# **Cultivation Practices in India**

NSS 54th Round January 1998 – June 1998

National Sample Survey Organisation Department of Statistics and Programme Implementation Government of India

August 1999

### PREFACE

The Nation Sample Survey Organisation (NSSO) carried out a nationwide survey on cultivation practices as a part of its 54th round (January to June '98). The enquiry was carried out in the rural areas of the entire country through household survey to ascertain the problems and utilisation of facilities in the field of agriculture and also their level of adoption in farms of different sizes in the country. In the past, the NSSO has conducted similar enquiries, either on the same topics or on those which are closely related to it.

The present report is on the spread of improved agricultural technology, viz. use of improved high yielding varieties of seeds, fertilisers, manures, pesticides, etc. and use of irrigation facilities and also use of improved agricultural implements like tractors, power tiller, harvesters etc.

The field work of the survey was conducted by the Field Operation Division. Data scrutiny and tabulation were done by the Data Processing Division. The Survey Design & Research Division was responsible for designing of the survey and preparation of the report.

I am grateful to the members of the Governing Council and member of the Working Group for their valuable guidance at various stages of the survey work. I also wish to thank the heads of various divisions of NSSO and their colleagues for their efforts in conducting the survey and bringing out this report. It is hoped that this report would serve as reference document to the users of NSS data.

Comments and suggestions for the improvement of the report are most welcome.

August 1999

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Report No. 451 Cultivation Practices in India

### Highlights

#### • Percentage of area under field crops cultivated using: HYV or hybrid (improved) seeds ... ... ... 59 fertilisers ... ... ... ... ... ... ... ... 81 ... manure ... ... ... ... ... ... ... 74 ... pesticides ... ... ... ... ... ... ... ... 47 ... weedicides .. ... ... ... ... ... ... ... ... 22 irrigation ... ... ... ... ... ... ... ... 66 . . . tractors / power tillers ... ... ... ... ... 54 ... harvestors / harvestor combines ... ... ... 6 • Percentage of area under field crops cultivated with improved seeds: paddy: kharif . ... ... ... ... ... 51 ... rabi ... ... ... ... ... ... 66 wheat ... ... ... ... ... ... ... 63 ... other cereals ... ... ... ... ... ... 64 . . . pulses ... ... ... ... ... ... ... ... 47 • Percentage of area under field crops located in villages with Govt. irrigation 25 canals: • Percentage of irrigated area hiring irrigation services from other households in: canal areas ... ... ... ... ... ... ... ... 40 ... non-canal areas ... ... ... ... ... ... ... 49 46 • Percentage of mechanically-tilled area using hired tractor / power-tiller:. 72 • Percentage of rural households engaged in field-crop cultivation: 61 • Percentage of field-crop cultivator (FCC) households owning 1 hectare or less of 62 land:

• Percentage of FCC households owning irrigation facilities and of them the percentage

reporting the facilities remaining 'out of use' due to shortage of fuel or power or low water level:

	dugwell / tubewell	electric pump	Oil pump
percentage owning	29	13	13
percentage reporting 'out of use'	26	48	14

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# **Chapter I**

### Introduction

### **1.1 The Report in Perspective**

1.1.1 An enquiry on cultivation practices was conducted as a part of the 54<sup>th</sup> round survey of the National Sample Survey Organisation (NSSO) during January to June 1998. The enquiry was carried out in the rural areas of the entire country through a household survey based on random sampling. In the past, the NSSO had conducted similar enquiries, either on the same topic or on those which are closely related to it, like land and livestock holdings, sources of irrigation and agricultural implements. The present enquiry, on which this report is based, is essentially designed to generate information only on the spread of improved agricultural technology, embodying the use of improved high-yielding seeds, fertilisers and irrigation on the one hand and mechanisation of agricultural operations on the other.

1.1.2 Objective: The technological change in agriculture that is currently under way in India was initiated in the 1960s when the Government introduced and popularised in certain regions of the country the high-yielding varieties (HYVs) of wheat and rice developed in Mexico and Philippines respectively. Over the last three decades, there has been a marked increase in the use of HYVs and hybrid seeds, and of the inputs like fertilisers, pesticides and irrigation which are essential for raising them and mechanisation of agriculture throughout the country. Nevertheless, it is widely held that not only has the geographical spread of the improved technology been uneven, but the sharing of the benefits of technology by different sections of the farmers has also been extremely unequal. Though the available macro-level data on the consumption of fertilisers and pesticides, irrigated area and area under HYVs of the main cereal crops like wheat, rice, maize, *jowar* and *bajra* do provide a fair idea of the geographical spread, the data on the level of adoption of improved technology on farms of different sizes or those on area treated with fertilisers or pesticides or tilled by tractors and power tillers are virtually absent. The present enquiry aims at providing certain basic State-level statistics on farm mechanisation and use of the improved 'seed-fertiliser-water' technology by farmers of varying ownership holding of knd. The enquiry is, however, confined to the study of field-crop cultivation. Thus the aspects of technological change in plantation and horticulture, or in the other sub-sectors of agriculture, are beyond the purview of this report.

#### **1.2 The Present Report**

1.2.1 This report pertains to the use of advanced technology for the cultivation of field crops based on data collected on crops cultivated, season of cultivation, area under each crop, use of irrigation facility and other inputs and use of machinery, in the 54<sup>th</sup> round of the NSSO. Data collected and used in this report can be briefly described as follows:

1. Data on crops cultivated, season of cultivation and area sown with it.

- 2. For each crop reported, data on use of machinery, such as tractors/power tillers, irrigation pump sets and harvestors. For crops for which the soil was tilled with tractors/power tillers, it was enquired whether they were taken on hire.
- 3. For each crop reported, data on use of inputs, viz., manure and its type, fertilisers, improved seeds and its type, irrigation and whether irrigation services hired and weedicide and pesticides, etc.
- 4. Household level information like
  - a) land owned, possessed, net sown area and area cropped more than once
  - b) whether soil was tested and whether recommendations followed
  - c) irrigation facilities and machinery and whether some of them remained unused.

1.2.2 Layout of the report: The report contains four chapters, including the present one, and two appendices. Chapter II provides a brief discussion on the definitions and concepts used for the enquiry. Chapter III gives a fairly detailed description of the sample design and the estimation procedure used for the survey. Chapter IV discusses the summary results of the survey and attempts to provide a perspective for proper interpretation of the results. Appendix I, which, in fact, forms the main body of the report, presents the detailed survey results on cultivation practices in the form of tables. A brief note on the editing and imputation procedures adopted for the survey data of the present enquiry is given in Appendix II. Appendix III is a facsimile of blocks 0, 1, 2, 13 and 14 of schedule 31 which are relevant for this report.

1.2.3 The estimates presented in the report are based on the pooled data of the two *sub-samples* of only the *Central sample*. (See the section "Method of Data Collection" for discussion on *sub-sample* and *Central sample*.) The survey results presented in the report are mostly in the form of ratios. The basic aggregate estimates and number of households, given in the detailed tables of Appendix I, generally as marginal column totals, may be used for working out rates and ratios for domains not presented in the report.

#### **1.3 Fifty-fourth Round**

1.3.1 Four main topics were covered in the 54th Round, namely,

Chapter 1 Introduction

(i) Drinking Water, Sanitation & Hygiene(ii) Travel and Use of Mass Media and Financial Services(iii) Cultivation Practices(iv) Common Property Resources

In addition, the survey on household consumer expenditure and employment-unemployment was as usual conducted in this round. The present report contains estimates on cultivation practices. The results of the enquiries on the other three topics are being brought out in separate reports.

1.3.2 The main schedules used in the 54th round, apart from Schedule 1.0 on consumer expenditure and employment-unemployment, were: Schedule 3.3 on village facilities and common property resources; and Schedule 31 on Drinking Water, Sanitation and Hygiene, Travel and Use of Mass Media and Financial Services, Cultivation Practices and Common Property Resources. The relevant portion of Schedule 31 has been provided in Appendix III.

1.3.3 For the enquiry on cultivation practices, the rural areas of the entire country, were covered, with the exception of some interior areas of Nagaland and Andaman & Nicobar Islands and the Ladakh and Kargil districts of Jammu & Kashmir.

### **1.4 Method of Data Collection**

1.4.1 The present report is based mainly on the information on cultivation practices collected in a part of Schedule 31. The data were collected from a sample of households by interview method. The survey period for the 54<sup>th</sup> Round was January to June 1998.

1.4.2 *Reference period*: The enquiry on cultivation practices was conducted generally with the reference period of the agricultural year 1997-98. The survey period being a part of the reference period in many cases, complete information on crops cultivated during the agricultural year was not available when the household was surveyed. The additional information on cultivation of crops that were to be undertaken during the remaining part of the agricultural year was ascertained by asking the informant certain additional probing questions regarding his plans for the *rabi* season. Similarly, the net sown area was worked out on the basis of actual area sown in *kharif* and the additional area planned to be sown during the *rabi* season. For questions like 'whether well/tubewell remained unused' and 'whether pump sets remained unused', a reference period of 365 days preceding the date of survey was used.

1.4.3 *Sample design*: The sample design adopted for the survey was essentially a two-stage stratified design, with census villages as the first-stage units (FSUs) and households as the second-stage units (SSUs). The survey period was January - June 1998. The sample of FSUs was drawn independently in the form of two sub-samples and an equal number of FSUs was allocated to each sub-sample. (For a detailed discussion on sample design, see Chapter III.)

1.4.4 *Sample size – first-stage units*: In all, 10,978 villages were planned to be surveyed in this round. Of these, 5,242 were allocated to the Central sample - the part surveyed mainly by the NSSO field staff - and the rest to the State sample - the part surveyed by the State agencies. In the urban sector, the allocations for the Central and State samples were 1,788 and 2,256 blocks respectively. This report, however, pertains to rural areas and thus is based on the data collected from the villages in the Central sample alone.

1.4.5 *Sample size – second-stage units*: For Schedule 31, 16 households were planned to be surveyed in each selected village. In all, 78,990 rural households were surveyed in the present survey.

### 1.5 Earlier Surveys of NSSO Relating to Cultivation Practices

1.5.1 As early as in 1951-52 and 1952-53, NSS, in its 5<sup>th</sup> to 7<sup>th</sup> rounds conducted a survey on some aspects of the cost of cultivation of minor cereals, pulses, sugarcane, oilseeds, potato, spices and tobacco. In those surveys, detailed data were collected on periods of sowing and harvesting by crops, area under crops, sources of seeds used, quantity and value of seeds used, quantity and value of manure used, water charges per acre, human and animal labour days utilised per acre and value of production per acre, etc. In the 8th round of the NSS (July 1953 -June 1954), for the first time, information was collected on agricultural implements - whether owned/hired mechanised agricultural operation in cultivation - whether used/not used, types of seeds and manure used and sources of irrigation. Information was collected on farming conditions and practices of agricultural operations, on adequacy of available human and animal labour, source of human and animal labour and implements and their utilisation, area of plots under sowing types: drilling, transplanting, etc., for different crops, area under manure by type of manure and area under different sources of irrigation. The 11<sup>th</sup> round of the NSS, conducted during August 1956 - February 1957, covered aspects of agriculture in India. In this survey detailed information on values of various inputs and outputs and yield per unit input was collected. Again, in the 22<sup>nd</sup> round of the NSS conducted during July 1967 - June 1968, a survey on farm practices was carried out. In this survey details of households using various improved agricultural practices with reasons for non-use and availability of irrigation, improved seeds and fertilisers was collected. Information on available animal labour and agricultural implements, and the extent to which they were used, was collected in the 26<sup>th</sup> round of the NSS, conducted during July 1971 - Sept. 1972. Lastly, in the 31<sup>st</sup> round of the NSS, a detailed enquiry on irrigation was taken up during July 1976 - June 1977. In this survey too, information on the use of improved seeds, chemical fertilisers, pesticides, etc. was collected, besides data on irrigation.

## **Chapter II**

### **Concepts and Definitions**

2.1.1 The concepts and definitions of the terms used in this report are briefly discussed in this chapter.

2.2.1 *Household*: A group of persons normally living together and taking food from a common kitchen constitutes a household. The word "normally" means that temporary visitors are excluded but temporary stay-aways are included. Thus a son or a daughter residing in a hostel for studies is excluded from the household of his/her parents, but a resident employee or a resident domestic servant or paying guest (but not just a tenant in the house) is included in the employer/host's household. "Living together" is usually given more importance than "sharing food from a common kitchen" in drawing the boundaries of a household in case the two criteria are in conflict; however, in the special case of a person taking food with his family but sleeping elsewhere (say, in a shop or a different house) due to space shortage, the household formed by such a person's family members is taken to include the person also. Each inmate of a hotel, mess, boarding lodging house, hostel, etc., is considered a single-member household except that a family living in a hotel (say) is considered to be one household only; the same applies to residential staff of such establishments.

2.3.1 *Land owned*: A plot of land is considered to be owned by the household if permanent heritable possession, with or without right to transfer (sell) the title, is vested in a member or members of the household.

2.3.2 *Land possessed*: Land possessed is given by land owned (including land held under long term lease of 30 years or more) + land leased-in - land leased-out + otherwise possessed land. The last class of land, i.e. otherwise possessed land, is understood to mean all public/institutional land possessed by the household without title of ownership or occupancy right.

2.3.3 *Net area sown*: It consists of area sown with field crops and area under orchards and plantations, counting only once the area sown more than once during the same year. [Area under the 5 major crops consists of net area sown under the 5 most important field crops among the 12 crop-groups as defined below in para 2.4.1.]

2.3.4 *Area sown more than once*: It is the area sown more than once, or planned to be sown more than once, during the same agricultural year. If the area is sown under 5 most important field crops among 12 crop-groups more than once the area is taken as the product of net area sown and number of times sown less one. Thus if 1 hectare of land is sown thrice in the agricultural year

1997-98 under a major field crop among 12 crop-groups, the area sown more than once will be taken as 2 hectares.

2.4.1 *Five major crops*: These are five most important field crops identified on the basis of value of production of the crops. The set of 5 major crops is not a fixed set but varies from household to household. For any particular household it is understood as the 5 most important field crops cultivated by the household in the agricultural year 1997-98 in terms of value of production of the crops (field-crops excluding plantation-crops and orchards) from among a list of crop-season combinations involving 12 crop-groups. Paddy: *kharif* and paddy: *rabi*, for example, are treated as different "crops" for this purpose. The 12 crop-groups are as follows:

1. paddy	5. oil seeds	9. fodder
2. wheat	6. mixed crop	10. fruits and nuts
3. other cereals	7. sugar cane	11. other cash crops
4. pulses	8. vegetables	12. others

2.4.2 *Season*: The season of a crop is determined by the time of the year it is harvested. All crops harvested during July to December are called *kharif* crops and those harvested during January to June are called *rabi* crops.

2.4.3 *Classification of field crop cultivators by ownership of holding*: In the detailed tables, given in Appendix I, 8 size classes have been used, which are as follows:

nil (<0.01 ha.)	1.01 - 2.00
0.01 - 0.20	2.01 - 4.00
0.21 - 0.50	4.01 - 10.00
0.51 - 1.00	10.01 & above

The households were classified accordingly depending upon the total area of land owned by its members.

2.5.1 *Improved seeds*: Nucleus was the one freshly released by Government research stations for multiplication in agricultural department farms or to some registered seed growers. From this nucleus seed parent/foundation seeds were obtained for general distribution to cultivators. Thus the parent seed certified as better yielding varieties and released for improved seeds by Government agricultural departments were considered as certified seeds. Seeds obtained by multiplication of these parent seeds were taken as uncertified improved seeds.

2.5.2 *Fertilisers and manure*: The pure compounds of N, P & K manufactured in factories that are used as nutrients of plants are fertilisers whereas all other nutrients of plants are manures.

2.6.1 *Cultivator households*: A household was considered a cultivator household, for this report, if it had reported some net sown area during the agricultural year 1997-98.

2.6.2 *Field crop cultivator household*: A household was taken a field crop cultivator household, for this report, if it had sown any field crop during the agricultural year 1997-98.

2.6.3 Some abbreviations commonly used in the Report are given below:

ACG	Average number of Crop Group
AFMC	Area under Five Major Crops
FCC	Field Crop Cultivator
GCA	Gross Cropped Area
HYV	High Yielding Variety
LHS	Land Holding Survey
LUS	Land Use Statistics
NSA	Net Sown Area

## Chapter III

### **Sample Design and Estimation Procedure**

3.0 Since in the 54<sup>th</sup> round of the NSS the survey on Cultivation Practices was conducted in the rural areas only, the sample design and estimation procedure, too, have been stated below only for the rural areas.

### 3.1 Sample Design

3.1.1 A stratified multi-stage sampling design was adopted for the survey. The first stage units were census villages (*panchayat* wards in the case of Kerala). Households formed the ultimate-stage units.

3.1.2 *Sampling frame for first-stage units (FSUs)*: The list of census villages of the 1991 population census (the 1981 census list for J & K) constituted the sampling frame for most of the States. For Kerala, however, the list of *panchayat* wards was used as the sampling frame for selection of *panchayat* wards. For Nagaland, the villages located within 5 km of a bus route constituted the sampling frame, whereas for Andaman & Nicobar Islands, the list of accessible villages constituted the sampling frame.

3.1.3 *Stratification*: From the list of villages of each State/Union Territory (UT), initially three separate strata were formed by considering villages (a) with very small population (b) with no population and (c) with very high population. These are formally stated below:

stratum 1 : all uninhabited villages (as per the 1991 census)

stratum 2 : villages each with a population of 1 to 50 (including both the boundaries) as per the 1991 census

stratum 3 : villages each with a population of more than 15,000 as per the 1991 census

Each of the above three strata was formed only when there were at least 10 villages of the specified population in the State/UT as per the 1991 population census. Otherwise, these villages were included in the general strata as described below.

3.1.4 After formation of the strata 1, 2 and 3 (wherever applicable), the remaining villages of the State/UT were considered for formation of the general strata. Each district with a population of less than 2 million as per the 1991 census formed a separate stratum. A district having a

population of 2 million or more was divided into two or more strata, depending on its population, as per the usual procedure followed in the NSS. For Gujarat, some districts cut across NSS regions. In such cases, the part of a district falling in an NSS region formed a separate stratum.

3.1.5 *Allocation of first-stage units (FSUs)*: A total all-India sample of 5242 villages for the Central sample were allocated to the States/UTs in proportion to their investigator strength.

3.1.6 Next a suitable sample size – minimum 2 and maximum 6 villages; the exact number depending on the total number of villages in the frame - was allocated to stratum type 1 of rural areas of each State and UT. In all, 68 sample villages were allocated to stratum 1 of the rural areas, considering all those States/UTs where stratum type 1 was formed. From stratum 2, a sample of a maximum of 6 villages was selected from each State and UT. The number of sample villages from stratum 3 was either 2 or 4 depending upon whether the number of villages in the frame of stratum type 3 was less than 20 or more. The remaining sample size (i.e. total allocation for the rural areas less the allocations for strata 1,2 and 3) of rural areas of each State and UT was allocated to the general strata (i.e. the strata other than strata 1, 2 and 3) in proportion to their populations.

stratum type	selection procedure
1	css with equal probability @
2	-do- *
3	-do- *
others	css with pps *
(and a simeral an existence of a commutive	na maximaliability means tional to size size

(css : circular systematic sampling, pps : probability proportional to size, size = population)

 $@ \ arrangement of villages in the frame is the same as that of the census$ 

\* after arranging the FSUs in an ascending order of population

3.1.7 *Selection of first-stage units* : The selection of the sample FSUs was done in the form of two independent sub-samples as follows :

3.1.8 *Selection of hamlet-groups in rural areas*: There are villages in India which contain large population. Listing all the households of such a village requires considerable amounts of time and effort of field officials. To limit their work-load at this stage of the survey operation, the large villages were further subdivided into a specified number of parts, by grouping contiguous natural hamlets, in such a way that each group contained natural hamlets, approximately with an equal fraction of the village population. These groups of hamlets were called hamlet-groups (hgs). From the specified number of hamlet groups (depending upon the approximate present population) thus formed, a random sample of the hamlet-groups was drawn for the subsequent stages of the survey. The number of hamlet-groups formed and selected for the survey were as follows:

approx. present popu- lation of village	no. of hgs formed ( <i>D</i> )	no. of hgs selected for $survey(d)$
less than - 1200	no hg formation	entire village is selected for survey
1200 - 1999	4	2
2000 - 2499	5	2
2500 - 2999	6	2
3000 - 3499	7	2
3500 - 3999	8	2
4000 - 4499	9	2
4500 - 4999	10	2
5000 - 5499	11	3
9500 - 9999	20	3
10000 - 10499	21	4
14500 - 14999	30	4
15000 - 15499	31	5 <sup>@</sup>
and so on		

@ 5 hgs were selected for survey from each selected village having approx. present population of 15000 or more

However, for the rural areas of Himachal Pradesh, Sikkim, and Punch, Rajouri, Udhampur and Doda districts of Jammu & Kashmir, the limit was D=1 for a population of less than 600, D=4 for a population of 600 - 1199; D=5 for a population of 1200 - 1499; D=6 for a population of 1500 - 1799 and so on. The number of hgs selected for the survey was d=2 for D=4 to 10, d=3 for D=11 to 20, d=4 for D=21 to 30 and d=5 for D>30.

3.1.9 Second-stage stratification (for selection of households): In rural areas, all the households of a sample village, or the selected hamlet groups of it, were classified into 3 second-stage strata. The households engaged in free collection (other than fuelwood and marine fishing) formed second-stage stratum 1. Other rural households were grouped into two second-stage strata - those with wage/salary earning but possessing land less than 0.40 hectare formed second-stage stratum 2 while the rest of the households formed second-stage stratum 3. The households of second-stage stratum 3 in rural areas were arranged by area of land possessed

before sample selection. In urban areas also, the households were grouped into three secondstage strata, but by following a procedure different from that followed for rural areas. 3.1.10 *Selection of households* : For schedule 31, a sample of 16 households from each selected village (or selected hamlet-groups) was selected for the survey.

3.1.11 The 16 households selected from each selected village (or selected hamlet-groups) were allocated among the three second-stage strata in proportion to the number of households in the respective frames with a minimum allocation of 4, 2 and 2 households, respectively, to second-stage strata 1, 2 and 3.

3.1.12 While allocating the above total number of sample households among the three secondstage strata, if allocation for one particular second-stage stratum was less than the minimum allocation specified for the second-stage stratum, its quota was increased to the said minimum number and the residual total allocation was allocated between the other two second-stage strata in proportion to the total number of households in the respective frames. The sample households were selected circular systematically with independent random starts from the respective frame of households in each second-stage stratum.

### 3.2 Estimation Procedure

3.2.1 The estimation procedure adopted in the 54th round for schedule 31 is briefly indicated here.

- 3.2.2 *Notation*: The notation used for describing the estimation procedure is as given below:
  - s = subscript for stratum
  - i = subscript for sample village
  - j = subscript for second-stage stratum of a sample village
  - k = subscript for sample household
  - b = subscript for sub-sample (b=1, 2)
  - z = size of the sample village used for selection
  - Z = total size for a stratum as per the frame
  - n = number of sample villages (i.e. no. used for tabulation) surveyed including uninhabited and zero cases and excluding casualty and other not received cases
  - D = number of hamlet-groups formed in the sample village
  - d = number of hamlet-groups selected for survey
  - H = total number of households listed in the frame
  - h = number of sample households available for tabulation
  - y = value of any characteristic under estimation in a sample village/household
  - $\vec{Y}$  = estimate of population total of the characteristic y

### 3.2.3 Estimates of aggregates:

For schedule 31, the formula used for the estimation of the aggregates of the s-th stratum and b-th sub-sample is as specified below:

$$\vec{\mathbf{Y}}_{sb} = \frac{Z_s}{n_{sb}} \sum_{i=1}^{n_{tb}} \frac{D_{sbi}}{d_{sbi}} \frac{1}{Z_{sbi}} \sum_{j=1}^3 \frac{H_{sbij}}{h_{sbij}} \sum_k \mathcal{Y}_{sbijk}$$

Note: (i) For strata 1,2 and 3 in the rural sector, z=1 and Z= total number of villages in the frame of the respective strata whereas for other strata in the rural sector, z= population of the sample village as per the frame used for selection and Z= total population of the stratum.

(ii) When D=1, d=1 and for  $D \ge 4$ ,  $2 \le d \le 5$ 

(iii) When H>0 but h=0 for any second-stage stratum, that second-stage stratum was merged with any of the other two second-stage strata. In particular, if h=0 for H>0 for the 1st second-stage stratum, it was merged with the 3rd second-stage stratum. If second-stage stratum 2 became a casualty, it was merged with second-stage stratum 3. Lastly, if second-stage stratum 3 became a casualty, it was merged with second-stage stratum 1.

The pooled estimate of the s-th stratum based on two sub-samples has been obtained as

$$\mathbf{Y}_{s}^{=} = \frac{1}{2} \sum_{b=1}^{2} \mathbf{Y}_{sb}^{=}$$

The pooled estimate  $\vec{P}$  at the region/State/UT/all-India has been obtained by summing the stratum estimates  $\vec{P}_s$  over all the strata of the region/State/UT/all-India.

3.2.4 *Estimates of ratios*: The estimate of the ratio  $R = \frac{Y}{X}$  (where X and Y are the population totals of the two characters) was obtained as  $\vec{R} = \frac{\vec{Y}}{\vec{X}}$ .

State/UT		number of	FSUs in		number of	f sample
	rural		urban		households	surveyed
	allotted	surveyed	allotted	surveyed	rural	urban
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Andhra Pradesh.	364	364	132	132	5721	2356
Ar. Pradesh *	52	49	8	7	719	126
Assam	214	206	28	28	3243	504
Bihar	478	477	72	72	7464	1283
Goa	18	18	12	12	256	212
Gujarat	190	190	96	96	2939	1701
Haryana	82	82	24	24	1222	430
Himachal Pradesh	132	127	12	12	1914	214
Jammu & Kashmir	192	116	60	27	1719	536
Karnataka	204	204	88	88	3152	1560
Kerala	204	204	72	72	2911	1290
Madhya Pradesh	372	372	112	112	5802	2010
Maharashtra	344	344	212	212	5359	3800
Manipur	60	60	24	16	873	414
Meghalaya	70	70	16	16	1040	27
Mizoram	42	42	36	36	594	648
Nagaland	56	56	12	11	895	196
Orissa	220	220	36	36	3401	646
Punjab	166	166	72	72	2533	1295
Rajasthan	228	228	64	64	3501	112
Sikkim	60	60	8	8	936	144
Tamil Nadu	338	336	176	176	5324	313
Tripura	108	76	20	20	1216	36
Uttar Pradesh	638	638	156	156	10003	2792
West Bengal	340	340	124	124	5312	222
A & N Islands	38	38	12	12	502	21
Chandigarh	4	4	12	12	64	21
D & N Haveli	4	4	4	4	64	72
Daman & Diu	4	4	4	4	64	72
Delhi	10	10	68	68	119	115
Lakshadweep	6	6	4	4	64	7
Pondicherry	4	4	12	12	64	21
All India	5242	5115	1788	1745	78990	3132

# **Chapter IV**

### **Summary of Findings**

4.1.1 The present enquiry on cultivation practices aims at assessing the level of adoption of advanced agricultural technology by farmers of varying ownership holdings of land in different parts of the country. The strategy of introducing high-yielding and short-duration varieties of exotic seeds adopted during the Fourth Plan has brought about a lasting technological change in Indian agriculture. In this report the term 'advanced agricultural technology' refers to the cultivation practices consisting of all operations of crop production that are required for high-yielding variety (HYV) and hybrid seeds.

4.1.2 The advanced technology has two specific components. First, the advanced 'seed-fertilizer-water' technology is based on use of improved seeds, which are responsive to ample doses of fertilizers and require an assured supply of water. This directly affects the agricultural production by raising the productivity of land. The second component, 'mechanised technology', i.e. use of capital-intensive farm machinery like tractors, power-tillers and harvesters, plays a complementary role leading to faster turnout of operations like ploughing, weeding and harvesting, with a substantial reduction in costs. This report attempts to present an overview of the spread and progress of the advanced 'seed-fertiliser-water' technology on the one hand and of the mechanisation in agricultural operations on the other.

4.1.3 The major findings of the enquiry on cultivation practices are summarised in this chapter. It starts with a brief discussion on size of ownership holdings of the field-crop cultivator households, i.e. those engaged in raising field crops. This is followed by an overview of the crop composition in terms of area devoted to different groups of crops. The spread of 'seed-fertiliser-water' technology is then discussed in some detail. Finally, the survey results indicating the extent of mechanisation of cultivation are discussed in terms of use of tractors, power tillers and harvesters.

#### 4.2 Field-crop cultivation

4.2.1 The present enquiry on cultivation practices is confined to the study of field-crop cultivation. The practices followed in plantation, horticulture, etc., are thus excluded from the purview of this study. The survey was conducted during a period of six months, viz. January-June 1998, while the data were required to be collected on crops cultivated during the agricultural year 1997-98. Thus a large part of the sample was surveyed before the completion of *rabi* cultivation in the reference agricultural year. In all such cases, the data on *rabi* cultivation are based on the cultivator's plans for the coming *rabi* season, as reported on the date of survey, and his experiences during the last *rabi* season.

**.** ..

4.2.2 In recent times, farmers, especially those with a fair amount of land, have shown an increasing tendency to raise a number of different crops in an agricultural year. Collection of data separately on all the crops raised by such farmers during an agricultural year demands considerable amounts of time and resources which can be afforded only in surveys devoted entirely to cultivation practices. The present enquiry being just a small component of the survey conducted in the NSS 54th round, it was decided to restrict the collection of crop-level details to only the five most important of all the field-crops cultivated by a sample household during the agricultural year. When a sample household was found to have grown more than five field crops, the field staff was required to record the details of only the *five major crops*, identified on the basis of value of produces. Thus, all the estimates on cultivation of field-crops presented in this report are based on data recorded on at most five field-crops for each sample household. The estimates of cropped area based on these data are called 'area under 5 major crops' through out this report. Besides the details of field -crops cultivated by a household, data on the total net sown area (NSA) and area sown more than once during the agricultural year were also collected from each household. For this report, the households reporting some amount of NSA during the agricultural year are treated as cultivator households. Thus, the category 'cultivator households' includes also those households who were reported to have some area under orchards or plantations but none devoted to cultivation of seasonal crops. As distinct from a cultivator household, a field-crop cultivator (FCC) household is defined as one which reported cultivation of at least one field crop during the agricultural year.

Table T1: Cultivator and Field-crop cultivator household and average area cultivated

	India
Item	estimate
<ol> <li>Estimated number of cultivator households (00)</li> <li>Estimated number of FCC households (00)</li> </ol>	825,058 821,388
<ol> <li>Percentage of cultivator households to all households</li> <li>Percentage of FCC households to all households</li> </ol>	61.2 60.9
<ol> <li>Average NSA per FCC household (ha)</li> <li>Average area sown more than once per FCC household (ha)</li> </ol>	1.25 0.57
7. Gross cropped area (GCA) per FCC household (ha)	1.82
8. Area under 5 major crops per FCC household (ha)	1.75
9. Percentage of area under 5 major crops to GCA	96%

4.2.3 The national-level estimates relating to NSA and area under field-crops recorded in the survey are given in Table T1. It reveals that almost all the cultivator households had raised some field-crops during the agricultural year 1997-98. The percentage of cultivator households (61.2%) was marginally higher than that of FCC households (60.9%).

4.2.4 The percentage of cultivator households, estimated from the present survey, however, appears to be some what on the lower side when compared to the estimated percentage of operating households (80%) based on the Land And Livestock Holdings Survey (LHS) of the NSS 48th round (1991-92). In the LHSs of the NSSO, the category 'operating households' includes all those households which carry out any kind of agricultural production during the reference agricultural year. Besides those raising any kind of crop, it included the households

engaged solely in other agricultural activities like animal husbandry, pisciculture, etc. From the estimates of LHS 1991-92, given in Table T2, it appears that field -crops were raised outside homestead in about hree-fourths of the operational holdings. Since, 80% of the households were operating households<sup>1</sup>, the percentage of households raising field -crops outside homestead works out to about 60% – a figure close enough to the percentage of cultivator households estimated in the present survey. Thus, it appears like that in the present survey, raising of seasonal or field-crops in kitchen gardens or in any other part of the homestead was not considered while recording cultivation of field-crops. There was no clear guidelines in this respect in the instructions manual for the field staff.

agricultural activity	percentage of holdings
6	of holdings
	or notatings
only in homestead:	
poultry or livestock only	7.6
kitchen garden only	1.6
any other combination	13.8
total within homestead	24.1
outside homestead:	
raising field crops	75.9
Total	100.0

Table T2: Percentage distribution of operational holdings reporting different types of agricultural production (1991-92)

4.2.5 Table T1 also shows that, on an average, a FCC household had a NSA of 1.25 ha, GCA of 1.82 ha and area under 5 major crops of 1.75 ha Significantly, it is seen that the share of area under 5 major crops (henceforth called AFMC) in the GCA is as high as 96%. Besides the area under crops other than the five most important ones recorded in the present survey, the GCA includes area under orchards and plantations of the households. Thus, it appears that the restriction of recording details of at the most five crops for a sample household has lead to an under-coverage, only a small part of the total cropped area under field crops.

4.2.6 The percentages of cultivator and field-crop cultivator households, given in Table T3, show that field crops were raised by virtually every cultivator household in all the States, except Kerala. A perceptible difference between the percentages of cultivator households (79%) and FCC households (76%) was found only in Kerala, which has about two-thirds of its NSA under plantation crops like rubber, black pepper and coconut<sup>2</sup>.

<sup>&</sup>lt;sup>1</sup> Source: NSS Report No. 408: *Livestock and Agricultural Implements in Household Operational Holdings*, NSS 48<sup>th</sup> Round, 1992

<sup>&</sup>lt;sup>2</sup>Reference: Area, Production and Yield of Principal Crops, 1993-94, DES, M/o Agriculture.



Figure 1 Percentage of FCC households using improved seeds percentage of FCC households by

4.2.7 Table T3 also gives the percentage of AFMC in GCA for each State. It is seen that the share of AFMC in GCA was about 90% or more in all the States, except for some of the North-eastern hill States and Kerala. Relatively high shares of AFMC in GCA were found in Himachal Pradesh (98%), Rajasthan (96%), Madhya Pradesh(96%) and Mizoram (96%).

4.2.8 Another feature of significance revealed by the table is that the five lowest percentages of FCC households were observed in Tamil Nadu (35%), Punjab (36%), Tripura (43%), Andhra Pradesh (44%) and Haryana (45%). The estimates relating to use of improved cultivation practices, discussed later in this chapter, indicate more extensive spread of advanced agricultural technology in all these States, except Tripura, than in the rest of the country. In fact, the percentage of FCC households and the percentage of households using improved variety of seeds for cultivation appear to be negatively related, as indicated by Figure 1.

	Percent	age of	percentage of		
state	FCC	cultivator	AFMC to GCA		
North Himalyan					
Himachal Pradesh	86	86	98		
Jammu & Kashmir	92	92	93		
North					
Haryana	45	45	93		
Punjab	36	36	95		
Uttar Pradesh	75	75	92		
North-West					
Gujarat	57	57	91		
Rajashthan	79	79	96		
West & Central					
Madhya Pradesh	72	72	96		
Maharashtra	53	53	92		
South					
Andhra Pradesh	44	44	91		
Karnataka	64	64	93		
Kerala	76	79	78		
Tamil Nadu	35	35	88		
East & North-East Plains					
Assam	70	71	91		
Bihar	62	62	91		
Orissa	63	64	95		
West Bengal	55	56	94		
North-East Hills					
Arunachal Pradesh	81	81	63		
Manipur	85	85	79		
Meghalaya	90	90	88		
Mizoram	87	87	96		
Nagaland	93	93	80		
Sikkim	69	69	87		
Tripura	43	44	76		
India	61	61	93		

Table T3: Percentage of cultivator households and field-crop cultivator (FCC) households, and percentage of area under 5 major crops(AFMC)

*Note:* AFMC stands for the area under five major crops as described in para 4.2.5.

#### 4.3 Distributions of field-crop cultivator households and cultivated area by ownership

### holding of land

4.3.1 A characteristic feature of the Indian agricultural sector is the high inequality in the distribution of land and material assets. The persistent nature of the unequal distribution of land is borne out by the results of the decennial Land and Livestock Holdings Surveys of the NSSO as well as the quinquennial Agricultural Census organised by the Ministry of Agriculture. The results of the present survey too reflect this feature of the agrarian structure.

4.3.2 In Appendix I, a classification of households based on eight size classes of household ownership holding of land has been used for the tables presenting survey results by ownership of land. Here, in order to explore the determining role of farm size in adoption of improved techniques of cultivation in different States, the eight size classes are merged into five broader size-groups along the lines adopted in the Agricultural Census of India. The five size groups are follows :

category	ownership of land							
marginal	: less than 1.01 ha							
small	: 1.01 - 2.00 ha							
semi-medium	: 2.01 - 4.00 ha							
medium	: 4.01 - 10.00 ha							
large	: larger than 10.00 ha							

The size groups will hence for the be called *categories* of ownership holdings.

4.3.3 Table T4 gives percentage distribution of the field-crop cultivator (FCC) households and of the AFMC by size class of ownership holding. The table clearly reveals a highly uneven distribution of the AFMC – a close approximation of gross cropped area during the agricultural year 1997-98 – among the FCC households of India. In fact, the inequality must have been more acute than what the table reflects. Owing to reasons mentioned earlier, the collection of data on cultivation was restricted to five most important crops reported by a household in the sample. Thus, the area under five major crops should necessarily be less than the gross cropped area under the field-crops cultivated by the household, particularly when the number of field crops cultivated exceeded five.

4.3.4 This limitation notwithstanding, the estimates given in Table T4 reflect the degree of inequality in cultivated area. It is seen that while about 40% of the bottom FCC households had cultivated only about 10% of the total are under five major crops, the top 7% of the FCC households had a share exceeding 31%.

4.3.5 Another important feature of Indian agriculture revealed by Table T4 is the predominance of marginal farmers. About 62% of the FCC households, it is seen, belonged to the marginal category, owning one hectare or less of land. Together with the FCC households in the 'small' category, they constituted over four-fifths of the total FCC households, and their combined share in the AFMC was just about 45%. At the other end less than 1% of the FCC households belonged to the category 'large', but their share in the area was more than 8%.

cı	ass of ownership not	ung		India
size-class	percentage distr	ibution of	cumulative p distribut	U
(ha)	FCC	AFMC	FCC	AFMC

Table T4: Percentage distribution of FCC households and of the AFMC by size class of ownership holding

Table T5: Percentage distribution of AFMC and FCC households by size category of ownership holding

state	esti- mate	Marginal	small	semi- medium	medium	large	all size
Himachal Pradesh	Н	78	15	6	1	0	10
	R	49	26	17	6	1	10
Jammu & Kashmir	Н	81	14	5	1	0	10
	R	51	27	18	5	0	10
Haryana	Н	38	26	21	14	2	10
	R	15	18	25	30	11	10
Punjab	Н	31	29	22	16	4	10
	R	8	17	24	33	18	10
Uttar Pradesh	Н	71	17	8	3	0	10
	R	35	25	22	15	2	10
Gujarat	Н	47	21	18	12	2	10
	R	15	17	26	33	10	10
Rajasthan	Н	38	22	20	16	4	10
	R	11	13	22	34	19	10
Madhya Pradesh	Н	36	28	24	11	1	10
	R	10	20	31	30	9	10
Maharashtra	Н	42	27	19	11	2	10
	R	13	21	27	30	10	10
Andhra Pradesh	Н	59	21	13	7	1	10
	R	24	21	23	23	8	10
Karnataka	Н	45	28	16	10	2	1
	R	14	23	24	28	12	1
Kerala	Н	92	6	1	1	0	10
	R	56	22	11	8	4	1
Tamil Nadu	Н	72	18	8	3	0	10
	R	38	27	20	14	2	10
Assam	Н	59	28	10	2	0	10
	R	28	36	26	10	0	1
Bihar	Н	73	17	7	3	0	10
	R	35	25	21	13	6	10
Orissa	Н	73	18	7	2	0	1
	R	39	27	20	9	4	10
West Bengal	Н	85	11	4	0	0	1
2	R	58	25	15	3	0	1
Arunachal Pradesh	Н	53	22	13	12	1	1
	R	26	23	24	22	5	1
Manipur	Н	80	17	4	1	0	1
	R	61	26	11	2	0	10
Meghalaya	Н	64	20	14	3	0	10
	R	34	25	30	12	0	10
Mizoram	Н	87	11	2	1	0	10
	R	80	14	5	1	0	10
Nagaland	Н	19	24	41	16	1	10
<u> </u>	R	5	14	37	41	4	10
Sikkim	Н	78	15	7	1	0	1(
	R	50	26	20	3	1	10

		size-ca	tegory of ow	nwership hold	ling	
state	marginal	small	semi-	medium	large	all
			medium			
Andhra Pradesh	1461	499	347	164	25	2496
Arunachal Pradesh	293	125	90	86	8	602
Assam	1405	582	205	42	0	2234
Bihar	3422	781	331	111	14	4659
Gujarat	742	338	282	200	30	1592
Haryana	207	138	116	77	13	551
Himachal Pradesh	1284	241	99	22	7	1653
Jammu & Kashmir	1192	242	84	17	0	1535
Karnataka	911	522	308	184	28	1953
Kerala	2025	116	29	10	2	2182
Madhya Pradesh	1473	1108	954	434	62	4031
Maharashtra	1153	739	527	287	40	2746
Manipur	567	140	34	6	0	747
Meghalaya	562	193	136	29	0	920
Mizoram	427	54	16	3	0	500
Nagaland	151	177	356	136	8	828
Orissa	1556	378	146	32	3	2115
Punjab	273	254	190	133	33	883
Rajasthan	989	583	539	451	124	2686
Sikkim	539	92	42	4	1	678
Tamil Nadu	1385	321	136	42	3	1887
Tripura	439	40	16	2	0	497
Uttar Pradesh	5207	1205	606	226	19	7263
West Bengal	2467	302	97	9	1	2876
India	30354	9215	5712	2716	422	48419

Table T6: Distribution of sample households by size-category of ownership holding

### 4.4 Crop Composition

4.4.1 Crop diversification forms an important component of the strategy of agricultural development, adopted in the 8th Plan, for improving the economic conditions of small and marginal farmers. While primary information on area under principal crops is regularly published by the Ministry of Agriculture, there are hardly any data on crop-diversification by size of farm or on number of crops raised by a cultivator in an agricultural year. The present enquiry provides some basic data essential for appraising the level of crop diversification as a part of present cultivation practices. The present enquiry was, however, designed to collect detailed information on field crops raised by a farmer-household during the agricultural year 1997-98. For item purpose, crops reported by a farmer were recorded in codes using a classification of twelve broad crop-groups, viz.:

1. Paddy 2. Wheat 3. Other Cereals 4. Pulses

diversification.

т 1.

5. Oilseeds 6. Mixed crops 7. Sugar Cane 8. Vegetables 9. Fodder 10. Fruits & nuts 11. Other cash-crops 12. Others 4.4.2 If a crop was raised more than once in different seasons of the agricultural year, crop during each season was considered a separate crop, while the same crop grown during a particular season, even if on more than one plot, was treated as single crop. However, although the data collection was restricted to a maximum of five major crops raised by a sample household the estimates based on them, covering about 93% of the GCA (see Table T3), are expected to provide a fair idea of crop diversification in farms of various sizes. The *kharif* and *rabi* paddy are taken as a separate crops, since raising of *rabi* paddy, by itself, is a sign of

		India
	crop-groupwis	se percentage of
crop group	FCC hhs	AFMC
		cultivating
Paddy: <i>kharif</i>	57	25
: rabi	7	3
:total	-	28
Wheat	44	21
other cereals	34	16
total cereals	-	64
Pulses	25	8
total foodgrains	-	72
Oilseeds	18	9
mixed crop	7	4
sugar cane	6	2
Vegetables	16	2
Fodder	12	2
fruits & nuts	5	1
other cash crops	12	7
Others	4	1
all crops	-	100

Table T7: Crop-groupwise percentage of FCC households and AFMC

4.4.3 Based on the data on five major crops reported by the sample households, the percentage distribution of the AFMC by crop-group and number of households cultivating a crop in the crop-group FCC household are given in Table T7. It may be observed that

- (1) 72% of the AFMC was under foodgrains alone, with the cereal crop-groups accounting for 64%.
- (2) *Kharif* paddy and wheat were sown in 25% and 21% of the AFMC, respectively, while other cereals covered 16%. Percentage share of *rabi* paddy was, however, low (3%).
- (3) Among other crops, pulses and oilseeds covered 8% and 9% of AFMC, respectively.
- (4) About 57%, 44% and 34% of FCC households reported cultivation of *kharif* paddy, wheat and 'other cereals', respectively, indicating that quite a sizeable percentage of FCC households were engaged in cereal production. As for the other crop-groups, about 25%

of the FCC households reported cultivation of pulses, 18% cultivation of reported oilseeds and 16% reported cultivation of vegetables.

	0				5	10	1								India
	pado	ly	_	other	pul-	food	oil	mixed	sugar	vege -	fod-	fruits	other		
size class (ha)	kharif	rabi	wheat	cereals	ses	grains	seeds	crop	cane	tables	der	& nuts	cash crop	other	total
nil (<0.01)	41	4	13	14	6	79	6	2	1	7	2	1	2	1	100
0.01 - 0.20	35	4	24	9	4	77	3	2	1	5	2	3	7	1	100
0.21 - 0.50	37	5	23	13	5	82	4	2	1	3	2	1	4	1	100
0.51 - 1.00	35	4	21	13	6	79	5	2	2	3	2	1	4	1	100
1.01 - 2.00	29	3	21	15	7	75	8	3	2	2	2	1	5	1	100
2.01 - 4.00	24	2	21	17	8	72	10	3	3	2	2	1	6	1	100
4.01 - 10.00	16	2	20	19	10	66	12	5	2	1	3	1	9	2	100
10.01 & above	12	0	19	20	11	62	15	4	1	1	3	1	12	1	100
all classes	25	3	21	16	8	72	9	4	2	2	2	1	7	1	100

Table T8: Percentage distribution of AFMC by crop-group

4.4.4 Table T8 gives the percentage distribution of AFMC by crop-group separately for each size-class of ownership holding. The table reveals the following features of crop cultivation in farms of varying sizes:

- 1. In all size classes, foodgrains have a predominant share (60% or more) in AFMC.
- 2. The higher the size-class the lower had the percentage of AFMC under foodgrains a phenomenon found to be generally true, leaving apart only the 'virtually landless' class of "0.01 ha or less". *kharif* paddy and wheat together played a determining role in this respect, particularly for their dominant share in the AFMC under foodgrains.
- 3. Contrary to the pattern observed for foodgrains, pulses were cultivated by larger percentages of FCC households in the higher size-classes. For "other cereals' and oilseeds, the table reveals similar patterns. However, for all these crop-groups, the percentages of AFMC in 'virtually landless' class did not conform to these patterns.

### 4.4.5 Cultivation of crops in different size-classes of holding: The percentages of FCC

size class (ha)	paddy <i>kharif</i>	paddy <i>rabi</i>	wheat	other cereals	pulses	oil seeds	mixed crop	sugar cane	vege - tables	fodder	fruits &	other cash	other
											nuts		
nil (<0.01)	69	8	25	26	13	7	6	2	30	4	5	4	4
0.01 - 0.20	54	7	36	16	8	6	4	1	18	3	13	10	5
0.21 - 0.50	65	9	44	28	19	12	4	4	14	7	4	7	3
0.51 - 1.00	63	9	44	32	25	16	6	7	17	11	4	10	4
1.01 - 2.00	56	7	46	40	31	23	8	8	16	15	3	14	4
2.01 - 4.00	48	6	49	48	37	31	10	9	15	19	3	17	5
4.01 - 10.00	35	4	50	56	43	38	14	9	10	24	3	26	6
10.01 &	29	2	49	68	48	47	13	6	11	32	6	35	8
above													
all sizes	57	7	44	34	25	18	7	6	16	12	5	12	4

Table T9: Percentage of FCC households reporting cultivation of crops in different crop-groups for each size-class

households cultivating crops in different crop-groups are shown in Table T9 for each size-class of holding. The following features of the table deserve to be noted:

- 1. Cereal crops were cultivated by a large percentage of FCC households, irrespective of the size-class of holding.
- 2. The higher the size of holding, the higher was the percentage of FCC households cultivating wheat, 'other cereals', pulses, oilseeds, 'mixed crop', sugarcane, 'fodder' 'other cash crops' and 'other crops,' except for the 'nil' class in a few cases . However, for both *kharif* paddy and *rabi* paddy, the pattern was the opposite, i.e., the higher the size-class the lower was the percentage of FCC households cultivating paddy.
- 3. There was no strong evidence of any clear association between the size-class and the percentage of FCC households growing vegetables and 'fruits & nuts'.

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4.4.6 Average number of crops cultivated: Table T10 gives average number of crop groups (ACG) cultivated by a FCC household for each size-class of holding during the agricultural year 1997-98. The estimates of ACG show an increase with a rise in size of holdings with the exception of the 'nil' class. As noted earlier, the estimate for the 'nil' class are not as robust as those for the other classes, as they are based on a much smaller sample size as compared to the other size classes. [See Appendix Table (10).]

4.4.7: *Inter-State variation in crop composition*: State-level variation in crop composition is shown in Table T11. The table reveals:

Table T10: Average crops (ACG) cu a FCC househol	iltivated by
	India
size class	ACG
(ha)	
nil (< 0.01)	2.03
0.01 - 0.20	1.80
0.21 - 0.50	2.20
0.51 - 1.00	2.48
1.01 - 2.00	2.70
2.01 - 4.00	2.97
4.01 - 10.00	3.19
10.01 & above	3.53
all sizes	2.12

1. Foodgrains production accounted for 50% or more in AEMC in all States except for Kerala and Gujarat. In Kera

AFMC in all States, except for Kerala and Gujarat. In Kerala, about 44% of the AFMC was under 'other cash crops' and over 17% under 'fruits & nuts' whereas foodgrains covered only 22%. In Gujarat, foodgrain covered 48%, oilseeds 18% and 'other cash crop' 19%.

2. All the States of the east and the north-east plains had a relatively high percentages of AFMC under foodgrain crops. In fact, Orissa (96%) and Bihar (92%) were the two States with highest shares under foodgrains. In all the other States of this region, the percentage of AFMC under foodgrains was well above that at national the level. Assam, West Bengal and some N-E hill States showed significant proportions of AFMC under *rabi* paddy, which is also observed for Tamil Nadu.

4.4.8 *InterState variation in share of foodgrains in AFMC & size of holdings*: The percentage of AFMC by category of holdings for all the States and for all India is shown in Table T12. The following observations emerge from the table:

1. The north-western States, viz. Gujarat & Rajasthan, reveal a strong negative association between percentage of AFMC under foodgrains and size-class – the decline being much sharper in Gujarat than in Rajasthan. In fact, the declining trend is the sharpest in Gujarat among all the States. For the States like Madhya Pradesh, Maharashtra, Andhra Pradesh also show such a declining trend.

2. For States of the northern region, viz. Punjab, Haryana and Uttar Pradesh, no definite pattern is visible in the percentage of AFMC under foodgrains against different size classes. For Punjab and Haryana, in particular, a rising pattern is observed for marginal, small and semimedium categories, which slopes downward for medium and large categories. For Uttar Pradesh, the pattern observed is different from that observed for Punjab and Haryana.

#### Table T11: Percentage distribution of AFMC by crop group for each state

	pad	ldy		other	pul-	food	oil	mixed	sugar	Vege-		fruit	other		all
state	khari	rabi	wheat	cereals	ses	grain	seeds	crop	cane	Table	fod	&	cash	other	crops
	f					s		1		s	-der	nuts	crop		
North Himalayan															
Himachal Pr.	8	0	42	34	2	85	1	0	0	2	1	5	4	1	100
J & K	29	1	27	13	3	72	9	0	0	6	5	7	1	2	100
North															
Haryana	19	0	38	9	5	71	7	0	1	1	9	0	6	4	100
Punjab	28	1	44	2	0	75	0	0	0	1	10	0	13	1	100
Uttar	24	1	38	11	8	81	3	2	6	2	4	0	1	1	100
Pradesh															
North-West															
Gujarat	8	1	12	22	5	48	18	6	3	2	4	1	19	1	100
Rajasthan	1	0	20	33	12	66	12	8	0	0	3	0	7	3	100
West & Central															
Madhya Pr.	24	1	26	10	11	71	19	4	0	1	1	0	3	1	100
Maharashtra	10	0	7	38	10	65	6	4	3	2	1	2	17	1	100
South															
Andhra Pr.	31	10	0	11	9	60	16	5	2	1	1	2	10	2	100
Karnataka	10	2	2	38	12	64	15	6	2	2	1	2	8	1	100
Kerala	14	5	0	2	0	22	5	5	0	3	0	17	44	4	100
Tamil Nadu	28	17	0	15	6	66	7	2	5	3	1	5	9	3	100
East & North-East	Plains														
Assam	60	13	3	1	4	81	2	0	1	12	0	0	0	3	100
Bihar	49	1	29	6	7	92	2	1	1	2	0	0	1	0	100
Orissa	80	3	0	3	9	96	1	0	0	2	0	0	1	0	100
West Bengal	56	15	6	1	1	79	4	0	0	8	0	1	8	2	100
North-East Hills															
Arunachal Pr.	50	10	3	10	2	75	1	11	0	7	0	1	3	3	100
Manipur	67	18	0	1	1	87	0	3	0	7	0	0	0	2	100
Meghalaya	41	3	0	5	0	50	0	7	0	28	0	7	3	4	100
Mizoram	43	6	0	2	3	54	0	25	1	9	0	2	6	4	100
Nagaland	45	17	0	7	2	71	1	7	0	12	0	0	5	5	100
Sikkim	14	1	2	43	2	62	1	0	0	15	3	1	18	1	100
Trinura	54	29	4	Ο	Ω	87	Λ	Λ	Λ	12	Λ	1	Λ	Λ	100

### 3. In the States of the east and north-east plains, the percentage of AFMC under foodgrains

state	marginal	small	semi-	Medium	large	all sizes
			medium			
North Himalayan						
Himachal Pradesh	88	82	83	*	*	85
Jammu & Kashmir	63	78	84	*	-	72
North						
Haryana	68	70	74	70	*	71
Punjab	70	73	78	74	73	74
Uttar Pradesh	85	80	77	77	*	80
North-West						
Gujarat	72	62	51	33	25	48
Rajasthan	74	68	67	63	63	66
West & Central						
Madhya Pradesh	78	75	71	69	61	71
Maharashtra	73	68	68	60	54	65
South						
Andhra Pradesh	72	66	57	54	35	60
Karnataka	68	63	65	62	60	64
Kerala	22	16	31	*	*	22
Tamil Nadu	69	65	60	70	*	66
East & North-East Plains						
Assam	76	83	84	83	-	81
Bihar	92	93	92	91	*	92
Orissa	96	95	98	99	*	96
West Bengal	78	79	82	*	*	78
North-East Hills						
Arunachal Pradesh	69	74	79	71	*	74
Manipur	84	89	92	86	-	86
Meghalaya	47	48	48	67	-	50
Mizoram	54	44	56	*	-	54
Nagaland	73	77	82	59	*	71
Sikkim	65	60	51	69	*	62
Tripura	86	89	85	*	-	87
India	80	75	72	66	62	72

Table T12: Percentage of AFMC under foodgrains by category of holdings

Note: The '\*' mark given in cell in case the number of FCC households in the sample falls below 25.

steadily increases with the holding size.

### 4.5 Use of Improved Seeds

4.5.1 The technological breakthrough in Indian agriculture initiated by the introduction of the short-duration HYV of food grains, especially rice and wheat, in the 1960s was restricted to

certain areas of the country for more than a decade. Moreover, apart from wheat, rice, and some improved varieties of hybrid maize, there was hardly any improved variety of seeds for other crops till the 1980s. Since then, the use of improved seeds has progressed at a fairly rapid pace covering a large part of the country as well as for a larger number of crops. But the available data on spread of improved seeds have so far been limited to HYV rice, *jowar*, *bajra*, maize, wheat and cotton. There are no data on the extent to which improved seeds for different crops are being used and by which section of farmers. The present survey provides some basic data on the extent and effectiveness of use of improved seeds by cultivators with varying holding sizes.

4.5.2 For each field crop cultivated by a sample household, the survey investigator inquired whether the seeds used were of an improved variety and if so, whether the entire crop or part of it was raised from improved seeds. Improved seeds bought from authorized seed farms are usually certified, while those bought from other sources are usually uncertified. The field officials were required to ascertain whether the improved seeds used were certified or uncertified, if purchased. In many cases, the farmers buy certified seeds once and to use the seeds grown out of them for some generations of cultivation. In all such cases, the improved seeds were treated as 'home-grown'. Table T13 gives the percentage distribution of area under different crop groups by use of improved seeds. The table provides separate estimates for use of 'cultivate', 'uncertified', 'home-grown' and 'other' kinds of improved seeds.

							India
	perc	entage dis	stribution	of area u	nder	percentage	
	in	nproved se	eeds by ty	pe of see	ds	of area	percentage
crop group	certi-	uncer-	home-	other	all	under impro-	share of crop
	fied	fied	grown		types	ved seeds	in AFMC
paddy ( <i>kharif</i> )	39	15	43	4	100	51	25
paddy ( <i>rab</i> i)	39	16	39	6	100	66	3
wheat	46	13	38	2	100	63	21
other cereals	61	9	28	1	100	64	16
pulses	47	11	41	2	100	47	8
oil seeds	59	12	27	2	100	59	9
mixed crop	72	5	22	1	100	51	4
sugar cane	44	14	38	4	100	61	2
vegetables	63	20	26	4	100	53	2
fodder	35	17	43	5	100	54	2
fruits & nuts	49	20	24	8	100	48	1
other cash	76	12	11	2	100	82	7
crops							
others	47	29	19	5	100	45	1
all crops	52	13	33	2	100	59	100

Table T13: Percentage distribution of area under improved seeds of crop group by type of seeds

4.5.3 From Table T13, which presents the percentage of area under improved seeds and percentage distribution of area under improved seeds by type of seeds, the following points attract attention

- 1. About 59% of the AFMC was cultivated with improved varieties of seeds. The range of variation between crops in area under improved seeds was small from 47% to 66% except for 'other cash crops'.
- 2. Till the mid-eighties, efforts to extend the improved practices of cultivation were largely focussed on cereal crops. Thus, as expected, the percentage of AFMC under improved seeds was found to be the highest in cereal group. Except for *kharif* paddy, improved seeds were used for almost two-thirds of the area under cereal crops.
- 3. The share of cereal crops in the AFMC was about 65%. It is seen that *kharif* paddy had the largest share (about 38%) in the AFMC under the 'cereals' group (see Figure 2). However, as far as the use of improved seeds was concerned, *kharif* paddy showed the least percentage of area (51%) under its coverage. For *kharif* paddy, the main crop of the rainfed agriculture of the east and north-east plains and the coastal south, the adoption of improved seeds had been less wide-spread. Besides, of the area under improved seeds, as high as 43% was cultivated with home-grown seeds, while certified seeds were used in 39% of the area.



- 4 As for *kharif* paddy, certified seeds were used only in 46% and 39% of area under improved seeds for wheat and *rabi* paddy, respectively. For the crop group, 'other cereals', viz. *jowar*, *bajra*, maize, *ragi*, small millets and barley, area under certified seeds constituted 61% of the area under improved seeds.
- 5. Among foodgrains, the use of improved seeds was the least for pulses: only 47% of the area under pulses was cultivated with improved seeds. Moreover, a fairly large part (41%) of this
India

area was cultivated with home-grown seeds.

- 6. Among the other crop-groups, oilseeds, with a share of about 9% in the total AFMC, had about 59% of its area under improved seeds. The use of certified seed was also fairly high (59% of the area under improved seeds).
- 7. The group 'other cash crops' consists of cotton, jute, *mesta* and tobacco in this survey. Of these, cotton is undoubtedly the main. The rapid rise in cotton production in recent years<sup>3</sup> perhaps in due to increased use of improved seeds besides the incease in acreage under cotton cultivation. This is evident from relatively high shares of 'other cash crop' in total AFMC in the States like Maharashtra, Gujarat, Andhra Pradesh, Punjab, Haryana, Karnataka and Rajasthan, as reflected in Table T11. Here also, it is worth mentioning that about 76% of the area under improved seeds was cultivated with certified seeds.

									maia
size class	paddy	paddy	wheat	other	pulses	oil seeds	fodder	others	all
(ha)	kharif	rabi		cereals					crops
nil (< 0.01)	27	60	54	35	31	60	45	44	38
00.01 - 00.20	45	68	47	46	22	57	59	52	47
00.21 - 00.50	48	69	51	51	37	54	50	52	50
00.51 - 01.00	49	67	54	58	40	55	51	58	53
01.01 - 02.00	49	60	59	60	44	57	53	61	55
02.01 - 04.00	50	65	65	65	45	58	58	68	60
04.01 - 10.00	58	69	71	69	51	61	57	70	65
10.01 & above	71	81	79	70	56	61	63	74	70
all	51	66	63	64	47	59	56	65	59

Table T14: Percentage of area under improved seeds by crop-group and size class of holding

4.5.4 *Use of improved seeds and size of holding*: Percentage area under improved seeds by crop group is presented in Table T14. The estimates for 'all crops' clearly display a positive relationship between area under improved seeds and size of holding. Modern farming based largely on the use of HYV seeds, chemical fertilizers and pesticides, with as assured supply of water for irrigation, demands high investment which the smaller farmers cannot afford. The positive relationship between area under improved seeds and size of holding, therefore, reflects the relative advantage of the bigger farmers over the smaller ones.

4.5.5 The table also reveals that, in about two-thirds of the area under *rabi* paddy, improved variety of seeds was used uniformly across all size classes. On the other hand, area under improved seeds for *kharif* paddy increased progressively with the rise of holding size. Similar patterns were also observed for crop-groups like wheat, 'other cereals', pulses and fodder.

<sup>&</sup>lt;sup>3</sup> The cotton production has risen from 9.7 mill. bales in 1991-92 to 14.3 mill. bales in 1996-97. Source: *Agricultural Statistics at a glance, 1997*, Ministry of Agriculture

4.5.6 Crop-*groupwise use of improved seeds*: The percentage areas under improved seeds by crop-group in different States are presented in Table T15.

1. For *kharif* paddy, the most important single crop-group in the country by its share in the total cropped area, the use of improved seeds varies widely from 4% to 90% of the area. The major rice-growing States of the south, north-west and north, each having about 20% or more of their total cropped area under *kharif* paddy, are Andhra Pradesh, Tamil Nadu, Kerala, Karnataka, Gujarat, Punjab and Haryana [see Table T11]. The use of improved seeds in all these States was found to be more extensive than in the States of the east and north-east in general. Only the state of West Bengal, in the east, came closer to these States in this respect. Madhya Pradesh, another major rice-growing state, had a very restricted use of improved seeds for cultivation of *kharif* paddy. Significantly, Manipur, Meghalaya and Tripura of the north-east hills had a moderately high percentages of area under *kharif* paddy under improved seeds.

state	paddy	paddy	wheat	other	pulses	oil	fodder	other	all
	kharif	rabi		cereals	-	seeds			crops
Himachal Pradesh	36	31	33	27	26	8	27	42	32
Jammu & Kashmir	69	92	72	51	60	54	63	69	66
Haryana	87	76	84	82	27	80	52	82	78
Punjab	90	51	87	54	43	73	71	79	84
Uttar Pradesh	51	64	58	44	34	47	63	52	52
Gujarat	77	79	90	86	81	71	50	95	84
Rajasthan	31	85	78	67	62	76	52	61	68
Karnataka	76	67	43	68	51	69	39	60	65
Kerala	77	72	100	23	29	14	0	28	37
Madhya Pradesh	21	69	46	51	31	52	26	49	40
Maharashtra	39	82	60	72	50	60	43	88	69
Andhra Pradesh	79	72	66	69	71	40	46	59	65
Tamil Nadu	72	70	89	64	73	71	38	64	68
Assam	41	38	80	50	25	34	40	52	43
Bihar	43	72	62	46	33	38	27	50	49
Orissa	36	55	54	38	59	33	0	60	40
West Bengal	73	72	70	81	69	68	2	71	72
Arunachal Pradesh	21	36	93	28	45	19	0	16	24
Manipur	65	66	100	58	68	4	44	35	61
Meghalaya	64	55	80	59	40	100	42	52	57
Mizoram	37	0	0	2	3	0	5	21	26
Nagaland	4	2	0	10	0	11	0	2	3
Sikkim	14	4	18	3	0	0	0	0	4
Tripura	61	66	91	0	0	0	0	58	63
India	51	66	63	64	47	59	56	65	59

Table T15: Percentage of area under improved seeds by crop-group and state

Note: The '\*' mark given in cell in case the number of FCC households in the sample falls below 25.

2. The States of Andhra Pradesh, Tamil Nadu, Assam, West Bengal, Arunachal Pradesh, Manipur, Nagaland and Tripura, each of which had about 10% σ more of its area under *rabi* paddy [see Table T11], had more than 60% of their area under improved seeds Assam

(38%), Arunacahal Pradesh (36%), and Nagaland (2%).

- 3. All the States of the north, north-west, east and north-east plains, Jammu & Kashmir and Arunachal Pradesh had quite high percentages of areas under improved wheat seeds.
- 4. The crop-group 'other cereals' is important for both the north-Himalayan States, Uttar Pradesh, all the States of the north-west, the south (except Kerala), the west and central India. Sikkim was the only State in the north-east reporting high percentage(43%) of its AFMC under 'other cereal' [see Table T11]. Use of improved seeds for cultivating 'other cereals', which was very low in Himachal Pradesh and Sikkim, and low in Jammu & Kashmir, Uttar Pradesh and Madhya Pradesh, was found to vary within a small range of 64% in Tamil Nadu to 86% in Gujarat.
- 5. Among the major pulse-producing States like Uttar Pradesh, Rajasthan, Karnataka, Madhya Pradesh, Maharashtra, Andhra Pradesh and Orissa, the percentage of area under improved seeds was relatively low in Uttar Pradesh and Madhya Pradesh, whereas in Andhra Pradesh, it was quite extensive.
- 6. Gujarat, Rajasthan, Karnataka, Madhya Pradesh and Andhra Pradesh were the only States having 10% of total cropped area under 'oilseeds' (see Table T11). Among these States, the percentage of area under improved seeds varied from 40% in Andhra Pradesh to 76% in Rajasthan. It was also high in Gujarat. Significantly, though only 7% of the AFMC in Haryana and Tamil Nadu was under 'oilseeds', the use of improved varieties of seeds was found to be very high in these two States. In fact, the percentage (80%) was the highest in Haryana.

### 4.6 Use of Inputs for Modern Cultivation

4.6.1 The strategy adopted in the Fourth Plan to combat the prevalent food crisis was based on an extensive use of HYV seeds and a package of improved practices, including application





of chemical fertilisers and pesticides. This has resulted in a rapid growth in foodgrain production during the last three decades. Today, improved cultivation practices are followed for a wide variety of crops over a large part of the country. But, while use of fertilisers and pesticides has played a vital role in agricultural growth, it has also raised issues of grave concern to the environmentalists and social scientists. Besides their impact on production, little is known of their effect on the other spheres. The data required to assess the extent of their use are either not available or scanty. The annual data on aggregate consumption of fertilisers, pesticides, weedicides and high quality seeds that are available do not reflect the extent of their use for different crops or by different sections of farmers. The present survey attempts to generate estimates of certain basic parameters relating to the use of these inputs.

4.6.2 In the present survey, some categorical data on the use of these inputs were collected for each of the major crops (a maximum of five) reported by a sample household. The estimates presented in this report being based on these data do not represent rates like quantity per unit area, etc.. They simply indicate broad features of their use, like proportions of area on which fertilisers, pesticides and weedicides were used entirely or partly or were not at all.

						India
crop	improved	fertilisers	manure	either	weedicides	pesticides
	seeds			or		
				both*		
paddy ( <i>kharif</i> )	51	83	77	94	26	52
paddy ( <i>rabi</i> )	66	89	73	94	35	74
wheat	63	93	72	98	28	44
other cereals	64	71	79	91	14	32
pulses	47	65	67	84	12	39
oil seeds	59	82	71	93	23	52
mixed crop	51	60	67	81	31	38
sugar cane	61	96	86	99	30	51
vegetables	59	77	76	92	21	59
fodder	56	73	67	86	16	29
fruits & nuts	48	71	73	84	23	56
other cash crops	82	91	78	97	24	76
others	45	66	59	74	24	41
all crops	59	81	74	93	22	47

Table T16: Percentages of area under a crop group reporting use of improved seeds, chemical fertilisers, manure, weedicides and pesticides

\* "either or both' means 'either of manures and fertilisers or both'

4.6.3 For modern cultivation, it is necessary to test the soil of cultivation fields so that appropriate manures and\or fertilisers could be used. But at national level, only 3.4% of cultivator households reported that they have tested soil of their fields in a soil testing laboratory. Again, half of the households reported testing of soil have followed the recommendations of the testing. [See Appendix Table (11).] Thus, the extent of soil testing is quite negligible. The need for testing of soil of cultivation fields is yet to gain ground in the country.

4.6.4 Table T16 gives the percentages of area under a crop group reported use of improved seeds, chemical fertilisers etc. The percentages shown against 'all crops', evidently, represent the percentages of AFMC. It is seen that the soil of over four-fifths of the AFMC was treated with fertilisers and about three-fourths with manure. Either fertilisers or manure were applied on 93%, pesticides on about half and weedicides on almost a fourth of the AFMC. It is evident from the percentages of area under improved seeds (59%) and area treated with chemical fertilisers (81%) that use of chemical fertilisers was not restricted to crops raised from improved seeds alone. The estimates indicate that there was at least 22% of the cropped area on which the traditional variety of crops was raised with use of fertilisers. In other words, of the cropped area sown with the traditional variety (41%), at least over half was treated with fertilisers.

4.6.5 This appears to be true not only in aggregate but also for each individual crop-group, as the percentage of area treated with fertilisers invariably exceeds that under improved seeds. This phenomenon is most pronounced for the crop-groups sugar cane, wheat and 'other cash crops'. It is seen that fertilisers were used on the area under each of them irrespective of the variety of seeds used.

4.6.6 With the growing awareness of the adverse effects of chemical fertilisers, the need for greater use of organic manures to substitute chemical fertilisers has been recognised in recent years. The estimates given in the table reflect the present practice of nutrient management by the farmers. It is seen that, in general, chemical fertilisers were used more extensively than organic manures. The difference between the percentages of area treated with chemical fertilisers and organic manures was most pronounced for the crop-groups wheat, *rabi* paddy and 'other cash crops'. Perceptibly wider use of manure than fertilisers was found only for the crop-groups 'mixed crop' and 'other cereals'.

4.6.7 The percentages of area under crops on which pesticides were applied reflect a fair degree of dependence of the improved varieties of crops on pesticides. However, the use of pesticides is found to have been, in general, less extensive than the use of improved seeds, with *rabi* paddy standing out as a clear exception. For *rabi* paddy, it appears, the use of pesticides was not restricted only to improved varieties.

4.6.8 As distinct from pesticides, which are applied to ward off pests and plant diseases, weedicides are used to suppress weeds that use up the nutrients from the soil leaving the crop undernourished. Moreover, unlike the use of pesticides, the use of weedicides replaces the weeding operations dependent on human labour. The most extensive use of weedicides was found in the cultivation of *rabi* paddy. Table T16 shows that 35% of the area under *rabi* paddy was treated with weedicides and herbicides. The use of weedicides was also found to be as high for the crop-groups 'mixed crops' and sugarcane. Among the crop-groups with relatively high shares in AFMC, viz. the cereal crop-groups other than *rabi* paddy, pulses and oilseeds, weedicides were most widely used for wheat cultivation, followed by cultivation of *kharif* paddy. For the crop-groups 'other cereals' and pulses, weedicides were used in a small percentage of area under them.

4.6.9 Spread of modern farming: Table T17 presents state-specific percentages of area

under five major crops reporting the use of improved seeds, chemical fertilisers, etc.

1. The estimates corroborate the widely held view that the progress of adoption of improved technology in agriculture has been uneven in different parts of the country. The table indicates that the States of Punjab and Haryana in the north and Gujarat in the north-west have progressed better than the rest of the country in this respect. At the other end, all the States of the east and north-east, except West Bengal, Tripura and Bihar, are lagging far behind.

	Percentage of area un hemical fertilisers, ma	5	L		1	g use of impro	oved seeds,
state	improved	fertilisers	manure	either or	weedicieds	pesticides	irrigation

state	improved seeds	fertilisers	manure	either or both*	weedicieds	pesticides	irrigation
North Himalayan							
Himachal Pradesh	32	77	98	100	8	15	17
Jammu & Kashmir	66	92	86	99	21	32	48
North							
Haryana	78	89	53	92	61	59	90
Punjab	84	99	69	100	79	88	97
Uttar Pradesh	52	92	74	97	17	28	91
North West							
Gujarat	84	95	93	99	31	76	73
Rajasthan	68	61	76	88	10	26	61
West & Central							
Madhya Pradesh	40	73	69	89	20	38	56
Maharashtra	69	79	72	91	13	49	44
South							
Andhra Pradesh	65	94	86	97	22	82	72
Karnataka	65	82	83	95	23	55	41
Kerala	37	67	72	86	14	38	46
Tamil Nadu	68	88	84	95	51	84	84
East & North-East							
Plains							
Assam	43	48	54	68	13	30	19
Bihar	49	84	66	93	18	48	76
Orissa	40	65	88	92	15	35	30
West Bengal	72	94	73	97	26	84	72
North East Hills							
Arunachal Pradesh	24	16	12	23	4	27	22
Manipur	62	58	50	71	21	60	37
Meghalaya	57	18	36	45	10	26	6
Mizoram	26	3	3	5	0	2	1
Nagaland	3	6	55	57	34	18	24
Sikkim	4	22	85	86	1	4	26
Tripura	63	70	84	90	54	70	60

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India	59	81	74	93	22	47	66
Notes * "sither or h	oth' maana 'aithan of m	a constance on d	fantiliaana an	hoth?			

Note: \* "either or both' means 'either of manures and fertilisers or both'

- 2. Punjab and Haryana demonstrated a close association between the use of improved practices and the development of modern irrigation system. The use of seeds, fertilisers, weedicides, pesticides and irrigation facilities were all very high or moderately high. In Uttar Pradesh, the other State of this region, the level of adoption was as high, in terms of the percentages of AFMC reporting use of these inputs, but for some of the inputs, the percentages were clearly lower than even the national average.
- 3. In the north-west, the adoption of improved technology in Gujarat resembled closely that in Punjab and Haryana, while Rajasthan's performance was not really impressive.
- 4. The southern States, except Kerala, are characterised by a moderately high use of improved seeds, and a moderate to high use of pesticides and irrigation.
- 5. Maharashtra and Madhya Pradesh have shown close resemblance in the use of these inputs, except that improved seeds were more extensively used in Maharashtra. In all other respects, these two States appeared to fall below the national average.
- 6. Wider use of fertilisers than manures, indicated by the difference in percentages of AFMC reporting their use, was observed to be the most pronounced in the three States of the north and the States of Bihar and West Bengal in the East. In contrast, manure was used more extensively than fertilisres in Orissa and Rajasthan.
- 7. The AFMC under irrigation seemed to have a bearing on the area under improved seeds almost in all the States. The more (less) the percentage of AFMC under irrigation, the more (less) was the percentage of AFMC under improved seeds barring a few exceptions. (See Figure 3)

## 4.7 Use of Irrigation

4.7.1 The close association between the spread of improved cultivation practices and the use of irrigation, which is clearly demonstrated in the preceding section, confirms the widely held view that irrigation is one of the crucial factors in the input package for cultivation based on improved seeds. Its role in fostering technological change in agriculture in Punjab, Haryana and western Uttar Pradesh during the 1960s and 1970s and in States like Tamil Nadu, Gujarat and West Bengal in more recent times, is now well recognised. This apart, irrigation plays a protective as well as productive role in traditional cultivation as well. The present survey attempts to provide an insight in to what one can broadly understand from the aggregate data on irrigation available as a part of agricultural statistics in India. It seeks to answer questions concerning issues like 'uneven spread of public irrigation facilities, particularly canals', 'relative importance of private irrigation resources in supplementing public investments', and 'dependence of farmers on irrigation services hired from privately-owned facilities in canal and non-canal areas'.

4.7.2 For each of the five major crops reported by a household, the use of irrigation was

ascertained and when the response was found to be in the affirmative, it was enquired whether or not any irrigation services were hired from other households. The estimates on theuse of irrigation presented in the report are based mainly on the responses to these two questions, along with the area under the crop. In addition, a village-level item of information pertaining to availability of water from government irrigation canals has also been used for this report. It also contains estimates on ownership of irrigation facilities like dugwell, tubewell and pump sets and their remaining idle due to low water level or lack of fuel or lack of electricity.

4.7.3 Table T18 gives certain estimates indicating the extent of use of irrigation and availability of public and private irrigation facilities. Besides the estimates from the present surveys, the table also includes some comparable estimates obtained from other sources.

4.7.4 The estimated percentage of irrigated area in AFMC is 65% according to the present survey. But it is seen that this estimate diverges considerably from the percentage of total irrigated area to total cropped area (37%) for the agricultural year 1993-94, as given by the Ministry of Agriculture. It is indeed unacceptable that the spread of irrigation has progressed at such a pace as these two estimates suggest. One can identify the following plausible reasons for this divergence:

			India
	item	source	estimate
1.	percentage of irrigated area in AFMC (1997-98) comparable estimates :	NSS 54th round	66
	percentage of GCA irrigated (1993-94)	LUS*, M/O Agriculture	37
		NSS 48th round (derived)	51
2.	percentage share of villages with Govt. canal (1997-98) in area under 5 major crops (AFMC)	n NSS 54th round	26
3.	Percentage of FCC households owning dugwell/tubewell	- do -	29
4.	percentage of FCC households owning (1997-98)	- do -	
	(i) electric pump		13
	(ii) diesel pump		13
5.	percentage of (all) households owning (1997-98)	- do -	
	(i) electric pump		8
	(ii) diesel pump		8
	comparable estimates : number of pumps per 100 households: (1991-92) (i) electric (ii) others	NSS 48th round	6 7
6.	percentage of pump-owning households reporting pump sets remaining idle due to lack of fuel/electricity	NSS 54th round	
	(i) electric pump		48
	(ii) diesel pump		14
7.	percentage of households owning dugwell/tubewel reporting well/tubewell remaining idle due to low water levels.		26

Table T18: Percentage of total cropped area irrigated and availability of irrigation facilities

\* 'LUS' stands for Land Use Statistics

- (a) Over-representation of irrigated area in the coverage of AFMC in the present survey seems likely. Most of the crops which were reported but not recorded owing to the restriction on the number of crops to be recorded, must have been relatively less important. Thus it is likely that the crops grown on area not covered in AFMC were more often unirrigated than irrigated.
- (b) Orchards and plantation areas were excluded from the coverage of the present enquiry as it pertains only to field-crop cultivation.
- (c) The field-staff was required to record the area under a crop reported by the household as 'irrigated' even when only a part of it was actually irrigated.

4.7.5 The first two reasons can easily be ignored as the coverage of the AFMC, in the present survey, falls short the of the GCA by only about 7% [see Table T3], which is far too small to explain the divergence. There is, however, the possibility of under-reporting of cropped area, particularly of the less important unirrigated plots, by the respondents. There are reasons to believe that the respondents tend to under-report area of land in NSSO surveys, as these are carried out through personal interviews without making any use of the official records. The GCA estimated in the present survey is found to be less than the corresponding figure of the Ministry of Agriculture for 1993-94 by about 22%.<sup>4</sup>

		India
	item	estimate
1. 2.	area operated (mha) percentage of operated area:	125.10
	(a) unirrigated & cropped once	35.31
	(b) unirrigated & cropped more than once	11.59
	(c) irrigated & cropped once	10.93
	(d) irrigated & cropped twice	22.97
	(e) irrigated & cropped more than twice	1.49
3.	NSA (mha) unirrigated and cropped	
	(a) once	44.17
	(b) more than once	14.50
4.	NSA (mha) irrigated and cropped	
	(a) once	13.67
	(b) twice	28.74
	(c) more than twice	1.86
5.	GCA (mha) unirrigated (approx.)	73.17
	[3(a) + twice 3(b)]	
6.	CCA (mha) irrigated (approx.)	76.73
	[ 4(a) + twice 4(b) + thrice 4(c) ]	
7.	GCA (approx.)	149.90
	[(5) + (6)]	

 Table T19:
 Estimates of LHS 1991-92 (NSS, 48th Round) used for deriving percentage of GCA irrigated in rural areas

<sup>&</sup>lt;sup>4</sup> The GCA estimates in the present survey is only about 144 mha, whereas that given by the Ministry of Agriculture is about 184 mha for 1993-94.

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8. Percentage of irrigated GCA (approx.)	51

Source : NSS Report No. 407: Some aspects of operational holdings.

4.7.6 The percentage of irrigated area in the AFMC estimated in the present survey, however, compares better with the broadly comparable figure derived from the estimates of the Land and Livestock Holding Survey (LHS) of the NSS 48th round (1991-92). An approximate estimate of the percentage of GCA irrigated, derived from the survey estimates of operated area cropped with irrigation and that without irrigation of the LHS, 1991-92, is found to be about 51% [see Table T19]. But the derived estimate too suffers from the limitation that a plot irrigated once during the agricultural year has been considered to be irrigated for all the crops raised on it, for deriving the figure. Thus the figure for the percentage of irrigated GCA derived from the estimates of the LHS, 1991-92, in fact, gives an upper bound.

4.7.7 Like the derived estimate from LHS, 1991-92, the estimated percentage of irrigated AFMC obtained from the present survey can be said to be on the higher side owing to reason (c) cited in para 4.7.4. Though the elements of over-estimation embodied in the two estimates are of unknown magnitudes, the difference between them suggests a fair degree of increase in the use of irrigation during the six-year period ending 1997-98. The increasing percentage of households owning pump sets provides further evidence in its favour.

4.7.8 Item 5 of Table T18 shows that while the percentages of households owning electric pump sets and those owning diesel pump sets were both 8 in 1997-98, the number of electric pump sets and that of diesel pump sets per 100 households were 6 and 7 respectively, in 1991-92. Since a household may own more than one pump set, the number of pump sets per 100 households should be greater than the percentage of households owning pump sets at any point of time. Given the growth of population and households even in rural India between1991-92 and January- June 1998, the difference between the estimates of the two rounds indicates a marked rise in privately owned irrigation facilities during the period of 6 years and suggests a growing use of irrigation for cultivation of field crops.

4.7.9 Besides pump sets, privately owned irrigation facilities comprises all dugwells and tubewells owned by the households. It is seen that about 29% of the FCC households relied on at least one of them for irrigation.

4.7.10 The farmers with privately-owned irrigation facilities are expected to have assured supply of water for irrigation at their command. But uncertain power supply or non-availability of fuel or low ground-water level limits the use of equipment for quite some time during a year. Table T18 shows that among the FCC households owning an electric pump set, 48% had to keep it idle for at least sometime during the 365 days preceding the date of survey. Similarly, among those who owned an oil-driven pump set, about 14% could not use it due to lack of fuel. Again, 26% of the households with a privately-owned dugwell or tubewell reported that it had remained unused for some time during last 365 days due to low ground water level.

4.7.11 About the public irrigation facilities, only the village-level information on the availability of water from government irrigation canals is used in this report. It is seen from item 2 of Table T18 that the share of villages with a government canal in the AFMC was about 26%.

4.7.12 Inter-State variation in modern irrigation facilities: Modern capital intensive irrigation systems have emerged during the second half of the present century and have contributed significantly to agricultural growth in many parts of the country. They can be classified into two broad categories. First, the large or medium scale storage- and gravity-based distribution through a network of canals is represented, in this report, by the availability of government canal in the village. Its maintenance and management falls in the domain of public governance. Second, the tubewell system, using pump sets for exploiting subsoil water resources, is mostly privately owned. Table T20 shows the availability of these categories of irrigation facilities and percentage of the AFMC irrigated in different States. The villages with government irrigation canals will be referred to as "canal areas" in the rest of this chapter.

_			percentage of		
State	irrigated AFMC	NSA in canal	cultivator households owning well/	households of pumps	
		areas	Tubewell	electric	oi
North Himdlayan					
Himachal Pradesh	17	3	3	1	1
Jammu & Kashmir	48	42	5	1	1
North					
Haryana	90	58	52	28	30
Punjab	97	60	73	38	51
Uttar Pradesh	91	30	23	21	5
North-West					
Gujarat	73	19	42	24	21
Rajasthan	61	16	50	24	20
West & Central					
Madhya Pradesh	56	17	28	8	20
Maharashtra	44	18	34	4	29
South					
Andhra Pradesh	72	32	36	6	30
Karnataka	41	25	23	2	19
Kerala	46	31	61	2	14
Tamil Nadu	84	31	49	15	33
East & North -East Plains					
Assam	19	3	27	3	1
Bihar	76	26	21	15	2
Orissa	30	30	8	2	1
West Bengal	72	26	19	12	1
North-East Hills					
Arunachal Pradesh	22	17	7	4	3
Manipur	37	23	11	10	2
Meghalaya	6	0	3	0	1
Mizoram	1 24	0 0	0 7	1 1	(
Nagaland Sikkim	24 26	0 10	0	1	(
Tripura	20 60	10	19	4	2

Table T20: Percentage of AFMC irrigated and availability of irrigation facilities

4.7.13 All the three northern States reported more than 90% of their AFMC irrigated, but the available irrigation facilities, whether public or privately owned, varied considerably. In Punjab and Haryana, the two agriculturally most developed States of the country, about 60% of the NSA was in the canal areas, while the figure for Uttar Pradesh was just 30%. In respect of percentages of cultivator households owning pump sets, wells and tubewells too, the difference between Uttar Pradesh and the other two States was quite pronounced.

4.7.14 Relatively high percentages of the irrigated AFMC were observed also in two southern States, viz. Tamil Nadu(84%) and Andhra Pradesh(72%). In both these States, nearly a third of the NSA was in canal areas. In Tamil Nadu, relatively large percentages of cultivator households owned electric and oil pump sets. In the other two States of the south, percentages of irrigated AFMC as well as percentages of cultivator households owning pump sets were much lower the national average.

4.7.15 In the east, West Bengal and Bihar had moderately high percentages of irrigated AFMC while Assam and Orissa were much worse off in this respect. Significantly, the share of canal areas in the total NSA of Orissa(30%) was higher than that in West Bengal(26%) and Bihar(26%), but the percentages of households owning electric and oil pump sets in Orissa were among the lowest in the country. It appears that the cultivators of Orissa were more dependent on government canals than on privately owned facilities for irrigation. On the other hand, it appears that for the small proportion of the AFMC that was irrigated in Assam, the main source was manually operated dugwells.

4.7.16 In the north-western States of Gujarat and Rajasthan, with relatively high percentages of AFMC irrigated, the dependence was more on privately owned tubewells and pump sets than on government irrigation canals. In Maharashtra and Madhya Pradesh also, the dependence was more on privately owned facilities, though much lower percentage of the AFMC was irrigated. In general, it is seen that the use of modern irrigation systems was much less common in the other regions.

4.7.17 *Hiring of irrigation services in canal and non-canal areas*: There are, at present, no data reflecting the role of private investment in supplementing the public efforts in irrigating the cultivable land in the country. The data on sources of irrigation and ownership of pumps and tubewells, available from the LHSs of the NSSO as well as the Agricultural and Livestock Censuses of the Ministry of Agriculture, provide only a partial picture. A large part of the cultivated land today is irrigated by hiring services from private sources, either in the form of water purchased or pump sets taken on hire. In the present enquiry, data on hiring of irrigation services from other households were collected from all the FCC households in the sample. The estimated percentages of the AFMC irrigated by hiring services from other households are given in Table T21 separately for canal and non-canal areas of all the States. However, Meghalaya and Mizoram are omitted from the table, as only very small parts of their AFMC was reported to have been irrigated. Again, the table does not include separate estimates for canal and non-canal areas of Himachal Pradesh, Assam and Nagaland, as the proportion of NSA in canal areas was 3% or less in these States. These estimates are excluded from the table, because they

state	percentage of	percentage of irrigated AFMC using hired services					
	canal areas	non-canal areas	All	AFMC			
North Himalayan							
Himachal Pradesh	*	*	14	17			
Jammu & Kashmir	3	7	5	48			
North							
Haryana	40	37	39	90			
Punjab	18	21	19	97			
Uttar Pradesh	61	69	67	91			
North-West							
Gujarat	45	35	38	73			
Rajasthan	17	30	28	61			
West & Central							
Madhya Pradesh	18	34	30	56			
Maharashtra	10	20	18	44			
South							
Andhra Pradesh	33	35	34	72			
Karnataka	6	23	17	4			
Kerala	7	7	7	40			
Tamil Nadu	24	25	25	84			
East & North-East Plair	15						
Assam	*	*	31	19			
Bihar	60	71	69	70			
Orissa	18	37	27	30			
West Bengal	57	72	67	72			
North-East Hills							
Arunachal Pradesh	31	7	15	22			
Manipur	62	37	46	3'			
Nagaland	*	*	2	24			
Sikkim	4	4	4	20			
Tripura	23	33	33	60			
India	40	49	46	6			

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Table 171 · Parcentage	ot AHA/II 'irrigated	HEING COTVICOS	hirod from	other households
Table T21: Percentage	of Armic infeated	using services	IIII CU II UIII	other nousenoius
		0		

are not expected to be stable or reliable.

4.7.18 It is seen that for 46% of the irrigated AFMC in the country, irrigation was hired from other households. As expected, the cultivators in the canal areas were less dependent on the hired private sources than in the non-canal areas. The percentage of the AFMC irrigated by hiring services from other households was appreciably higher in the non-canal areas (49) than in the canal areas (40).

4.7.19 The phenomenon of buying water or hiring irrigation services was most pronounced in Bihar (69%), West Bengal (67%) and Uttar Pradesh (67%). In fact, these were the only States with the percentages of AFMC irrigated by hiring the services from other households exceeded

the national average. Among these three States, the percentage was perceptibly higher in the non-canal areas than in the canal areas, the difference being the most pronounced in West Bengal. Among other States, a considerably higher percentages of AFMC irrigated by hiring services in the canal areas than in the non-canal areas were observed in Orissa, Karnataka, Rajasthan, Madhya Pradesh and Maharashtra. In contrast, the percentages were found to be higher in the canal areas of Manipur, Gujarat, Arunachal Pradesh and Haryana than in the non-canal areas.

#### 4.8 Mechanisation in Agriculture

4.8.1 The beginning of mechanisation in Indian agriculture can be traced to the early 1960s. Since then it has progressed at a fairly rapid pace. But certain important forms of farm mechanisation are known to have remained largely concentrated in certain pockets, commonly called 'green revolution' areas. The estimates obtained from the decennial LHSs of the NSSO, which are reproduced in Table T22<sup>5</sup>, clearly depict the development of mechanised cultivation in terms of ownership of modern machinery like tractors, power tillers and pump sets. These

Table T22: Estimated number of tractors, power tillers and pumps in different NSS rounds

farm equipment	<b>71-72</b> (26th)	<b>81-82</b> (37th)	India 91-92 (48th)
tractor (000)	75	486	1,363
power tiller (000)	-	249	513
pumps – electric & oil (mill.)	5	11	16

estimates, indicate a rapidly rising trend in the number of modern farm equipment owned but, do not provide a good measure of their actual use. A large number of farmers hire in the services of tractors, power tillers and harvesters from those who own them. Thus, the actual use of modern farm machinery is much wider han what the data on ownership of equipment suggest. The present survey provides some data on actual use of modern farm machinery, either hired or owned. The percentage of rural households reporting use of a tractor or power tiller was 25% in the present survey. This reflects a phenomenal rise in the use of tractors and power tillers during the last three decades, since the percentage of households using tractors or power tillers estimated in the NSS 22nd Round (1967-68) was merely 1.17%.<sup>6</sup>

<sup>&</sup>lt;sup>5</sup> These estimates are quoted from NSS Report No. 408, 'Livestock and Agricultural Implements in Household Operational Holdings', NSS 48th Round, 1992.

<sup>&</sup>lt;sup>6</sup> Note: This estimate is taken from NSS Report No. 202, based on the survey on cultivation practices conducted in the 22nd Round of NSS with agricultural year 1967-68 as the reference period.

4.8.2 For each of the five important crops cultivated by a sample household, it was enquired whether the household had used any tractor or power-tiller, and if so whether it had been taken on hire. The estimates on use of tractors and power tillers given in these reports are all based on responses to these two questions. Table T23 gives the percentage of AFMC tilled with tractors or power tillers and indicates what part of it was taken on hire separately for each size-class of holdings. It is important to note that the estimates presented in this table represent the percentage of the AFMC entirely or partly tilled with tractors or power tillers. It is seen from Table (5) of Appendix I that about a third of the AFMC tilled with hired tractors or power tillers was actually tilled partially with machines. Of the mechanically-tilled AFMC without using hired services, partial tilling with tractor or power tiller was reported in only about 10%. Though the distinction between 'partly used' and 'entirely used' is important, only the percentages of mechanically-tilled AFMC, whether partly or entirely, are discussed in this chapter.

	*			India			
		percentage of AFMC tilled with tractors /power tillers					
size-class (ha)	hired	others	all	tilled with hired tractors*			
nil (< 0.01)	42	8	50	84			
0.01 - 0.20	44	3	47	94			
0.21 - 0.50	44	3	46	96			
0.51 - 1.00	41	3	44	93			
1.01 - 2.00	41	5	46	90			
2.01 - 4.00	40	12	52	77			
4.01 - 10.00	37	26	63	59			
10.01 &above	29	52	81	36			
all sizes	39	15	54	72			

Table T23 : Percentage of AFMC tilled with tractor / power tiller and use of hired tractors and power tillers

\* 'Tractors' stand for 'tractors & power tillers'

4.8.3 It is seen that about 54% of the AFMC was tilled mechanically, either with tractors or power tillers. Significantly, hired tractors and power tillers were used in about three-fourths of the mechanically-tilled AFMC. Tilling land with hired equipment was extensive in all the size-classes, including the 'large' category, with over 90% of the mechanically-tilled AFMC in the 'marginal' and 'small' holding categories. A sizeable part of the AFMC, ranging from 44% to 50%, in the 'small' and 'marginal' holdings, was mechanically tilled.

4.8.4 *Inter-state variation in the use of tractors and power tillers*: The percentages of AFMC tilled with tractors or power tillers and the proportion of it tilled with hired services are given in Table T24 separately for each State. It also shows the estimated number of tractors and power tillers per 10,000 households obtained from the LHS, NSS 48th Round. However, the States of Meghalaya, Mizoram, Nagaland and Sikkim are excluded from the table, as

	p.c. of tractor-	p.c. of tractor- tilled AFMC	no. of tractors/p 10,000 ha of opera	
state	tilled AFMC	tilled with hired tractors*	tractor	power tiller
Himachal Pradesh	15	93	53	3
Jammu & Kashmir	36	89	27	6
Haryana	94	57	387	317
Punjab	97	34	1024	584
Uttar Pradesh	76	79	215	58
Gujarat	67	72	103	0
Rajasthan	89	79	91	10
Madhya Pradesh	36	63	73	12
Maharashtra	16	75	34	2
Andhra Pradesh	51	75	48	1
Karnataka	27	74	50	11
Kerala	15	73	3	15
Tamil Nadu	59	80	66	18
Assam	11	64	0	23
Bihar	48	75	59	25
Orissa	12	75	5	2
West Bengal	47	92	37	86
Arunachal Pradesh	9	44	3	0
Manipur	48	94	6	6
Tripura	37	76	9	18
India	54	72	109	41

TableT24: Percentage of mechanically-tilled AFMC and use of hired tractors and power tillers

Source: NSS Report No. 408, *Livestock and Agricultural Implements in Household Operational Holdings*, 48th Round, 1992.

mechanical tilling was reported on only an insignificant part of the cultivated area in these States.

4.8.5 The estimates of percentage of mechanically-tilled AFMC for different States clearly show that the mechanisation of Indian agriculture is largely concentrated in the States of the north and those of the north-west. In Punjab and Haryana, about 97% and 94% of the respective AFMCs were tilled entirely or partly with tractors and power tillers. Relatively high percentages of mechanically-tilled AFMC were also reported in all the other States of the north and north-west. In fact, only in these States were the estimates higher than the national-level estimate. Besides these States, large proportions of mechanically-tilled AFMC were reported

in Tamil Nadu(59%), Andhra Pradesh(51%), Bihar(48%) and West Bengal(47%). The estimates of number of tractors and power tillers per 10,000 ha of operated area obtained from the LHS, NSS 48th Round also suggest relatively high use of modern equipment for tilling the land.

4.8.6 Table T24 also gives the percentages of mechanically-tilled AFMC using hired tractors or power tillers. In general, the hiring of tractors and power tillers was reported in very high percentage of mechanically-tilled AFMC. Among the States with 10% or more of mechanically-tilled AFMC, it was low only in Punjab(34%) and Haryana (57%).

4.8.7 *Use of machines for harvesting*: The modern harvesters and harvester-combines are used for mechnical harvesting. To assess the extent to which these are used, for harvesting the crops, a question was asked to ascertain whether the harvesting for each of the five crops reported by a household was done manually or mechanically. It was also asked whether the equipment for harvesting was hired, if was done mechanically. Table T25 gives the percentage of AFMC by mode of harvesting for all the States, except the North-Himalayan and North-Eastern Hill States. Mechanical harvesting being a rare phenomenon, in general, and the estimates for these States being based on a relatively small sample, the estimates for these States are not discussed here.

state	manual	own	hired	all
		equipment	equipment	
Haryana	92	2	5	100
Punjab	59	6	35	100
Uttar Pradesh	99	1	1	100
Gujarat	95	2	3	100
Rajasthan	98	1	1	100
Madhya Pradesh	99	0	1	100
Maharashtra	91	1	8	100
Andhra Pradesh	97	1	3	100
Karnataka	76	3	21	100
Kerala	97	2	1	100
Tamil Nadu	98	0	2	100
Assam	97	2	1	100
Bihar	99	1	1	100
Orissa	99	1	1	100
West Bengal	94	2	4	100
India	94	1	5	100

TableT25: Percentage distribution of AFMC by mode of harvesting

4.8.8 It is seen that mechanical harvesting was reported in only 6% of the AFMC of the country. Only in 1% of the AFMC, crops were harvested using owned machines and about 5% using hired machines. What clearly emerges from the table that the use of machines for harvesting of crops is concentrated mainly in the States of Punjab and Karnataka. In all, mechanical harvesting was done in about 41% and 24% of the AFMC in Punjab and

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Karnataka respectively. Among the other States, appreciable proportions of mechanicallyharvested AFMC were found in Maharashtra (9%), Haryana (7%) and West Bengal (6%). Appendix I Detailed Tables

size-class of				e area (0.00	,			
			cropped	under	five major crops*	sown by	numb	
ownership	owned	net	more than		households		house	
holding (ha)		sown	once	irrigated	unirrigated	all	est.(00)	sample
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
				Andhra P	radesh			
nil (< 0.01)	-	0.02	0.01	0.02	0.00	0.03	42804	1998
00.01 - 00.20	0.04	0.04	0.01	0.04	0.01	0.04	24697	1257
00.21 - 00.50	0.36	0.33	0.11	0.31	0.11	0.42	15328	744
00.51 - 01.00	0.76	0.66	0.22	0.59	0.22	0.81	13766	639
01.01 - 02.00	1.41	1.26	0.42	1.17	0.37	1.53	11497	532
02.01 - 04.00	2.65	2.31	0.64	1.87	0.78	2.65	7233	358
04.01 - 10.00	5.40	4.68	1.33	3.91	1.52	5.43	3513	168
10.01 & above	16.99	13.19	1.98	8.34	5.20	13.54	495	25
all	0.67	0.59	0.17	0.50	0.19	0.69	119333	5721
				Arunachal	Pradach			
				Alunachai	Tauesn			
nil (< 0.01)	-	0.39	0.16	0.01	0.36	0.37	387	145
00.01 - 00.20	0.10	0.05	0.02	0.02	0.03	0.05	179	70
00.21 - 00.50	0.36	0.29	0.09	0.09	0.21	0.30	202	83
00.51 - 01.00	0.84	0.53	0.11	0.16	0.36	0.52	225	110
01.01 - 02.00	1.66	0.97	0.31	0.31	0.67	0.97	295	126
02.01 - 04.00	3.03	2.08	0.92	0.50	1.37	1.86	165	90
04.01 - 10.00	6.24	2.26	1.16	0.26	1.48	1.74	162	87
10.01 & above	17.68	8.24	4.27	-	5.60	5.60	11	8
all	1.52	0.87	0.36	0.17	0.61	0.78	1625	719
				A 200				
				Assa				
nil (< 0.01)	-	0.07	0.05	0.02	0.09	0.10	1965	194
00.01 - 00.20	0.09	0.03	0.01	0.00	0.03	0.04	10457	1013
00.21 - 00.50	0.34	0.23	0.11	0.06	0.25	0.31	5298	560
00.51 - 01.00	0.76	0.64	0.29	0.17	0.69	0.86	7270	636
01.01 - 02.00	1.44	1.26	0.47	0.27	1.31	1.58	7034	590
02.01 - 04.00	2.63	2.33	1.09	0.67	2.38	3.05	2570	208
04.01 - 10.00	4.87	4.45	2.28	1.27	4.81	6.09	520	42
10.01 & above * <i>Note</i>	-	-	-	-	-	-	-	-

Table (1) Average area owned, net sown area (NSA), area cropped more than once and irrigated & unirrigated gross cropped area (GCA) under five major crops sown by households by size-class of ownership holding, 1997-98

1. Paddy: *kharif* and paddy: *rabi*, for example, are treated as different "crops" for this purpose.

all	11/9	0.67	0.17	0.97	35114	3243

Table (1) Average area owned, net sown area (NSA), area cropped more than once and irrigated & unirrigated gross cropped area
(GCA) under five major crops sown by households by size-class of ownership holding, 1997-98

			average	area (0.00 l				
size-class of			cropped	under f	ive major crops* s	own by	numb	
ownership	owned	net	more than		households		house	holds
holding (ha)		sown	once	irrigated	unirrigated	all	est.(00)	sample
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
				Biha	r			
nil (< 0.01)	-	0.13	0.07	0.10	0.08	0.18	20316	988
00.01 - 00.20	0.05	0.05	0.03	0.05	0.02	0.07	59569	2976
00.21 - 00.50	0.37	0.38	0.26	0.43	0.16	0.59	24233	1268
00.51 - 01.00	0.78	0.78	0.52	0.87	0.34	1.21	20336	983
01.01 - 02.00	1.43	1.39	0.95	1.53	0.58	2.11	16094	790
02.01 - 04.00	2.71	2.67	1.89	3.31	0.77	4.08	6889	334
04.01 - 10.00	5.64	5.43	3.53	6.18	1.31	7.49	2313	111
10.01 & above	19.04	18.07	12.93	26.08	3.24	29.32	278	14
all	0.59	0.59	0.40	0.68	0.21	0.90	150028	7464
				Gujar				
nil (< 0.01)	-	0.00	0.00	0.00	0.00	0.01	20034	1136
00.01 - 00.20	0.06	0.10	0.03	0.10	0.01	0.11	4159	246
00.21 - 00.50	0.38	0.39	0.25	0.38	0.18	0.56	7672	398
00.51 - 01.00	0.79	0.76	0.44	0.79	0.29	1.08	5928	290
01.01 - 02.00	1.44	1.37	0.71	1.29	0.55	1.85	6666	344
02.01 - 04.00	2.86	2.63	0.99	2.29	1.09	3.38	5688	292
04.01 - 10.00	5.94	5.39	1.46	4.95	1.36	6.32	3793	203
10.01 & above	14.66	12.21	2.70	9.96	3.33	13.29	529	30
all	1.17	1.08	0.40	0.99	0.37	1.35	54468	2939
				Harya	na			
nil (< 0.01)	-	0.01	0.01	0.02	-	0.02	11933	573
00.01 - 00.20	0.03	0.31	0.27	0.55	0.04	0.58	2342	116
00.21 - 00.50	0.37	0.55	0.47	0.93	0.05	0.98	1987	98
00.51 - 01.00	0.79	0.89	0.68	1.31	0.23	1.53	1895	88
01.01 - 02.00	1.44	1.52	1.18	2.27	0.31	2.58	3009	140
*Note								

1. Paddy: *kharif* and paddy: *rabi*, for example, are treated as different "crops" for this purpose.

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02.01 - 04.00	2.78	2.75	2.01	3.98	0.48	4.46	2362	116
04.01 - 10.00	5.64	5.25	3.74	6.94	0.93	7.87	1613	77
10.01 & above	11.98	10.85	9.09	18.66	-	18.66	248	14
all	1.00	1.02	0.77	1.49	0.16	1.66	25388	1222

\*Note

<sup>1.</sup> Paddy: *kharif* and paddy: *rabi*, for example, are treated as different "crops" for this purpose.

<sup>2.</sup> The set of 5 major crops is not a fixed set but varies from household to household; for any particular household it is understood as the 5 most important field crops cultivated, in terms of value of production, by the household in 1997-98, from among a list of crop-season combinations involving 12 crops and crop-groups spanning the entire range of crops cultivated in the country.

			average	e area (0.00 ł	na.)			
size-class of			cropped	under f	ive major crops* so	wn by	numb	er of
ownership	owned	net	more than		households		house	holds
holding (ha)		sown	once	irrigated	unirrigated	all	est.(00)	sample
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
				Himachal P	radesh			
nil (< 0.01)	-	0.03	0.02	-	0.05	0.05	626	122
00.01 - 00.20	0.10	0.07	0.07	0.04	0.11	0.14	2434	453
00.21 - 00.50	0.36	0.28	0.26	0.12	0.42	0.54	2984	559
00.51 - 01.00	0.75	0.52	0.49	0.16	0.84	1.00	2232	409
01.01 - 02.00	1.46	0.96	0.84	0.26	1.48	1.75	1286	243
02.01 - 04.00	2.85	1.60	1.34	0.35	2.48	2.83	522	99
04.01 - 10.00	5.86	2.64	2.44	0.76	4.23	4.99	108	22
10.01 & above	12.75	1.74	1.62	1.03	2.11	3.14	35	7
all	0.73	0.45	0.41	0.14	0.70	0.84	10226	1914
				Jammu & K	<b>Kashmir</b>			
nil (< 0.01)	-	0.02	0.00	0.01	0.01	0.02	237	65
00.01 - 00.20	0.12	0.11	0.06	0.10	0.05	0.16	1432	329
00.21 - 00.50	0.38	0.37	0.18	0.32	0.19	0.51	2857	589
00.51 - 01.00	0.76	0.73	0.44	0.49	0.60	1.09	1978	392
01.01 - 02.00	1.45	1.24	0.90	0.79	1.23	2.02	1001	243
02.01 - 04.00	2.57	2.20	1.80	1.67	2.11	3.79	353	84
04.01 - 10.00	5.36	4.37	2.99	4.05	2.88	6.92	51	17
10.01 & above	-	-	-	-	-	-	-	-
all	0.68	0.62	0.40	0.46	0.50	0.95	7907	1719
				Karnata	aka			
nil (< 0.01)	-	0.01	-	0.00	0.00	0.01	16411	780
00.01 - 00.20	0.06	0.04	0.01	0.02	0.03	0.04	10304	493
00.21 - 00.50	0.38	0.32	0.08	0.10	0.29	0.39	7526	358
00.51 - 01.00	0.78	0.72	0.19	0.31	0.55	0.86	10665	463
01.01 - 02.00	1.50	1.42	0.33	0.67	0.97	1.64	12550	533
02.01 - 04.00	2.79	2.61	0.62	1.40	1.61	3.01	7330	313
04.01 - 10.00	5.71	5.21	1.12	2.45	3.43	5.87	4250	184
*Note								

Table (1) Average area owned, net sown area (NSA), area cropped more than once and irrigated & unirrigated gross cropped area(GCA) under five major crops sown by households by size-class of ownership holding, 1997-98

\*Note

1. Paddy: *kharif* and paddy: *rabi*, for example, are treated as different "crops" for this purpose.

10.01 & above	16.00	14.55	2.62	5.67	10.19	15.85	656	28
all	1.23	1.14	0.26	0.53	0.77	1.30	69692	3152

\*Note

<sup>1.</sup> Paddy: *kharif* and paddy: *rabi*, for example, are treated as different "crops" for this purpose.

<sup>2.</sup> The set of 5 major crops is not a fixed set but varies from household to household; for any particular household it is understood as the 5 most important field crops cultivated, in terms of value of production, by the household in 1997-98, from among a list of crop-season combinations involving 12 crops and crop-groups spanning the entire range of crops cultivated in the country.

			average	e area (0.001	na.)			
size-class of			cropped	under f	ive major crops* s	own by	numb	
ownership	owned	net	more than	<u> </u>	households		house	
holding (ha)		sown	once	irrigated	unirrigated	all	est.(00)	sample
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
				Kera	la			
nil (< 0.01)	-	0.00	0.00	-	0.00	0.00	1833	121
00.01 - 00.20	0.07	0.05	0.00	0.02	0.03	0.04	30300	1961
00.21 - 00.50	0.34	0.30	0.05	0.12	0.16	0.28	6868	449
00.51 - 01.00	0.74	0.66	0.10	0.26	0.31	0.58	3632	216
01.01 - 02.00	1.42	1.22	0.19	0.44	0.59	1.03	2030	119
02.01 - 04.00	2.76	2.20	0.26	1.04	0.86	1.90	532	32
04.01 - 10.00	6.32	4.78	0.87	2.47	1.78	4.25	185	11
10.01 & above	11.54	9.50	1.86	8.76	2.59	11.36	32	2
all	0.28	0.24	0.03	0.10	0.11	0.21	45411	2911
				Madhya P	radesh			
nil (< 0.01)	-	0.03	0.02	0.03	0.02	0.05	15259	927
00.01 - 00.20	0.06	0.03	0.01	0.01	0.02	0.03	16226	902
00.21 - 00.50	0.38	0.34	0.13	0.18	0.28	0.46	10601	593
00.51 - 01.00	0.79	0.85	0.32	0.45	0.58	1.03	15480	800
01.01 - 02.00	1.48	1.37	0.64	0.92	1.04	1.95	21789	1122
02.01 - 04.00	2.74	2.52	1.08	1.77	1.73	3.50	18907	959
04.01 - 10.00	5.78	5.22	2.69	5.03	2.69	7.71	8193	437
10.01 & above	14.79	12.99	7.58	15.51	3.78	19.29	1028	62
all	1.52	1.41	0.66	1.12	0.87	1.99	107483	5802
				Maharas	htra			
nil (< 0.01)	-	0.00	0.00	0.00	0.01	0.01	34047	1630
00.01 - 00.20	0.04	0.04	0.01	0.01	0.03	0.04	20421	1074
00.21 - 00.50	0.36	0.31	0.08	0.11	0.26	0.36	9080	433
00.51 - 01.00	0.77	0.69	0.16	0.29	0.50	0.79	12672	580
01.01 - 02.00	1.47	1.29	0.27	0.60	0.88	1.48	16246	76
02.01 - 04.00	2.74	2.34	0.47	1.14	1.50	2.64	11577	54.
04.01 - 10.00	5.66	4.73	1.02	2.44	2.91	5.35	6321	29
*Note								
· (N/)///								

Table (1) Average area owned, net sown area (NSA), area cropped more than once and irrigated & unirrigated gross cropped area (GCA) under five major crops sown by households by size-class of ownership holding, 1997-98

\*Note

1. Paddy: *kharif* and paddy: *rabi*, for example, are treated as different "crops" for this purpose.

10.01 & above	16.81	11.79	2.78	8.20	4.43	12.64	883	40
all	1.08	0.91	0.20	0.45	0.57	1.02	111247	5359

\*Note

<sup>1.</sup> Paddy: *kharif* and paddy: *rabi*, for example, are treated as different "crops" for this purpose.

<sup>2.</sup> The set of 5 major crops is not a fixed set but varies from household to household; for any particular household it is understood as the 5 most important field crops cultivated, in terms of value of production, by the household in 1997-98, from among a list of crop-season combinations involving 12 crops and crop-groups spanning the entire range of crops cultivated in the country.

			average	area (0.00 ł	na.)			
size-class of ownership	owned	net	cropped more than	under f	ive major crops* so households	own by	numbe housel	
holding (ha)	Owned	sown	once	irrigated	unirrigated	all	est.(00)	sample
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	(=)	(0)					(0)	(2)
				Manip	ur			
nil (< 0.01)	-	0.47	0.12	0.06	0.81	0.86	259	105
00.01 - 00.20	0.08	0.04	0.01	0.00	0.03	0.04	405	129
00.21 - 00.50	0.37	0.30	0.09	0.12	0.19	0.31	507	181
00.51 - 01.00	0.77	0.66	0.18	0.27	0.40	0.67	844	261
01.01 - 02.00	1.34	1.01	0.43	0.47	0.59	1.06	391	153
02.01 - 04.00	2.33	1.77	0.82	0.98	0.85	1.83	89	38
04.01 - 10.00	5.74	4.74	2.31	0.07	2.72	2.79	10	6
10.01 & above	-	-	-	-	-	-	-	-
all	0.66	0.58	0.20	0.23	0.39	0.62	2505	873
				Meghala	aya			
nil (< 0.01)	-	0.02	0.01	-	0.02	0.02	102	35
00.01 - 00.20	0.11	0.16	0.03	0.00	0.18	0.19	552	176
00.21 - 00.50	0.36	0.30	0.11	0.01	0.35	0.36	845	233
00.51 - 01.00	0.76	0.65	0.22	0.02	0.77	0.80	828	236
01.01 - 02.00	1.45	1.17	0.28	0.09	1.18	1.27	613	195
02.01 - 04.00	2.76	2.08	0.51	0.20	2.00	2.21	425	136
04.01 - 10.00	5.12	4.20	0.61	0.06	4.19	4.25	92	29
10.01 & above	-	-	-	-	-	-	-	-
all	1.02	0.83	0.21	0.05	0.87	0.92	3457	1040
				Mizora	am			
N(1 < 0.01)		0.56	0.09		0.61	0.61	101	02
Nil (< 0.01) 00.01 - 00.20	0.05	0.56 0.59	0.08 0.06	- 0.00	0.61 0.63	0.61 0.64	121 394	92 319
00.01 - 00.20	0.03	0.59	0.08	0.00	0.63	0.60	52	53
00.21 - 00.30	0.33	0.37	0.03	0.04	0.80	0.80	52 60	50 50
01.01 - 02.00	1.56	1.04	0.00	0.03	0.96	0.99	72	60
02.01 - 04.00	2.58	1.73	0.09	-	1.57	1.57	16	17
04.01 - 10.00	6.67	2.00	-	-	2.00	2.00	3	3
10.01 & above	-	-	-	-	-	-	-	-
*Note								

Table (1) Average area owned, net sown area (NSA), area cropped more than once and irrigated & unirrigated gross cropped area (GCA) under five major crops sown by households by size-class of ownership holding, 1997-98

1. Paddy: *kharif* and paddy: *rabi*, for example, are treated as different "crops" for this purpose.

all 0.36 0.68 0.06 0.01 0.70 0.71 718	594
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\*Note

<sup>1.</sup> Paddy: *kharif* and paddy: *rabi*, for example, are treated as different "crops" for this purpose.

<sup>2.</sup> The set of 5 major crops is not a fixed set but varies from household to household; for any particular household it is understood as the 5 most important field crops cultivated, in terms of value of production, by the household in 1997-98, from among a list of crop-season combinations involving 12 crops and crop-groups spanning the entire range of crops cultivated in the country.

			average	e area (0.001	ha.)			
size-class of			cropped	under f	ive major crops* s	own by	numb	
ownership	owned	net	more than	irrigated	households	all	house	
holding (ha)	(2)	sown	once		unirrigated		est.(00)	sample
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
				Nagala	nd			
nil (< 0.01)	-	0.46	0.28	-	0.50	0.50	52	39
00.01 - 00.20	0.11	0.06	0.04	0.00	0.07	0.07	39	43
00.21 - 00.50	0.34	0.19	0.14	0.03	0.20	0.22	45	61
00.51 - 01.00	0.81	0.62	0.42	0.09	0.71	0.80	77	71
01.01 - 02.00	1.66	1.26	0.79	0.14	1.44	1.57	192	179
02.01 - 04.00	2.94	2.10	1.27	0.26	2.19	2.45	331	358
04.01 - 10.00	6.78	4.99	2.87	2.79	4.21	7.00	127	136
10.01 & above	13.08	8.00	4.59	6.18	5.56	11.75	7	8
all	2.68	1.97	1.18	0.60	1.92	2.52	871	895
				Oriss	a			
nil (< 0.01)	-	0.01	0.00	0.00	0.01	0.01	6215	341
00.01 - 00.20	0.06	0.05	0.01	0.01	0.04	0.05	22120	1211
00.21 - 00.50	0.36	0.34	0.06	0.09	0.30	0.38	12884	698
00.51 - 01.00	0.76	0.72	0.13	0.20	0.60	0.80	11131	575
01.01 - 02.00	1.39	1.25	0.22	0.45	0.97	1.41	7419	391
02.01 - 04.00	2.51	2.27	0.48	0.72	1.93	2.65	2936	149
04.01 - 10.00	5.35	4.88	0.90	2.45	3.31	5.76	624	33
10.01 & above	13.15	10.28	1.22	6.31	5.20	11.50	122	3
all	0.58	0.53	0.10	0.18	0.42	0.60	63451	3401
				Punja	ab			
nil (< 0.01)	-	0.01	0.01	0.01	0.00	0.01	17638	1639
00.01 - 00.20	0.11	0.22	0.21	0.38	0.03	0.41	570	55
00.21 - 00.50	0.37	0.34	0.36	0.59	0.07	0.66	1181	103
00.51 - 01.00	0.77	1.01	1.04	1.95	0.02	1.97	1462	122
01.01 - 02.00	1.45	1.54	1.46	2.79	0.05	2.84	2952	257
02.01 - 04.00	2.70	2.79	2.80	5.15	0.03	5.32	2202	190
04.01 - 10.00	5.94	5.53	5.43	9.87	0.52	10.39	1588	134

Table (1) Average area owned, net sown area (NSA), area cropped more than once and irrigated & unirrigated gross cropped area (GCA) under five major crops sown by households by size-class of ownership holding, 1997-98

\*Note

1. Paddy: *kharif* and paddy: *rabi*, for example, are treated as different "crops" for this purpose.

10.01 & above	13.29	13.13	13.17	24.38	-	24.38	377	33
all	0.94	0.95	0.94	1.73	0.05	1.79	27971	2533

\*Note

<sup>1.</sup> Paddy: *kharif* and paddy: *rabi*, for example, are treated as different "crops" for this purpose.

<sup>2.</sup> The set of 5 major crops is not a fixed set but varies from household to household; for any particular household it is understood as the 5 most important field crops cultivated, in terms of value of production, by the household in 1997-98, from among a list of crop-season combinations involving 12 crops and crop-groups spanning the entire range of crops cultivated in the country.

		average	e area (0.00 l	na.)			
		cropped	under f	<i>v</i> 1	own by	numb	
owned							
				2			sample
(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
			Rajastl	nan			
-	0.13	0.08	0.12	0.09	0.20	4836	323
0.06	0.11	0.07	0.13	0.04	0.17	8536	497
0.38	0.40	0.27	0.47	0.18	0.65	8354	451
0.76	0.68	0.42	0.69	0.39	1.07	8870	461
1.45	1.29	0.70	1.30	0.61	1.91	11588	618
2.88	2.52	1.27	2.44	1.22	3.66	10029	561
6.09	5.11	2.13	3.98	3.03	7.01	8119	464
15.68	12.45	4.76	8.07	7.65	15.71	2046	126
2.21	1.89	0.88	1.60	1.05	2.65	62377	3501
-	0.09	0.05	0.02	0.10	0.13	254	257
							174
							227
0.75	0.59				0.73	125	138
1.34	1.07				1.34	85	92
							43
							4
							1
0.49	0.42	0.18	0.14	0.38	0.52	849	936
			Tamil N	adu			
_	0.01	0.00	0.01	0.00	0.01	35242	1887
0.04							1730
	0.31	0.12	0.32	0.06	0.39	11556	677
0.75	0.68	0.26	0.66	0.16	0.82	9363	508
	1 22		1 21		1.50		335
1.57	1.44	0.43	1.41	0.29	1.50	0101	555
	0.38 0.76 1.45 2.88 6.09 15.68 2.21 0.10 0.37 0.75 1.34 2.53 4.11 12.35 0.49	sown           (2)         (3)           (2)         (3)           (3)         (3)           (1)         (3)           (1)         (3)           (3)         (3)           (3)         (3)           (3)         (3)           (1)         (3)           (1)         (3)           (3)         (3)           (3)         (4)           (3)         (3)	ownednet sownmore than once(2)(3)(4)(2)(3)(4)(2)(3)(4)(2)(3)(4)(2)(3)0.080.060.110.070.380.400.270.760.680.421.451.290.702.882.521.276.095.112.1315.6812.454.762.211.890.88-0.090.050.100.100.060.370.300.130.750.590.251.341.070.502.532.010.714.113.931.7612.358.102.030.490.420.18-0.010.000.040.020.010.350.310.120.750.680.26	owned         net         more than once         irrigated           (2)         (3)         (4)         (5)           Rajasti           -         0.13         0.08         0.12           0.06         0.11         0.07         0.13           0.38         0.40         0.27         0.47           0.76         0.68         0.42         0.69           1.45         1.29         0.70         1.30           2.88         2.52         1.27         2.44           6.09         5.11         2.13         3.98           15.68         12.45         4.76         8.07           2.21         1.89         0.88         1.60           Sikki           -         0.09         0.05         0.02           0.10         0.10         0.06         0.03           0.37         0.30         0.13         0.08           0.75         0.59         0.25         0.18           1.34         1.07         0.50         0.31           2.53         2.01         0.71         0.74           4.11         3.93         1.76         2.50	owned         net         more than once         irrigated         unirrigated           (2)         (3)         (4)         (5)         (6)           Rajasthan           -         0.13         0.08         0.12         0.09           0.06         0.11         0.07         0.13         0.04           0.38         0.40         0.27         0.47         0.18           0.76         0.68         0.42         0.69         0.39           1.45         1.29         0.70         1.30         0.61           2.88         2.52         1.27         2.44         1.22           6.09         5.11         2.13         3.98         3.03           15.68         12.45         4.76         8.07         7.65           2.21         1.89         0.88         1.60         1.05           Sikkim           -           -         0.09         0.05         0.02         0.10           0.10         0.10         0.06         0.03         0.12           0.37         0.30         0.13         0.08         0.29           0.75         0.59         <	owned         net         more than once         irigated         unirrigated         all           (2)         (3)         (4)         (5)         (6)         (7)           Rajasthan         Rajasthan         Rajasthan         Rajasthan         Rajasthan           -         0.13         0.08         0.12         0.09         0.20           0.06         0.11         0.07         0.13         0.04         0.17           0.38         0.40         0.27         0.47         0.18         0.65           0.76         0.68         0.42         0.69         0.39         1.07           1.45         1.29         0.70         1.30         0.61         1.91           2.88         2.52         1.27         2.44         1.22         3.66           6.09         5.11         2.13         3.98         3.03         701           15.68         12.45         4.76         8.07         7.65         15.71           2.21         1.89         0.88         1.60         1.05         2.65           0.10         0.06         0.03         0.12         0.15           0.37         0.30         0.13	owned         net         more than once         households         net         house est.(00)           (2)         (3)         (4)         (5)         (6)         (7)         (8)           Rajasthan           -         0.13         0.08         0.12         0.09         0.20         4836           0.06         0.11         0.07         0.13         0.04         0.17         8536           0.38         0.40         0.27         0.47         0.18         0.65         8354           0.76         0.68         0.42         0.69         0.39         1.07         8870           1.45         1.29         0.70         1.30         0.61         1.91         11588           2.88         2.52         1.27         2.44         1.22         3.66         10029           6.09         5.11         2.13         3.98         3.03         7.01         8119           15.68         12.45         4.76         8.07         7.65         15.71         2046           2.21         1.89         0.88         1.60         1.05         2.65         62377           1.33         0.02         0.10

Table (1) Average area owned, net sown area (NSA), area cropped more than once and irrigated & unirrigated gross cropped area (GCA) under five major crops sown by households by size-class of ownership holding, 1997-98

#### \*Note

1. Paddy: *kharif* and paddy: *rabi*, for example, are treated as different "crops" for this purpose.

04.01 - 10.00	4.86	3.74	1.93	4.02	0.58	4.60	1048	46
10.01 & above	14.39	7.69	4.52	12.22	-	12.22	49	3
all	0.35	0.29	0.12	0.30	0.06	0.36	96319	5324

\*Note

1. Paddy: *kharif* and paddy: *rabi*, for example, are treated as different "crops" for this purpose.

			average	e area (0.00	ha.)			
size-class of			cropped		five major crops* so	own by	numb	
ownership	owned	net	more than		households		house	
holding (ha)	(2)	sown	once	irrigated	unirrigated	all	est.(00)	sample
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
				Tripu	Ira			
nil (< 0.01)	-	0.02	0.01	0.01	0.00	0.01	1547	306
00.01 - 00.20	0.08	0.03	0.02	0.02	0.01	0.03	2052	492
00.21 - 00.50	0.37	0.29	0.16	0.18	0.13	0.32	1021	218
00.51 - 01.00	0.74	0.58	0.35	0.49	0.27	0.76	678	140
01.01 - 02.00	1.45	1.08	0.80	0.75	0.67	1.42	223	41
02.01 - 04.00	2.90	1.74	0.88	1.30	0.63	1.93	76	17
04.01 - 10.00	7.85	4.31	1.38	1.14	2.90	4.04	8	2
10.01 & above	-	-	-	-	-	-	-	-
all	0.30	0.21	0.12	0.15	0.10	0.25	5606	1216
				Uttar Pra	adesh			
nil (< 0.01)	-	0.03	0.01	0.03	0.00	0.04	23667	1052
00.01 - 00.20	0.07	0.08	0.06	0.11	0.02	0.13	62366	2978
00.21 - 00.50	0.36	0.34	0.26	0.50	0.08	0.57	52259	2153
00.51 - 01.00	0.74	0.69	0.56	1.06	0.13	1.18	41524	1713
01.01 - 02.00	1.40	1.28	0.98	1.90	0.18	2.08	30206	1236
02.01 - 04.00	2.68	2.50	1.76	3.65	0.21	3.86	14409	620
04.01 - 10.00	5.58	5.08	3.23	7.03	0.41	7.44	5159	231
10.01 & above	13.35	10.19	7.21	12.67	0.72	13.38	417	20
all	0.74	0.68	0.50	1.00	0.09	1.09	230008	10003
				West Be	engal			
nil (< 0.01)	_	0.06	0.02	0.06	0.02	0.08	23373	1141
00.01 - 00.20	0.06	0.05	0.02	0.05	0.02	0.07	42971	2105
00.21 - 00.50	0.35	0.30	0.18	0.32	0.14	0.46	20270	1002
00.51 - 01.00	0.74	0.67	0.42	0.73	0.31	1.04	14792	654
01.01 - 02.00	1.39	1.25	0.73	1.30	0.54	1.84	6767	303
02.01 - 04.00	2.64	2.41	1.23	2.54	0.89	3.43	2164	97
							-	

Table (1) Average area owned, net sown area (NSA), area cropped more than once and irrigated & unirrigated gross cropped area (GCA) under five major crops sown by households by size-class of ownership holding, 1997-98

\*Note

1. Paddy: *kharif* and paddy: *rabi*, for example, are treated as different "crops" for this purpose.

10.01 & above	10.66	10.66	10.66	3.46	-	3.46	24	1
all	0.33	0.31	0.18	0.33	0.13	0.46	110552	5312

\*Note

<sup>1.</sup> Paddy: *kharif* and paddy: *rabi*, for example, are treated as different "crops" for this purpose.

<sup>2.</sup> The set of 5 major crops is not a fixed set but varies from household to household; for any particular household it is understood as the 5 most important field crops cultivated, in terms of value of production, by the household in 1997-98, from among a list of crop-season combinations involving 12 crops and crop-groups spanning the entire range of crops cultivated in the country.

	_		average	e area (0.00 l	ha.)			
size-class of	cropped under five major crops* sown by							er of
ownership	owned	net	more than		households		house	holds
holding (ha)		sown	once	irrigated	unirrigated	all	est.(00)	sample
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
				A. & N. Is	slands			
nil (< 0.01)	-	0.11	0.01	0.06	0.06	0.12	322	349
00.01 - 00.20	0.07	0.01	-	0.00	0.01	0.01	22	28
00.21 - 00.50	0.37	0.16	0.08	0.18	0.06	0.24	8	15
00.51 - 01.00	0.79	0.29	0.03	0.19	0.13	0.32	29	37
01.01 - 02.00	1.56	0.67	0.04	0.16	0.54	0.70	32	37
02.01 - 04.00	2.85	1.59	0.35	0.73	1.16	1.89	25	26
04.01 - 10.00	4.51	2.00	0.36	1.16	1.14	2.30	8	8
10.01 & above	14.15	-	-	-	-	-	1	2
all	0.43	0.28	0.04	0.13	0.18	0.31	447	502
				Indi	a			
nil (< 0.01)	-	0.03	0.02	0.03	0.02	0.04	283269	16571
00.01 - 00.20	0.06	0.05	0.03	0.05	0.02	0.08	354011	21047
00.21 - 00.50	0.36	0.34	0.19	0.33	0.16	0.49	204157	12280
00.51 - 01.00	0.76	0.71	0.38	0.66	0.35	1.01	186059	10616
01.01 - 02.00	1.44	1.31	0.65	1.18	0.65	1.83	166322	9465
02.01 - 04.00	2.73	2.48	1.15	2.23	1.15	3.38	99607	5824
04.01 - 10.00	5.73	5.04	2.20	4.54	2.19	6.73	48023	2759
10.01 & above	15.38	12.58	5.35	11.18	5.05	16.23	7246	428
all	0.84	0.76	0.36	0.69	0.35	1.04	1348695	78990

Table (1) Average area owned, net sown area (NSA), area cropped more than once and irrigated & unirrigated gross cropped area (GCA) under five major crops sown by households by size-class of ownership holding, 1997-98

\*Note

1. Paddy: *kharif* and paddy: *rabi*, for example, are treated as different "crops" for this purpose.

# Table (2): Proportion of households and net sown area (NSA) accounted by villages with government canal and differential between villages with government canal and other villages in respect of extent of irrigation (irrigated area per 1000 hectares of land under five major crops sown by households)

			land under fi	per 1000 hectare ve major crops* villages		no. of hous	eholds
state / UT	Н	A	with	others	all	est.	sample
			govt. canal			(00)	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Andhra Pradesh	392	320	774	696	723	119333	5721
Arunachal Pradesh	99	165	487	195	217	1625	719
Assam	33	30	437	186	194	35114	3243
Bihar	205	255	900	708	760	150028	7464
Gujarat	305	193	901	683	729	54468	2939
Haryana	546	575	909	889	901	25388	1222
Himachal Pradesh	52	29	746	150	168	10226	1914
Jammu & Kashmir	440	415	651	348	479	7907	1719
Karnataka	262	249	637	330	408	69692	3152
Kerala	285	306	568	414	461	45411	2911
Madhya Pradesh	185	174	735	523	561	107483	5802
Maharashtra	203	178	587	413	444	111247	5359
Manipur	273	225	737	264	369	2505	873
Meghalaya	11	2	625	54	55	3457	1040
Mizoram	-	-	-	12	12	718	594
Nagaland	-	-	-	237	237	871	895
Orissa	281	302	596	160	296	63451	3401
Punjab	517	596	1000	926	971	27971	2533
Rajasthan	176	164	880	541	605	62377	3501
Sikkim	117	96	442	245	263	849	936
Tamil Nadu	340	313	882	818	839	96319	5324
Tripura	145	131	941	535	598	5606	1216
Uttar Pradesh	284	299	955	896	914	230008	10003
West Bengal	284	257	824	678	715	110552	5312
A & N.Island	117	295	777	325	420	447	502
India	268	246	837	600	663	1348695	78990

H: Number per 1000 of households residing in villages with govt. canal.

A: NSA per 1000 hectares of NSA in villages with govt. canal.

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

<sup>\*</sup>Note
size-class of	in village	s with govt. c	anal	in village	s without go	vt. canal	est. area under major crops
ownership holding (ha)	kharif	rabi	all	kharif	rabi	all	(00 ha)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
		An	dhra Prades	sh			
nil (< 0.01)	0.52	0.32	0.84	1.52	1.01	2.52	1109
00.01 - 00.20	0.20	0.10	0.30	0.13	0.05	0.19	1077
00.21 - 00.50	0.39	0.23	0.61	0.33	0.09	0.42	6374
00.51 - 01.00	0.65	0.34	0.99	0.61	0.20	0.81	1112:
01.01 - 02.00	1.34	0.67	2.01	1.12	0.34	1.46	17640
02.01 - 04.00	2.22	0.79	3.02	1.94	0.68	2.62	19148
04.01 - 10.00	3.79	2.01	5.80	3.98	1.38	5.40	1908
10.01 & above	7.29	5.53	12.82	13.12	0.81	13.93	670
all	1.05	0.53	1.58	1.18	0.36	1.54	8226
		Aru	nachal Prad	esh			
nil (< 0.01)	-	-	-	0.18	0.52	0.70	142
00.01 - 00.20	0.10	-	0.10	0.08	0.04	0.12	10
00.21 - 00.50	0.23	-	0.23	0.23	0.06	0.34	6
00.51 - 01.00	0.36	-	0.36	0.45	0.08	0.53	11
01.01 - 02.00	0.29	-	0.29	0.89	0.19	1.07	28
02.01 - 04.00	0.70	0.06	0.76	1.60	0.50	2.10	30
04.01 - 10.00	1.07	0.05	1.12	1.57	0.34	1.91	28
10.01 & above	3.50	3.50	7.00	4.40	0.73	5.13	6
all	0.61	0.10	0.71	0.73	0.25	0.99	126
			Assam				
1(.001)				0.22	0.15	0.27	•
nil (< 0.01 ) 00.01 - 00.20	-	-	-	0.22	0.15	0.37	20
	- 0.22	0.07	0.07	0.06	0.06	0.13	39- 164
00.21 - 00.50 00.51 - 01.00	0.33 0.54	0.21 0.50	0.55 1.05	0.24 0.58	0.16 0.32	$\begin{array}{c} 0.40 \\ 0.90 \end{array}$	627
01.01 - 02.00	0.96	0.79	1.75	1.13	0.45	1.59	1108
02.01 - 04.00 04.01 - 10.00	2.51	1.65 3.03	4.16 6.83	2.00 3.89	1.08 2.15	3.07 6.04	785
10.01 & above	3.80	5.05	0.83	5.89	2.13	6.04 -	316
*Note	-	-	-	-	-	-	

\*Note

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

all	0.93	0.73	1.66	0.82	0.41	1.23	30618

<sup>1.</sup> Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

<sup>2.</sup> The set of 5 major crops is not a fixed set but varies from household to household; for any particular household it is understood as the 5 most important field crops cultivated, in terms of value of production, by the household in 1997-98, from among a list of crop-season combinations involving 12 crops and crop-groups spanning the entire range of crops cultivated in the country.

size-class of	in village	es with govt.	canal	in village	es without go	vt. canal	est. area under major crops
ownership holding (ha)	kharif	rabi	all	kharif	rabi	all	(00 ha)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
			Bihar				
nil (< 0.01)	0.49	0.22	0.71	0.65	0.41	1.06	3740
00.01 - 00.20	0.14	0.12	0.26	0.11	0.11	0.21	4376
00.21 - 00.50 00.51 - 01.00	$\begin{array}{c} 0.40\\ 0.76\end{array}$	0.37 0.76	0.77 1.52	0.31 0.65	0.25 0.49	0.57 1.15	14383 24522
01.01 - 02.00 02.01 - 04.00	1.19 2.40	1.23 2.39	2.43 4.78	1.17 2.16	0.89 1.70	2.06 3.85	33955 28125
04.01 - 10.00	2.40 4.47	2.39 4.09	4.78 8.56	3.80	3.19	5.85 7.00	17326
10.01 & above	13.27	13.12	26.38	15.93	15.23	31.17	8158
all	0.95	0.92	1.87	0.75	0.59	1.34	134585
			Gujarat				
nil (< 0.01)	0.46	0.13	0.58	0.73	0.10	0.83	113
00.01 - 00.20	0.10	0.06	0.17	0.64	0.07	0.71	467
00.21 - 00.50	0.35	0.30	0.65	0.35	0.19	0.54	4301
00.51 - 01.00	0.72	0.52	1.24	0.68	0.35	1.02	6386
01.01 - 02.00	1.27	0.83	2.11	1.18	0.63	1.82	12302
02.01 - 04.00	2.13	1.43	3.56	2.39	1.07	3.45	19218
04.01 - 10.00	4.25	3.04	7.29	4.76	1.44	6.21	23963
10.01 & above all	2.68 1.09	4.85 0.79	7.52 1.88	9.86 1.82	4.08 0.75	13.94 2.57	7030 73780
an	1.09	0.79	1.00	1.02	0.75	2.57	13180
			Haryana				
nil (< 0.01)	0.92	1.53	2.45	_	_	_	266
00.01 - 00.20	1.26	1.40	2.45	0.19	0.19	0.39	1365
00.21 - 00.50	0.70	0.75	1.44	0.27	0.36	0.64	1940
00.51 - 01.00	0.79	0.97	1.76	0.62	0.77	1.39	290
01.01 - 02.00	1.20	1.47	2.67	1.13	1.41	2.55	775
02.01 - 04.00	2.05	2.68	4.73	1.83	2.35	4.18	1053
04.01 - 10.00	3.84	4.71	8.55	2.91	4.02	6.92	1269:
10.01 & above	9.47	10.65	20.12	8.92	11.31	20.23	4622

\*Note

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

all	1.77	2.17	3.94	1.43	1.85	3.28	42089

<sup>1.</sup> Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

<sup>2.</sup> The set of 5 major crops is not a fixed set but varies from household to household; for any particular household it is understood as the 5 most important field crops cultivated, in terms of value of production, by the household in 1997-98, from among a list of crop-season combinations involving 12 crops and crop-groups spanning the entire range of crops cultivated in the country.

size-class of	in villag	es with govt. c	canal	in villages	without gov	. canal	est. area under major crops
ownership holding (ha)	kharif	rabi	all	kharif	rabi	all	(00 ha)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
		Him	achal Prade	sh			
nil (< 0.01)	-	-	-	0.40	0.35	0.75	34
00.01 - 00.20	0.12	0.12	0.24	0.10	0.10	0.20	351
00.21 - 00.50	0.31	0.30	0.61	0.28	0.26	0.54	1606
00.51 - 01.00	0.52	0.51	1.03	0.52	0.49	1.01	2228
01.01 - 02.00	0.67	0.75	1.41	0.93	0.83	1.76	2245
02.01 - 04.00	-	-	-	1.51	1.31	2.83	1474
04.01 - 10.00	-	-	-	2.70	2.29	4.99	538
10.01 & above	-	-	-	1.58	1.56	3.14	11
all	0.30	0.30	0.61	0.52	0.47	0.99	858
		Jamı	nu & Kashr	nir			
nil (< 0.01)	0.25	_	0.25	0.26	0.24	0.51	4
00.01 - 00.20	0.15	0.09	0.25	0.12	0.08	0.20	22:
00.21 - 00.50	0.33	0.11	0.44	0.32	0.27	0.59	1464
00.51 - 01.00	0.61	0.41	1.03	0.62	0.50	1.12	214
01.01 - 02.00	1.21	0.99	2.20	1.11	0.80	1.91	201
02.01 - 04.00	2.12	1.81	3.93	1.91	1.74	3.64	133
04.01 - 10.00	3.82	3.33	7.15	3.57	2.78	6.34	35
10.01 & above	-	-	-	-	-	-	
all	0.63	0.43	1.06	0.57	0.46	1.03	7547
		I	Karnataka				
nil (< 0.01)	1.60	1.60	3.20	0.17	-	0.17	99
00.01 - 00.20	0.15	0.05	0.20	0.09	0.05	0.14	464
00.21 - 00.50	0.28	0.13	0.41	0.33	0.12	0.44	291
00.51 - 01.00	0.66	0.28	0.94	0.68	0.19	0.87	913
01.01 - 02.00	1.21	0.45	1.65	1.21	0.47	1.67	2057
02.01 - 04.00	2.21	1.01	3.22	2.17	0.87	3.04	2206
04.01 - 10.00	3.59	1.84	5.44	4.20	1.80	5.99	2496
10.01 & above	10.52	3.84	14.36	7.95	8.90	16.85	1039
*Note							

\*Note

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

all	1.31	0.56	1.87	1.46	0.64	2.11	90596

<sup>1.</sup> Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

<sup>2.</sup> The set of 5 major crops is not a fixed set but varies from household to household; for any particular household it is understood as the 5 most important field crops cultivated, in terms of value of production, by the household in 1997-98, from among a list of crop-season combinations involving 12 crops and crop-groups spanning the entire range of crops cultivated in the country.

size-class of	in village	es with govt.	canal	in village	es without gov	vt. canal	est. area under major crops
ownership holding (ha)	kharif	rabi	all	kharif	rabi	all	(00 ha)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
			Kerala				
nil (< 0.01)	-	-	-	0.03	0.03	0.06	1
00.01 - 00.20	0.05	0.01	0.06	0.05	0.01	0.06	1332
00.21 - 00.50 00.51 - 01.00	0.25 0.48	0.08 0.22	0.33 0.70	0.22 0.42	0.07 0.17	0.29 0.59	1935 2091
01.01 - 02.00 02.01 - 04.00	0.92 0.93	0.21 0.60	1.13 1.53	0.68 1.35	0.35 0.95	1.03 2.30	2082 1011
02.01 - 04.00	0.93	4.26	4.42	2.56	2.17	2.30 4.72	787
10.01 & above	10.00	0.80	10.80	4.00	8.00	12.00	360
all	0.20	0.08	0.28	0.19	0.09	0.27	9599
		Μ	ladhya Prade	sh			
nil (< 0.01)	0.38	-	0.38	1.15	0.82	1.98	765
00.01 - 00.20	0.15	0.08	0.23	0.15	0.06	0.21	528
00.21 - 00.50	0.30	0.17	0.47	0.32	0.19	0.52	4893
00.51 - 01.00	0.64	0.41	1.05	0.67	0.40	1.07	15992
01.01 - 02.00	1.19	0.77	1.96	1.22	0.76	1.98	42582
02.01 - 04.00	1.97	1.80	3.77	2.20 4.29	1.27	3.48	66204
04.01 - 10.00 10.01 & above	4.60 12.10	3.69 11.85	8.29 23.95	4.29 9.89	3.35 8.27	7.63 18.16	63206 19829
all	1.54	1.22	2.76	1.67	1.11	2.78	213999
			Maharashtra				
nil (< 0.01)	-	-	-	0.92	0.06	0.98	174
00.01 - 00.20	0.11	0.05	0.17	0.20	0.02	0.22	827
00.21 - 00.50	0.30	0.10	0.40	0.32	0.08	0.39	3301
00.51 - 01.00	0.62	0.25	0.87	0.65	0.16	0.82	10062
01.01 - 02.00	1.16	0.39	1.55	1.18	0.34	1.52	24077
02.01 - 04.00	1.92	0.67	2.60	2.04	0.68	2.73	30564
04.01 - 10.00 10.01 & above	4.10 9.40	1.54 3.40	5.65 12.80	4.16 9.17	1.21 3.45	5.37 12.62	33809 11154
*Note	9.40	5.40	12.00	7.17	5.45	12.02	11134

\*Note

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

all 1.55 0.49 1.84 1.51 0.46 1.96 113969	all	1.35	0.49	1.84	1.51	0.46	1.96	113969
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<sup>1.</sup> Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

<sup>2.</sup> The set of 5 major crops is not a fixed set but varies from household to household; for any particular household it is understood as the 5 most important field crops cultivated, in terms of value of production, by the household in 1997-98, from among a list of crop-season combinations involving 12 crops and crop-groups spanning the entire range of crops cultivated in the country.

size-class of	in village	s with govt. c	anal	in villages	s without gov	t. canal	est. area under major crops
ownership holding (ha)	kharif	rabi	all	kharif	rabi	all	(00 ha)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
			Manipur				
nil (< 0.01)	0.80	0.05	0.85	0.49	0.66	1.15	224
00.01 - 00.20	0.02	0.05	0.07	0.04	0.04	0.08	15
00.21 - 00.50	0.26	0.10	0.36	0.21	0.11	0.32	159
00.51 - 01.00	0.66	0.07	0.73	0.51	0.16	0.66	564
01.01 - 02.00	1.22	0.07	1.29	0.86	0.25	1.13	414
02.01 - 04.00	2.08	0.04	2.12	1.61	0.56	2.18	164
04.01 - 10.00	-	-	-	2.39	0.40	2.79	28
10.01 & above	-	-	-	-	-	-	
all	0.63	0.07	0.70	0.51	0.22	0.74	1566
		1	Meghalaya				
nil (< 0.01)	-	-	-	0.10	0.04	0.13	2
00.01 - 00.20	-	0.09	0.09	0.22	0.05	0.27	102
00.21 - 00.50	-	-	-	0.28	0.11	0.39	302
00.51 - 01.00	-	0.50	0.50	0.55	0.28	0.83	658
01.01 - 02.00	-	-	-	0.84	0.44	1.28	77
02.01 - 04.00	-	-	-	1.51	0.69	2.21	938
04.01 - 10.00	-	-	-	3.64	0.61	4.25	391
10.01 & above	-	-	-	-	-	-	
all	-	0.47	0.47	0.72	0.30	1.02	3171
			Mizoram				
nil (< 0.01)	-	-	-	0.55	0.17	0.72	74
00.01 - 00.20	-	-	-	0.63	0.11	0.74	25
00.21 - 00.50	-	-	-	0.69	0.03	0.72	31
00.51 - 01.00	-	-	-	0.76	0.12	0.88	48
01.01 - 02.00	-	-	-	1.06	0.03	1.08	72
02.01 - 04.00	-	-	-	1.70	0.07	1.77	25
04.01 - 10.00	-	-	-	1.93	0.07	2.00	
10.01 & above	-	-	-	-	-	-	

\*Note

1. Paddy: *kharif* and paddy: *rabi*, for example, are treated as different "crops" for this purpose.

all	-	-	-	0.71	0.11	0.81	508

<sup>1.</sup> Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

<sup>2.</sup> The set of 5 major crops is not a fixed set but varies from household to household; for any particular household it is understood as the 5 most important field crops cultivated, in terms of value of production, by the household in 1997-98, from among a list of crop-season combinations involving 12 crops and crop-groups spanning the entire range of crops cultivated in the country.

size-class of	in village	s with govt.	canal	in village	s without go	vt. canal	est. area under major crops
ownership holding (ha)	kharif	rabi	all	kharif	rabi	all	(00 ha)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
			Nagaland				
nil (< 0.01)	-	-	-	0.96	0.67	1.63	26
00.01 - 00.20	-	-	-	0.09	0.03	0.12	3
00.21 - 00.50	-	-	-	0.19	0.09	0.27	10
00.51 - 01.00	-	-	-	0.49	0.31	0.80	62
01.01 - 02.00	-	-	-	0.90	0.69	1.59	302
02.01 - 04.00	-	-	-	1.45	1.02	2.47	813
04.01 - 10.00	-	-	-	4.55	2.36	7.00	891
10.01 & above	-	-	-	8.01	3.74	<u>11.75</u> 2.71	84 2190
all	-	-	-	1.07	1.03	2.71	2190
			Orissa				
nil (< 0.01)	0.05	0.01	0.07	0.46	0.01	0.47	64
00.01 - 00.20	0.15	0.02	0.17	0.18	0.02	0.20	1130
00.21 - 00.50	0.37	0.06	0.43	0.35	0.05	0.40	4953
00.51 - 01.00	0.69	0.12	0.81	0.72	0.10	0.83	8882
01.01 - 02.00	1.21	0.24	1.45	1.27	0.16	1.43	10467
02.01 - 04.00	2.14	0.56	2.69	2.32	0.39	2.70	7779
04.01 - 10.00	4.50	1.44	5.94	5.13	0.76	5.89	3596
10.01 & above	12.20	5.80	18.00	8.00	-	8.00	1406
all	0.81	0.18	0.99	0.83	0.11	0.94	38276
			Punjab				
nil (< 0.01)	4.00	3.10	7.10	2.11	2.11	4.22	257
00.01 - 00.20	4.00 0.38	0.37	0.75	0.17	0.21	4.22 0.39	257
00.21 - 00.50	0.38	0.37	0.75	0.17	0.21	0.69	781
00.51 - 01.00	0.98	0.99	1.97	0.95	1.02	1.97	2881
01.01 - 02.00	1.57		3.25	1.19	1.29	2.49	8373
02.01 - 02.00	2.92	1.68 2.87	5.25 5.79	2.37	2.46	2.49 4.83	11713
04.01 - 10.00	5.65	5.45	11.10	4.67	4.81	4.83 9.48	16504
10.01 & above	12.39	12.60	24.99	11.07	12.09	23.16	9200

\*Note

1. Paddy: *kharif* and paddy: *rabi*, for example, are treated as different "crops" for this purpose.

all 2.97 2.96 5.93 1.88 1.99 3.88 49942
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<sup>1.</sup> Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

<sup>2.</sup> The set of 5 major crops is not a fixed set but varies from household to household; for any particular household it is understood as the 5 most important field crops cultivated, in terms of value of production, by the household in 1997-98, from among a list of crop-season combinations involving 12 crops and crop-groups spanning the entire range of crops cultivated in the country.

size-class of	in village	es with govt.	canal	in village	in villages without govt. canal				
ownership holding (ha)	kharif	rabi	all	kharif	rabi	all	crops (00 ha)		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)		
			Rajasthan						
nil (< 0.01)	-	0.44	0.44	1.36	2.00	3.37	985		
00.01 - 00.20	0.82	1.14	1.96	0.18	0.17	0.35	146		
00.21 - 00.50	0.34	0.32	0.66	0.39	0.32	0.71	547		
00.51 - 01.00	0.59	0.62	1.21	0.63	0.46	1.09	951		
01.01 - 02.00	1.16	1.10	2.26	1.12	0.84	1.97	22182		
02.01 - 04.00	2.04	2.26	4.30	2.19	1.51	3.70	3672		
04.01 - 10.00	4.14	4.86	9.00	4.50	2.37	6.87	5693		
10.01 & above	8.91	9.50	18.41	10.31	5.16	15.47	3214		
all	1.95	2.14	4.09	1.99	1.22	3.21	16541		
			Sikkim						
nil (< 0.01)	0.13	0.08	0.21	0.31	0.28	0.59	3:		
00.01 - 00.20	0.26	0.03	0.28	0.14	0.07	0.22	2		
00.21 - 00.50	0.33	0.07	0.40	0.24	0.15	0.40	7		
00.51 - 01.00	0.55	0.12	0.67	0.52	0.24	0.75	9		
01.01 - 02.00	0.75	0.17	0.92	0.86	0.54	1.41	11		
02.01 - 04.00	2.01	0.08	2.09	1.52	0.82	2.35	8		
04.01 - 10.00	-	-	-	2.46	1.43	3.89	1		
10.01 & above	-	-	-	2.84	2.27	5.11			
all	0.45	0.08	0.53	0.49	0.29	0.78	43		
			Tamil Nadu						
nil (< 0.01)	0.42	0.10	0.52	0.21	0.19	0.40	29		
00.01 - 00.20	0.10	0.06	0.15	0.10	0.07	0.17	69		
00.21 - 00.50	0.26	0.18	0.44	0.25	0.17	0.42	445		
00.51 - 01.00	0.54	0.37	0.91	0.47	0.37	0.84	771		
01.01 - 02.00	1.00	0.70	1.69	0.91	0.59	1.50	928		
02.01 - 04.00	1.64	1.27	2.90	1.53	0.92	2.45	700		
04.01 - 10.00	2.98	2.48	5.46	3.30	1.47	4.77	481		
10.01 & above	10.00	2.00	12.00	6.21	6.21	12.43	60		
\$ NT									

\*Note

1. Paddy: *kharif* and paddy: *rabi*, for example, are treated as different "crops" for this purpose.

all 0.64 0.45 1.09 0.60 0.39 0.99 34863
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<sup>1.</sup> Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

<sup>2.</sup> The set of 5 major crops is not a fixed set but varies from household to household; for any particular household it is understood as the 5 most important field crops cultivated, in terms of value of production, by the household in 1997-98, from among a list of crop-season combinations involving 12 crops and crop-groups spanning the entire range of crops cultivated in the country.

size-class of	in village	es with govt. c	canal	in villages	without gov	t. canal	est. area under major crops
ownership holding (ha)	kharif	rabi	all	kharif	rabi	all	(00 ha)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
			Tripura				
nil (< 0.01)	-	-	-	0.51	0.03	0.54	15
00.01 - 00.20	0.13	0.05	0.18	0.07	0.05	0.13	66
00.21 - 00.50	0.27	0.12	0.39	0.16	0.19	0.35	323
00.51 - 01.00	0.63	0.16	0.79	0.44	0.35	0.79	515
01.01 - 02.00	0.93	0.51	1.44	1.01	0.48	1.49	318
02.01 - 04.00	1.74	1.24	2.98	1.17	0.64	1.81	147
04.01 - 10.00	-	-	-	3.44	0.60	4.04	32
10.01 & above	-	-	-	-	-	-	-
all	0.48	0.21	0.69	0.34	0.24	0.58	1415
		U	ttar Pradesł	1			
nil (< 0.01)	0.68	0.53	1.21	0.62	1.02	1.64	942
00.01 - 00.20	0.13	0.13	0.26	0.13	0.14	0.27	8230
00.21 - 00.50	0.31	0.32	0.63	0.27	0.30	0.58	29992
00.51 - 01.00	0.62	0.65	1.27	0.58	0.61	1.19	49080
01.01 - 02.00	1.05	1.12	2.17	1.01	1.09	2.10	62695
02.01 - 04.00	1.81	2.05	3.88	1.94	2.03	3.97	55575
04.01 - 10.00	3.36	4.78	8.14	3.44	3.93	7.37	38392
10.01 & aboveall	5.39 0.73	8.84 0.83	14.24 1.56	6.95 0.68	7.11 0.74	14.06 1.42	<u>558</u> 250492
all	0.75	0.85	1.30	0.08	0.74	1.42	230492
		۷	Vest Bengal				
nil (< 0.01)	0.28	0.08	0.36	0.72	0.27	0.99	1795
00.01 - 00.20	0.13	0.10	0.22	0.11	0.07	0.18	2917
00.21 - 00.50	0.29	0.20	0.49	0.29	0.18	0.47	9347
00.51 - 01.00	0.67	0.42	1.09	0.67	0.37	1.04	15448
01.01 - 02.00	1.29	0.60	1.89	1.21	0.64	1.85	1248
02.01 - 04.00	2.56	0.97	3.53	2.29	1.11	3.40	7423
04.01 - 10.00	2.44	1.90	4.34	4.22	3.50	7.73	1293
10.01 & above	-	-	-	0.60	2.86	3.46	83
*Note							

\*Note

1. Paddy: *kharif* and paddy: *rabi*, for example, are treated as different "crops" for this purpose.

all 0.52 0.29 0.81 0.55 0.30 0.85 50792
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<sup>1.</sup> Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

<sup>2.</sup> The set of 5 major crops is not a fixed set but varies from household to household; for any particular household it is understood as the 5 most important field crops cultivated, in terms of value of production, by the household in 1997-98, from among a list of crop-season combinations involving 12 crops and crop-groups spanning the entire range of crops cultivated in the country.

size-class of	in village	s with govt. c	canal	in village	in villages without govt. canal			
ownership holding (ha)	kharif	rabi	all	kharif	rabi	all	crops (00 ha)	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	
		A	& N. Island	s				
nil (< 0.01)	-	-	-	1.10	0.07	1.17	39	
00.01 - 00.20	0.02	-	0.02	0.01	0.01	0.02	0	
00.21 - 00.50	0.32	0.26	0.58	0.09	0.08	0.17	2	
00.51 - 01.00	0.56	0.08	0.64	0.27	0.19	0.46	9	
01.01 - 02.00	1.34	0.19	1.52	0.85	0.10	0.95	22	
02.01 - 04.00	2.61	0.30	2.91	1.68	0.44	2.12	48	
04.01 - 10.00	3.00	0.63	3.63	2.40	0.41	2.82	17	
10.01 & above	-	-	-	-	-	-	-	
all	1.25	0.19	1.44	1.02	0.18	1.20	138	
			India					
nil (< 0.01)	0.50	0.32	0.82	0.66	0.46	1.13	11503	
00.01 - 00.20	0.15	0.12	0.26	0.12	0.08	0.20	26575	
00.21 - 00.50	0.33	0.24	0.57	0.30	0.21	0.51	100803	
00.51 - 01.00	0.65	0.48	1.13	0.62	0.39	1.02	188584	
01.01 - 02.00	1.18	0.85	2.03	1.13	0.69	1.82	304245	
02.01 - 04.00	2.07	1.67	3.75	2.10	1.25	3.34	336368	
04.01 - 10.00	4.08	3.56	7.64	4.16	2.40	6.57	323143	
10.01 & above	9.82	8.61	18.44	9.83	5.89	15.73	117611	
all	1.00	0.79	1.80	1.05	0.64	1.69	1408832	

\*Note

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

Table (4): Per 1000 distribution of field-crop cultivator households by status of irrigation of area under five
major crops, separately for different size-classes of household ownership holding, in villages with
government canals and other villages

State:	Andhra Pr	adesh						
						estd.	no. of	
size-class of			igated			area	house	nolds
ownership holding (ha)	unirri- gated	with irrigation services hired	others	all	all	under 5 major crops*	estd. (00)	sample
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
		Villages with	government c	anal				
nil(< 0.01)	43	350	606	957	1000	474	564	20
00.01 - 00.20	178	322	499	822	1000	680	2251	99
00.21 - 00.50	201	312	487	799	1000	3010	4903	229
00.51 - 01.00	163	286	552	837	1000	4155	4195	176
01.01 - 02.00	123	237	640	877	1000	6665	3312	136
02.01 - 04.00	282	233	485	718	1000	5346	1773	78
04.01 - 10.00	63	130	808	937	1000	6348	1095	47
10.01 & above	104	-	896	896	1000	2204	172	6
all	169	273	558	831	1000	28882	18264	791
		Villages withou	ıt government					
nil(< 0.01)	119	324	557	881	1000	324	172	10
00.01 - 00.20	139	453	407	861	1000	387	2087	102
00.21 - 00.50	309	258	433	691	1000	3327	7989	394
00.51 - 01.00	297	222	480	703	1000	6849	8546	414
01.01 - 02.00	256	268	475	744	1000	10826	7458	360
02.01 - 04.00	220	267	513	780	1000	13400	5188	265
04.01 - 10.00	162	172	666	838	1000	12741	2360	117
10.01 & above	17	170	813	983	1000	4496	323	19
all	257	258	485	743	1000	52350	34123	1681
		All	villages					
nil(< 0.01)	74	311	615	926	1000	1109	816	35
00.01 - 00.20	159	383	459	841	1000	1077	4366	203
00.21 - 00.50	270	277	454	730	1000	6374	12989	627
00.51 - 01.00	254	241	505	746	1000	11125	12848	596
01.01 - 02.00	215	257	527	785	1000	17640	10837	499
02.00	210		227	, 60	1000	1,010	10007	.,,,

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

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02.01 - 04.00	236	256	509	764	1000	19148	7035	347
04.01 - 10.00	131	158	711	869	1000	19089	3455	164
10.01 & above	47	111	842	953	1000	6700	495	25
all	227	261	512	773	1000	82260	52840	2496

<sup>1.</sup> Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

<sup>2.</sup> The set of 5 major crops is not a fixed set but varies from household to household; for any particular household it is understood as the 5 most important field crops cultivated, in terms of value of production, by the household in 1997-98, from among a list of crop-season combinations involving 12 crops and crop-groups spanning the entire range of crops cultivated in the country.

## Table (4): Per 1000 distribution of field-crop cultivator households by status of irrigation of area under five major crops, separately for different size-classes of household ownership holding, in villages with government canals and other villages

State:	Arunachal	Pradesh						
						estd.	no. of	
size-class of			igated			area	house	nolds
ownership	unirri-	with irrigation			all	under 5		
holding (ha)	gated	services hired	others	all		major crops*	estd. (00)	sample
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
		Villages with	government c	anal				
nil(< 0.01)	-	-	-	-	-	-	-	-
00.01 - 00.20	1000	-	-	-	1000	0	4	1
00.21 - 00.50	1000	-	-	-	1000	7	30	8
00.51 - 01.00	508	-	492	492	1000	2	6	3
01.01 - 02.00	803	-	197	197	1000	9	33	12
02.01 - 04.00	-	189	811	1000	1000	22	29	20
04.01 - 10.00	-	500	500	1000	1000	37	33	23
10.01 & above	1000	-	-	-	1000	20	3	1
all	483	159	358	517	1000	98	138	68
		Villages withou	t government	canal				
nil(< 0.01)	936	-	64	64	1000	142	198	68
00.01 - 00.20	738	-	262	262	1000	6	66	30
00.21 - 00.50	401	24	575	599	1000	51	155	71
00.51 - 01.00	663	4	334	337	1000	112	208	102
01.01 - 02.00	659	44	298	341	1000	276	254	111
02.01 - 04.00	712	49	239	288	1000	285	136	70
04.01 - 10.00	959	9	31	41	1000	244	128	63
10.01 & above	1000	-	-	-	1000	42	8	7
all	719	20	261	281	1000	1158	1153	522
		All	villages					
nil(< 0.01)	914	23	62	86	1000	142	203	70
00.01 - 00.20	665	60	274	335	1000	10	209 79	34
00.21 - 00.50	487	44	469	513	1000	61	190	81
00.51 - 01.00	637	14	348	363	1000	117	221	108
01.01 - 02.00	664	38	298	336	1000	287	292	125

\*Note

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

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02.01 - 04.00	586	74	340	414	1000	307	165	90
04.01 - 10.00	763	110	127	237	1000	281	161	86
10.01 & above	1000	-	-	-	1000	62	11	8
all	678	47	275	322	1000	1266	1321	602

<sup>1.</sup> Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

<sup>2.</sup> The set of 5 major crops is not a fixed set but varies from household to household; for any particular household it is understood as the 5 most important field crops cultivated, in terms of value of production, by the household in 1997-98, from among a list of crop-season combinations involving 12 crops and crop-groups spanning the entire range of crops cultivated in the country.

State:	Assam							
						estd.	no. of	FCC
size-class of			igated			area	househ	olds
ownership	unirri-	with irrigation			all	under 5		
holding (ha)	gated	services hired	others	all		major	estd. (00)	sample
						crops*		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
		Villages with	government c	anal				
nil(< 0.01.)	-	-	-	-	-	-	-	-
00.01 - 00.20	1000	-	-	-	1000	1	11	1
00.21 - 00.50	119	309	572	881	1000	81	149	10
00.51 - 01.00	125	203	673	875	1000	178	170	13
01.01 - 02.00	172	319	509	828	1000	316	180	12
02.01 - 04.00	-	-	1000	1000	1000	210	50	5
04.01 - 10.00	333	-	667	667	1000	196	29	3
10.01 & above	-	-	-	-	-	-	-	-
all	154	234	612	846	1000	981	590	44
		Villages withou	t government	canal				
nil(< 0.01)	951	32	17	49	1000	204	552	63
00.01 - 00.20	863	32	105	137	1000	386	3060	300
00.21 - 00.50	794	57	149	206	1000	1489	3802	411
00.51 - 01.00	757	102	141	243	1000	5822	6522	572
01.01 - 02.00	795	56	150	205	1000	10535	6624	556
02.01 - 04.00	727	49	224	273	1000	7515	2434	196
04.01 - 10.00	675	52	274	325	1000	2821	479	38
10.01 & above	-	-	-	-	-	-	-	-
all	787	64	148	213	1000	28773	23473	2136
		All	villages					
nil(< 0.01)	951	32	17	49	1000	204	552	63
00.01 - 00.20	862	35	102	138	1000	394	3132	307
00.21 - 00.50	769	69	161	231	1000	1640	4041	432
00.51 - 01.00	740	111	149	260	1000	6278	6940	603
01.01 - 02.00	773	67	161	227	1000	11087	6968	582

Table (4): Per 1000 distribution of field-crop cultivator households by status of irrigation of area under five major crops, separately for different size-classes of household ownership holding, in villages with government canals and other villages

\*Note

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

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02.01 - 04.00	713	47	241	287	1000	7850	2536	205
04.01 - 10.00	664	48	289	336	1000	3164	520	42
10.01 & above	-	-	-	-	-	-	-	-
all	770	72	158	230	1000	30618	24689	2234

<sup>1.</sup> Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

<sup>2.</sup> The set of 5 major crops is not a fixed set but varies from household to household; for any particular household it is understood as the 5 most important field crops cultivated, in terms of value of production, by the household in 1997-98, from among a list of crop-season combinations involving 12 crops and crop-groups spanning the entire range of crops cultivated in the country.

State:	Bhar							
						estd.	no. of	FCC
size-class of			igated			area	househ	olds
ownership	unirri-	with irrigation			all	under 5		
holding (ha)	gated	services hired	others	all		major crops*	estd. (00)	sample
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
		Villages with	government c	anal				
nil(< 0.01)	481	284	236	519	1000	466	657	37
00.01 - 00.20	211	613	176	789	1000	1078	4214	208
00.21 - 00.50	101	615	284	899	1000	3860	5020	252
00.51 - 01.00	88	604	308	912	1000	5569	3669	175
01.01 - 02.00	43	510	447	957	1000	7601	3131	148
02.01 - 04.00	42	273	686	958	1000	8259	1727	87
04.01 - 10.00	26	201	773	974	1000	6276	733	39
10.01 & above	-	-	1000	1000	1000	2842	108	6
all	117	534	349	883	1000	35951	19258	952
		Villages withou	t government	canal				
nil(< 0.01)	495	298	207	505	1000	3259	3063	159
00.01 - 00.20	277	543	180	723	1000	3282	15419	801
00.21 - 00.50	333	566	101	667	1000	10357	18279	975
00.51 - 01.00	322	504	174	678	1000	18736	16340	797
01.01 - 02.00	295	450	255	705	1000	26288	12777	632
02.01 - 04.00	175	376	449	825	1000	19210	4984	242
04.01 - 10.00	56	404	540	944	1000	11050	1580	72
10.01 & above	-	203	797	1000	1000	5316	171	8
all	301	498	201	699	1000	97498	72612	3686
		All	villages					
nil(< 0.01)	496	294	211	504	1000	3740	3743	197
00.01 - 00.20	262	558	180	738	1000	4376	19828	1015
00.21 - 00.50	283	578	139	717	1000	14383	23571	1234
00.51 - 01.00	278	523	199	722	1000	24522	20184	976
01.01 - 02.00	247	461	292	753	1000	33955	15932	781

Table (4): Per 1000 distribution of field-crop cultivator households by status of irrigation of area under five major crops, separately for different size-classes of household ownership holding, in villages with government canals and other villages

\*Note

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

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02.01 - 04.00	139	344	517	861	1000	28125	6811	331
04.01 - 10.00	47	340	614	953	1000	17326	2313	111
10.01 & above	-	124	876	1000	1000	8158	278	14
all	262	506	232	738	1000	134585	92660	4659

<sup>1.</sup> Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

<sup>2.</sup> The set of 5 major crops is not a fixed set but varies from household to household; for any particular household it is understood as the 5 most important field crops cultivated, in terms of value of production, by the household in 1997-98, from among a list of crop-season combinations involving 12 crops and crop-groups spanning the entire range of crops cultivated in the country.

						estd.	no. of	FCC
size-class of		irr	igated			area	househ	olds
ownership holding (ha)	unirri- gated	with irrigation services hired	others	all	all	under 5 major crops*	estd. (00)	sample
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9
		Villages with	government c					
nil(< 0.01)	-	1000	-	1000	1000	266	109	
00.01 - 00.20	-	564	436	1000	1000	1338	503	2
00.21 - 00.50	46	644	310	954	1000	1363	943	4
00.51 - 01.00	63	497	439	937	1000	1675	950	4
01.01 - 02.00	39	322	640	961	1000	4166	1562	6
02.01 - 04.00	33	270	697	967	1000	5741	1214	5
04.01 - 10.00	71	151	778	929	1000	8014	937	4
10.01 & above	-	-	1000	1000	1000	2438	121	
all	43	386	572	957	1000	25000	6339	27

Table (4): Per 1000 distribution of field-crop cultivator households by status of irrigation of area under five major crops, separately for different size-classes of household ownership holding, in villages with

Villages without government canal

nil(< 0.01)	-	-	-	-	-	-	-	-
00.01 - 00.20	-	751	249	1000	1000	27	70	4
00.21 - 00.50	129	587	284	871	1000	578	908	48
00.51 - 01.00	160	378	462	840	1000	1232	889	42
01.01 - 02.00	123	297	580	877	1000	3482	1359	71
02.01 - 04.00	39	246	715	961	1000	4467	1069	59
04.01 - 10.00	68	91	842	932	1000	4188	624	33
10.01 & above	-	-	1000	1000	1000	1607	82	6
all	102	329	569	898	1000	15581	5000	263
		All	villages					

nil(< 0.01)	-	1000	-	1000	1000	266	109	5
00.01 - 00.20	-	587	413	1000	1000	1365	573	27
00.21 - 00.50	87	616	297	913	1000	1940	1851	90
00.51 - 01.00	110	440	450	890	1000	2907	1839	85
01.01 - 02.00	77	322	601	923	1000	7757	2973	138

\*Note

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

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02.01 - 04.00	35	250	715	965	1000	10536	2362	116
04.01 - 10.00	67	123	810	933	1000	12695	1613	77
10.01 & above	-	-	1000	1000	1000	4622	229	13
all	68	359	574	932	1000	42089	11548	551

<sup>1.</sup> Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

<sup>2.</sup> The set of 5 major crops is not a fixed set but varies from household to household; for any particular household it is understood as the 5 most important field crops cultivated, in terms of value of production, by the household in 1997-98, from among a list of crop-season combinations involving 12 crops and crop-groups spanning the entire range of crops cultivated in the country.

## Table (4): Per 1000 distribution of field-crop cultivator households by status of irrigation of area under five major crops, separately for different size-classes of household ownership holding, in villages with government canals and other villages

size-class of		irr	igated			estd. area	no. of househ	
ownership holding (ha)	unirri- gated	with irrigation services hired	others	all	all	under 5 major crops*	estd. (00)	sample
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
		Villages with	government c	anal				
nil(< 0.01)	-	-	-	-	-	-	-	-
00.01 - 00.20	256	-	744	744	1000	33	140	25
00.21 - 00.50	134	- 48	866	866	1000	114	187 94	32 17
00.51 - 01.00	133	48	819	867	1000	97		
01.01 - 02.00	-	-	1000	1000	1000	19	14	3
02.01 - 04.00 04.01 - 10.00	-	-	-	-	-	-	-	-
10.01 & above	-	-	-	-	-	-	-	-
all	169	10	821	831	1000	263	434	77
		Villages withou	t government	canal				
nil(< 0.01)	1000	-	-	-	1000	34	45	8
00.01 - 00.20	746	33	221	254	1000	317	1543	295
00.21 - 00.50	799	30	171	201	1000	1484	2732	514
00.51 - 01.00	797	36	167	203	1000	2098	2079	380
01.01 - 02.00	717	61	222	283	1000	2210	1253	236
02.01 - 04.00	681	46	273	319	1000	1423	502	95
04.01 - 10.00	539	95	367	461	1000	517	95 25	20
10.01 & above all	876 768	- 38	<u>124</u> 194	124 232	1000	<u>111</u> 8194	<u>35</u> 8284	<u>7</u> 1555
un	700			232	1000	0171	0201	1000
		All	villages					
nil(< 0.01)	1000	-	-	-	1000	34	45	8
00.01 - 00.20	704	30	266	296	1000	351	1691	322
00.21 - 00.50	757	28	215	243	1000	1606	2939	550
00.51 - 01.00	766	36	198	234	1000	2228	2208	404
01.01 - 02.00	708	60	232	292	1000	2245	1277	241

\*Note

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

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02.01 - 04.00	676	44	279	324	1000	1474	522	99
04.01 - 10.00	593	83	323	407	1000	538	108	22
10.01 & above	876	-	124	124	1000	111	35	7
all	737	36	227	263	1000	8587	8825	1653

<sup>1.</sup> Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

<sup>2.</sup> The set of 5 major crops is not a fixed set but varies from household to household; for any particular household it is understood as the 5 most important field crops cultivated, in terms of value of production, by the household in 1997-98, from among a list of crop-season combinations involving 12 crops and crop-groups spanning the entire range of crops cultivated in the country.

Table (4): Per 1000 distribution of field-crop cultivator households by status of irrigation of area under five
major crops, separately for different size-classes of household ownership holding, in villages with
government canals and other villages
State: Jammu & Kashmir

	Kashmir						
					estd.	no. of	
		igated			area	house	nolds
unirri-	ē			all	under 5		
gated	services hired	others	all		major	estd. (00)	sample
(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	Villages with	government c	anal				
-	-	1000	1000	1000	1	3	1
151	18	831	849	1000	104	421	85
119	22	859	881	1000	572	1306	260
237	15	748	763	1000	727	708	136
245	43	713	755	1000	903	411	101
258	-	742	742	1000		174	43
177	-	823	823	1000		37	11
-	-	-	-	-	-	-	-
176	21	803	824	1000	3253	3058	637
	Villages withou	0					
59	-	941	941	1000	4	8	3
							133
							318
353	65	583	647	1000	1421	1270	256
566	94	340	434	1000	1116	586	141
674	45	281	326	1000	650	179	41
557	-	443	443	1000	89	14	6
-	-	-	-	-	-	-	-
344	46	610	656	1000	4293	4178	898
	All	villages					
46	-	954	954	1000	5	11	4
194	18	787	806	1000	225	1039	218
194	23	783	806	1000	1464	2807	578
311	47	642	689	1000	2149	1978	392
433	73	494	567	1000	2018	997	242
	gated (2) (2) (3) (2) (3) (3) (3) (3) (3) (3) (3) (3) (3) (3	unirrigated       with irrigation services hired         (2)       (3) $(2)$ (3) $Villages with$ 151       18         119       22         237       15         245       43         258       -         177       -         -       -         176       21         Villages without         59       -         224       18         259       25         353       65         566       94         674       45         557       -         -       -         344       46         46       -         194       18         194       23	gated         services hired         others           (2)         (3)         (4)           Villages with government co         overnment co           -         -         1000           151         18         831           119         22         859           237         15         748           245         43         713           258         -         742           177         -         823           -         -         -           176         21         803           Villages without government           59         -         941           224         18         758           259         25         716           353         65         583           566         94         340           674         45         281           557         -         443           -         -         -           344         46         610           46         -         954           194         18         787           194         23         783	unirrigatedwith irrigation services hiredothersall(2)(3)(4)(5)Villages with government canal100015118831237157482454371324543713258-742177-82382317621803824Villages without government canal59-9412241875877625716259257162592571674135365566943404344528134446610656All villages46-9549541941878780619423783	unirri- gated         with irrigation services hired         others         all           (2)         (3)         (4)         (5)         (6)           Villages with government canal         villages with government canal         1000         1000           151         18         831         849         1000           151         18         831         849         1000           237         15         748         763         1000           245         43         713         755         1000           258         -         742         742         1000           177         -         823         823         1000           176         21         803         824         1000           259         25         716         741         1000           259         25         716         741         1000           353         65         583         647         1000           557         -         443         443         1000           557         -         443         443         1000           557         -         443         443         1000	unirri- gated         with irrigation services hired         others         all         area all         area major crops*           (2)         (3)         (4)         (5)         (6)         (7)           Villages with government canal           Villages with government canal           -         1000         1000         1           151         18         831         849         1000         104           119         22         859         881         1000         727           245         43         713         755         1000         903           258         -         742         742         1000         685           177         -         823         823         1000         3253           Villages without government canal         Villages without government canal         111           59         -         941         941         1000         4           224         18         758         776         1000         121           259         25         716         741         1000         891           353         65         583         647         1000         1421	irrigated         area with irrigation services hired         others others         all         area all         housel under 5 major         housel estd. (00) crops*           (2)         (3)         (4)         (5)         (6)         (7)         (8)           (2)         (3)         (4)         (5)         (6)         (7)         (8)           Villages with government canal           (3)         (4)         (5)         (6)         (7)         (8)           -         -         1000         1000         1000         1         3         3           151         18         831         849         1000         104         421           119         22         859         881         1000         727         708           245         43         713         755         1000         903         411           258         -         742         742         1000         685         174           176         21         803         824         1000         3253         3058           Villages without government canal             59         -         941

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

04.01 - 10.00	282	-	718	718	1000	351	51	17
10.01 & above	-	-	-	-	-	-	-	-
all	273	36	691	727	1000	7547	7236	1535

<sup>1.</sup> Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

<sup>2.</sup> The set of 5 major crops is not a fixed set but varies from household to household; for any particular household it is understood as the 5 most important field crops cultivated, in terms of value of production, by the household in 1997-98, from among a list of crop-season combinations involving 12 crops and crop-groups spanning the entire range of crops cultivated in the country.

Table (4): Per 1000 distribution of field-crop cultivator households by status of irrigation of area under five
major crops, separately for different size-classes of household ownership holding, in villages with
government canals and other villages

State:	Karnataka	1						
						estd.	no. of FCC	
size-class of			igated			area	househ	olds
ownership holding (ha)	unirri- gated	with irrigation services hired	others	all	all	under 5 major crops*	estd. (00)	sample
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
		Villages wi	ith governmen	t canal				
nil(< 0.01)	1000	-	-	-	1000	78	24	1
00.01 - 00.20	504	-	496	496	1000	226	1144	54
00.21 - 00.50	467	27	506	533	1000	960	2351	104
00.51 - 01.00	396	38	566	604	1000	2708	2885	119
01.01 - 02.00	332	73	595	668	1000	5276	3189	129
02.01 - 04.00	196	10	794	804	1000	5068	1573	69
04.01 - 10.00	207	54	739	793	1000	5028	925	38
10.01 & above	-	92	908	1000	1000	3778	263	12
all	356	40	604	644	1000	23123	12354	526
		Villages with	hout governme	ent canal				
nil(<0.01)	480	520	-	520	1000	21	122	6
00.01 - 00.20	487	53	460	513	1000	237	1682	83
00.21 - 00.50	792	53	155	208	1000	1949	4383	218
00.51 - 01.00	686	112	202	314	1000	6424	7384	326
01.01 - 02.00	589	112	299	411	1000	15295	9133	393
02.01 - 04.00	542	85	373	458	1000	16996	5592	239
04.01 - 10.00	487	41	472	513	1000	19933	3325	146
10.01 & above	437	82	481	563	1000	6619	393	16
all	613	90	297	387	1000	67473	32016	1427
		P	All villages					
nil(< 0.01)	566	434	-	434	1000	99	146	7
00.01 - 00.20	494	32	474	506	1000	464	2826	137
00.21 - 00.50	678	44	278	322	1000	2910	6735	322
00.51 - 01.00	605	91	304	395	1000	9132	10269	445
01.01 - 02.00	522	102	376	478	1000	20571	12321	522

\*Note

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

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02.01 - 04.00	466	68	466	534	1000	22063	7165	308
04.01 - 10.00	426	44	530	574	1000	24961	4250	184
10.01 & above	262	86	652	738	1000	10397	656	28
all	541	76	383	459	1000	90596	44369	1953

<sup>1.</sup> Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

<sup>2.</sup> The set of 5 major crops is not a fixed set but varies from household to household; for any particular household it is understood as the 5 most important field crops cultivated, in terms of value of production, by the household in 1997-98, from among a list of crop-season combinations involving 12 crops and crop-groups spanning the entire range of crops cultivated in the country.

Table (4): Per 1000 distribution of field-crop cultivator households by status of irrigation of area under five
major crops, separately for different size-classes of household ownership holding, in villages with
government canals and other villages

State	Kerala								
						estd.		. of FCC	
size-class of			igated			area	house	nolds	
ownership holding (ha)	unirri- gated	with irrigation services hired	others	all	all	under 5 major	estd. (00)	sample	
norung (m)	guied		others			crops*	esta: (00)	Sumpre	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	
		Villages with	n government o	canal					
nil(< 0.01)	690	-	310	310	1000	-	54	3	
00.01 - 00.20	557	40	403	443	1000	411	6509	409	
00.21 - 00.50	438	43	519	562	1000	716	2187	137	
00.51 - 01.00	339	30	631	661	1000	694	993	61	
01.01 - 02.00	377	-	623	623	1000	511	452	28	
02.01 - 04.00	283	-	717	717	1000	205	134	8	
04.01 - 10.00	-	-	1000	1000	1000	223	51	3	
10.01 & above	-	-	1000	1000	1000	184	17	1	
all	497	37	466	503	1000	2944	10395	650	
		Villages witho	ut government	t canal					
nil(< 0.01)	1000	-	-	-	1000	1	21	1	
00.01 - 00.20	704	12	284	296	1000	921	15592	992	
00.21 - 00.50	560	43	398	440	1000	1219	4216	282	
00.51 - 01.00	479	72	449	521	1000	1397	2382	140	
01.01 - 02.00	542	20	438	458	1000	1570	1525	88	
02.01 - 04.00	295	125	580	705	1000	806	351	21	
04.01 - 10.00	313	-	687	687	1000	564	119	7	
10.01 & above	-	-	1000	1000	1000	176	15	1	
all	639	25	336	361	1000	6654	24220	1532	
		All	l villages						
nil(< 0.01)	778	-	222	222	1000	1	75	4	
00.01 - 00.20	661	20	319	339	1000	1332	22100	1401	
00.21 - 00.50	518	43	439	482	1000	1935	6402	419	
00.51 - 01.00	438	60	502	562	1000	2091	3374	201	

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

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01.01 - 02.00	504	16	480	496	1000	2082	1976	116
02.01 - 04.00	292	91	618	708	1000	1011	485	29
04.01 - 10.00	220	-	780	780	1000	787	170	10
10.01 & above	-	-	1000	1000	1000	360	32	2
all	596	29	375	404	1000	9599	34615	2182

<sup>1.</sup> Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

<sup>2.</sup> The set of 5 major crops is not a fixed set but varies from household to household; for any particular household it is understood as the 5 most important field crops cultivated, in terms of value of production, by the household in 1997-98, from among a list of crop-season combinations involving 12 crops and crop-groups spanning the entire range of crops cultivated in the country.

Table (4): Per 1000 distribution of field-crop cultivator households by status of irrigation of area under five
major crops, separately for different size-classes of household ownership holding, in villages with
government canals and other villages

State:	Madhya P	radesh						
size-class of		irrigated				estd. area	no. of FCC households	
ownership holding (ha)	unirri- gated	with irrigation services hired	others	all	all	under 5 major crops*	estd. (00)	sample
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
		Villages wit	h government	canal				
nil(< 0.01)	680	-	320	320	1000	16	42	2
00.01 - 00.20	544	218	239	456	1000	112	491	26
00.21 - 00.50	396	155	449	604	1000	1120	2368	134
00.51 - 01.00	300	124	576	700	1000	3120	2976	159
01.01 - 02.00	252	163	585	748	1000	7247	3702	190
02.01 - 04.00	174	107	719	826	1000	10305	2733	146
04.01 - 10.00	120	56	824	880	1000	11823	1426	75
10.01 & above	-	78	922	1000	1000	4788	200	11
all	266	132	602	734	1000	38530	13938	743
		Villages with	out governmer	nt canal				
nil(< 0.01)	669	180	151	331	1000	749	379	19
00.01 - 00.20	733	110	157	267	1000	407	1911	110
00.21 - 00.50	670	148	181	330	1000	3706	7178	399
00.51 - 01.00	627	154	219	373	1000	12807	11993	612
01.01 - 02.00	564	180	256	436	1000	35208	17794	915
02.01 - 04.00	526	134	339	474	1000	55479	15959	802
04.01 - 10.00	371	121	509	629	1000	50932	6668	356
10.01 & above	172	87	741	828	1000	15042	828	51
all	559	150	291	441	1000	174330	62709	3264
		A	ll villages					
nil(< 0.01)	670	162	167	330	1000	765	421	21
00.01 - 00.20	693	129	179	307	1000	528	2467	139
00.21 - 00.50	603	150	247	397	1000	4893	9680	539
00.51 - 01.00	561	149	290	439	1000	15992	15036	774

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.
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01.01 - 02.00	511	176	313	489	1000	42582	21560	1108
02.01 - 04.00	477	129	393	523	1000	66204	18818	954
04.01 - 10.00	329	109	562	671	1000	63206	8158	434
10.01 & above	138	85	776	862	1000	19829	1028	62
all	506	146	347	494	1000	213999	77168	4031

<sup>1.</sup> Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

<sup>2.</sup> The set of 5 major crops is not a fixed set but varies from household to household; for any particular household it is understood as the 5 most important field crops cultivated, in terms of value of production, by the household in 1997-98, from among a list of crop-season combinations involving 12 crops and crop-groups spanning the entire range of crops cultivated in the country.

Table (4): Per 1000 distribution of field-crop cultivator households by status of irrigation of area under five
major crops, separately for different size-classes of household ownership holding, in villages with
government canals and other villages

State:	Maharasht	tra						
· 1 C			• . •			estd.	no. of	
size-class of ownership holding (ha)	unirri- gated	with irrigation services hired	igated others	all	all	area under 5 major crops*	housel estd. (00)	sample
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
		Villages with	government c	anal				
nil(< 0.01)	-	-	-	-	-	-	-	-
00.01 - 00.20	534	241	225	466	1000	100	605	29
00.21 - 00.50	540	50	411	460	1000	665	1663	80
00.51 - 01.00	411	72	517	589	1000	2071	2380	112
01.01 - 02.00	338	60	602	662	1000	4914	3169	143
02.01 - 04.00	337	9	654	663	1000	5239	2014	91
04.01 - 10.00	303	78	619	697	1000	6721	1191	51
10.01 & above	-	-	1000	1000	1000	708	55	2
all	389	63	548	611	1000	20418	11077	508
		Villages witho	ıt government	canal				
nil(< 0.01)	877	-	123	123	1000	174	178	7
00.01 - 00.20	698	128	174	302	1000	727	3307	159
00.21 - 00.50	735	97	168	265	1000	2636	6686	319
00.51 - 01.00	664	98	237	336	1000	7992	9730	447
01.01 - 02.00	625	77	299	375	1000	19072	12549	593
02.01 - 04.00	563	46	391	437	1000	25187	9224	432
04.01 - 10.00	452	48	500	548	1000	26855	5019	234
10.01 & above	268	33	699	732	1000	10073	771	35
all	618	78	304	382	1000	92716	47463	2226
		All	villages					
nil(< 0.01)	877	-	123	123	1000	174	178	7
00.01 - 00.20	672	146	182	328	1000	827	3913	188
00.21 - 00.50	696	88	216	304	1000	3301	8349	399
00.51 - 01.00	615	93	292	385	1000	10062	12111	559

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

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01.01 - 02.00	568	73	359	432	1000	24077	15774	739
02.01 - 04.00	524	39	436	476	1000	30564	11295	527
04.01 - 10.00	425	54	521	575	1000	33809	6238	287
10.01 & above	265	29	706	735	1000	11154	883	40
all	576	75	350	424	1000	113969	58740	2746

<sup>1.</sup> Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

<sup>2.</sup> The set of 5 major crops is not a fixed set but varies from household to household; for any particular household it is understood as the 5 most important field crops cultivated, in terms of value of production, by the household in 1997-98, from among a list of crop-season combinations involving 12 crops and crop-groups spanning the entire range of crops cultivated in the country.

State:	Manipur							
						estd.	no. of	
size-class of			igated			area	house	nolds
ownership	unirri-	with irrigation			all	under 5		
holding (ha)	gated	services hired	others	all		major crops*	estd. (00)	sample
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
		Villages with	government c	anal				
nil(< 0.01)	685	-	315	315	1000	8	10	3
00.01 - 00.20	946	-	54	54	1000	4	58	18
00.21 - 00.50	334	269	398	666	1000	50	142	44
00.51 - 01.00	252	541	207	748	1000	130	179	42
01.01 - 02.00	180	559	261	820	1000	114	89	24
02.01 - 04.00	-	1000	-	1000	1000	40	19	4
04.01 - 10.00	-	-	-	-	-	-	-	-
10.01 & above	-	-	-	-	-	-	-	-
all	343	410	247	657	1000	347	496	135
		Villages withou	ıt government	canal				
nil(< 0.01)	966	22	12	34	1000	147	173	75
00.01 - 00.20	875	86	39	125	1000	8	87	33
00.21 - 00.50	633	65	301	367	1000	90	284	121
00.51 - 01.00	595	126	279	405	1000	423	640	210
01.01 - 02.00	608	220	172	392	1000	277	247	112
02.01 - 04.00	532	342	126	468	1000	124	57	30
04.01 - 10.00	489	458	53	511	1000	28	10	6
10.01 & above	-	-	-	-	-	-	-	-
all	660	126	214	340	1000	1096	1498	587
		All	villages					
nil(< 0.01)	954	19	26	46	1000	224	198	80
00.01 - 00.20	926	40	35	74	1000	15	189	57
00.21 - 00.50	574	117	309	426	1000	159	483	174
00.51 - 01.00	527	213	259	473	1000	564	832	256
01.01 - 02.00	519	295	186	481	1000	414	353	140

Table (4): Per 1000 distribution of field-crop cultivator households by status of irrigation of area under five major crops, separately for different size-classes of household ownership holding, in villages with government canals and other villages

\*Note

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

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02.01 - 04.00	399	507	94	601	1000	164	76	34
04.01 - 10.00	489	458	53	511	1000	28	10	6
10.01 & above	-	-	-	-	-	-	-	-
all	606	183	210	394	1000	1566	2139	747

<sup>1.</sup> Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

<sup>2.</sup> The set of 5 major crops is not a fixed set but varies from household to household; for any particular household it is understood as the 5 most important field crops cultivated, in terms of value of production, by the household in 1997-98, from among a list of crop-season combinations involving 12 crops and crop-groups spanning the entire range of crops cultivated in the country.

# Table (4): Per 1000 distribution of field-crop cultivator households by status of irrigation of area under five major crops, separately for different size-classes of household ownership holding, in villages with government canals and other villages

size-class of		irr	igated			estd. area	no. of housel	
ownership holding (ha)	g (ha) gated services hired others		all	all	under 5 major crops*	estd. (00)	sample	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
		Villages with	government c	anal				
nil(< 0.01)	-	-	-	-	-	-	-	-
00.01 - 00.20	1000	-	-	-	1000	0	1	1
00.21 - 00.50	-	-	-	-	-	-	-	-
00.51 - 01.00	-	-	1000	1000	1000	5	10	3
01.01 - 02.00	-	-	-	-	-	-	-	-
02.01 - 04.00	-	-	-	-	-	-	-	-
04.01 - 10.00	-	-	-	-	-	-	-	-
10.01 & above	-	-	-	-	-	-	-	
all	69	-	931	931	1000	5	11	4
		Villages withou	ıt government	canal				
nil(< 0.01)	1000	-	-	-	1000	2	17	6
00.01 - 00.20	973	-	27	27	1000	102	385	120
00.21 - 00.50	966	13	21	34	1000	302	782	210
00.51 - 01.00	959	19	22	41	1000	653	786	222
01.01 - 02.00	836	13	151	164	1000	777	605	193
02.01 - 04.00	805	26	169	195	1000	938	425	136
04.01 - 10.00	930	-	70	70	1000	391	92	29
10.01 & above	-	-	-	-	-	-	-	
all	917	14	69	83	1000	3166	3093	916
		All	villages					
nil(< 0.01)	1000	-	-	-	1000	2	17	6
00.01 - 00.20	973	-	27	27	1000	102	385	121
00.21 - 00.50	966	13	21	34	1000	302	782	210
00.51 - 01.00	947	19	34	53	1000	658	796	22
01.01 - 02.00	836	13	151	164	1000	777	605	193
*Note								

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

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02.01 - 04.00	805	26	169	195	1000	938	425	136
04.01 - 10.00	930	-	70	70	1000	391	92	29
10.01 & above	-	-	-	-	-	-	-	-
all	914	14	72	86	1000	3171	3103	920

<sup>1.</sup> Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

<sup>2.</sup> The set of 5 major crops is not a fixed set but varies from household to household; for any particular household it is understood as the 5 most important field crops cultivated, in terms of value of production, by the household in 1997-98, from among a list of crop-season combinations involving 12 crops and crop-groups spanning the entire range of crops cultivated in the country.

# Table (4): Per 1000 distribution of field-crop cultivator households by status of irrigation of area under five major crops, separately for different size-classes of household ownership holding, in villages with government canals and other villages

State:	Mizoram							
						estd.	no. of	
size-class of			igated			area	housel	nolds
ownership	unirri-	with irrigation			all	under 5		
holding (ha)	gated	services hired	others	all		major	estd. (00)	sample
						crops*		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
		Villages with	government co	anal				
nil(< 0.01)	-	-	-	-	-	-	-	-
00.01 - 00.20	-	-	-	-	-	-	-	-
00.21 - 00.50	-	-	-	-	-	-	-	-
00.51 - 01.00	-	-	-	-	-	-	-	-
01.01 - 02.00	-	-	-	-	-	-	-	-
02.01 - 04.00	-	-	-	-	-	-	-	-
04.01 - 10.00	-	-	-	-	-	-	-	-
10.01 & above	-	-	-	-	-	-	-	-
all	-	-	-	-	-	-	-	-
		Villages withou	t government	canal				
nil(< 0.01)	1000	-	-	-	1000	74	104	72
00.01 - 00.20	990	10	-	10	1000	245	320	250
00.21 - 00.50	1000	-	-	-	1000	31	40	42
00.51 - 01.00	951	8	41	49	1000	48	55	47
01.01 - 02.00	957	-	43	43	1000	72	66	54
02.01 - 04.00	1000	-	-	-	1000	25	14	16
04.01 - 10.00	1000	-	-	-	1000	7	3	3
10.01 & above	-	-	-	-	-	-	-	-
all	986	6	8	14	1000	501	601	484
		All	villages					
nil(< 0.01)	1000	-	-	-	1000	74	104	72
00.01 - 00.20	991	9	-	9	1000	251	339	263
00.21 - 00.50	1000	-	-	-	1000	31	43	45
00.51 - 01.00	951	8	41	49	1000	48	55	47

\*Note

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

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01.01 - 02.00	957	-	43	43	1000	72	66	54
02.01 - 04.00	1000	-	-	-	1000	25	14	16
04.01 - 10.00	1000	-	-	-	1000	7	3	3
10.01 & above	-	-	-	-	-	-	-	-
all	986	6	8	14	1000	508	624	500

<sup>1.</sup> Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

<sup>2.</sup> The set of 5 major crops is not a fixed set but varies from household to household; for any particular household it is understood as the 5 most important field crops cultivated, in terms of value of production, by the household in 1997-98, from among a list of crop-season combinations involving 12 crops and crop-groups spanning the entire range of crops cultivated in the country.

# Table (4): Per 1000 distribution of field-crop cultivator households by status of irrigation of area under five major crops, separately for different size-classes of household ownership holding, in villages with government canals and other villages

size-class of ownership holding (ha)estd.no. of FCC householdsallunirri- unirri- services hiredwith irrigation services hiredallunder 5 major estd. (00)sample crops*(1)(2)(3)(4)(5)(6)(7)(8)(9)Villages with government canalnil(< 0.01)00.01 - 00.2000.21 - 00.5000.51 - 01.0001.01 - 02.0002.01 - 04.00
ownership holding (ha) unirri- gated with irrigation services hired others all under 5 major estd. (00) sample crops*   (1) (2) (3) (4) (5) (6) (7) (8) (9)   Villages with government canal   nil(< 0.01)
holding (ha) gated services hired others all major estd. (00) sample   (1) (2) (3) (4) (5) (6) (7) (8) (9)   Villages with government canal   nil(<0.01)
Image: comps * crops *   (1) (2) (3) (4) (5) (6) (7) (8) (9)   Villages with government canal Villages with government canal comps * comps * comps *   nil(<0.01)
(1) (2) (3) (4) (5) (6) (7) (8) (9)   Villages with government canal   nil(< 0.01)
Villages with government canal   nil(< 0.01)
nil(< 0.01)
00.01 - 00.20 - <
00.21 - 00.50 - <
00.51 - 01.00 - <
01.01 - 02.00
02.01 04.00
02.01 - 04.00
04.01 - 10.00
10.01 & above
<u>all </u>
Villages without government canal
nil(< 0.01 ) 1000 1000 26 16 13
00.01 - 00.20 933 67 - 67 1000 3 24 20
00.21 - 00.50 885 - 115 115 1000 10 37 46
00.51 - 01.00 778 - 222 222 1000 62 77 71
01.01 - 02.00 768 20 213 232 1000 285 179 172
02.01 - 04.00 678 3 319 322 1000 775 314 349
04.01 - 10.00 235 4 760 765 1000 871 121 133
10.01 & above 1000 1000 1000 84 7 8
all 657 9 334 343 1000 2115 775 812
All villages
nil(< 0.01 ) 1000 1000 26 16 13
00.01 - 00.20 933 67 - 67 1000 3 24 20
00.21 - 00.50 885 - 115 115 1000 10 37 47
00.51 - 01.00 778 - 222 222 1000 62 77 71

\*Note

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

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01.01 - 02.00	781	19	200	219	1000	302	190	177
02.01 - 04.00	692	3	305	308	1000	813	329	356
04.01 - 10.00	274	4	722	726	1000	891	127	136
10.01 & above	-	-	1000	1000	1000	84	7	8
all	671	8	321	329	1000	2190	807	828

<sup>1.</sup> Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

<sup>2.</sup> The set of 5 major crops is not a fixed set but varies from household to household; for any particular household it is understood as the 5 most important field crops cultivated, in terms of value of production, by the household in 1997-98, from among a list of crop-season combinations involving 12 crops and crop-groups spanning the entire range of crops cultivated in the country.

Table (4): Per 1000 distribution of field-crop cultivator households by status of irrigation of area under five
major crops, separately for different size-classes of household ownership holding, in villages with
government canals and other villages

State	: Orissa							
						estd.	no. of	FCC
size-class of		irr	igated			area	househ	nolds
ownership	unirri-	with irrigation			all	under 5		
holding (ha)	gated	services hired	others	all		major	estd. (00)	sample
						crops*		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
		Villages with	government c	anal				
nil(< 0.01)	524	-	476	476	1000	5	72	5
00.01 - 00.20	525	55	420	475	1000	303	1802	99
00.21 - 00.50	566	80	354	434	1000	1547	3589	200
00.51 - 01.00	409	141	451	591	1000	2544	3131	158
01.01 - 02.00	355	117	528	645	1000	3540	2443	128
02.01 - 04.00	284	65	652	716	1000	2049	761	41
04.01 - 10.00	286	191	523	714	1000	1168	197	11
10.01 & above	-	-	1000	1000	1000	771	43	2
all	451	100	449	549	1000	11927	12038	644
		Villages withou	ut government	canal				
nil(< 0.01)	822	-	178	178	1000	59	126	15
00.01 - 00.20	810	72	118	190	1000	793	3984	219
00.21 - 00.50	840	50	109	160	1000	3320	8276	445
00.51 - 01.00	809	71	120	191	1000	6094	7355	378
01.01 - 02.00	662	152	186	338	1000	6654	4638	239
02.01 - 04.00	792	57	150	208	1000	5574	2055	101
04.01 - 10.00	668	111	222	332	1000	2341	398	20
10.01 & above	1000	-	-	-	1000	635	79	1
all	791	78	131	209	1000	25469	26911	1418
		All	villages					
nil(< 0.01)	714	-	286	286	1000	64	198	20
00.01 - 00.20	725	69	206	275	1000	1130	5949	326
00.21 - 00.50	762	58	180	238	1000	4953	12133	657
00.51 - 01.00	687	94	219	313	1000	8882	10803	553

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

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01.01 - 02.00	560	138	302	440	1000	10467	7280	378
02.01 - 04.00	663	58	279	337	1000	7779	2881	146
04.01 - 10.00	529	134	337	471	1000	3596	609	32
10.01 & above	650	-	350	350	1000	1406	122	3
all	688	85	227	312	1000	38276	39975	2115

<sup>1.</sup> Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

<sup>2.</sup> The set of 5 major crops is not a fixed set but varies from household to household; for any particular household it is understood as the 5 most important field crops cultivated, in terms of value of production, by the household in 1997-98, from among a list of crop-season combinations involving 12 crops and crop-groups spanning the entire range of crops cultivated in the country.

Table (4): Per 1000 distribution of field-crop cultivator households by status of irrigation of area under five
major crops, separately for different size-classes of household ownership holding, in villages with
government canals and other villages

State:	Punjab							
						estd.	no. of	
size-class of			igated			area	househ	olds
ownership holding (ha)	unirri- gated	with irrigation services hired	others	all	all	under 5 major crops*	estd. (00)	sample
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
		Villages with	government c	anal				
nil(< 0.01)	-	-	1000	1000	1000	109	15	1
00.01 - 00.20	192	410	398	808	1000	94	125	13
00.21 - 00.50	24	523	453	976	1000	335	484	44
00.51 - 01.00	-	313	687	1000	1000	1232	625	50
01.01 - 02.00	-	125	875	1000	1000	4871	1501	123
02.01 - 04.00	-	91	909	1000	1000	6497	1122	91
04.01 - 10.00	-	99	901	1000	1000	10790	972	77
10.01 & above	-	37	963	1000	1000	6278	251	21
all	7	176	817	993	1000	30206	5097	420
		Villages withou	ıt government	canal				
nil(< 0.01)	324	274	402	676	1000	148	35	4
00.01 - 00.20	248	371	381	752	1000	139	357	34
00.21 - 00.50	147	306	547	853	1000	446	646	55
00.51 - 01.00	28	180	792	972	1000	1649	836	72
01.01 - 02.00	56	213	731	944	1000	3502	1408	131
02.01 - 04.00	82	119	799	918	1000	5216	1080	99
04.01 - 10.00	146	59	795	854	1000	5714	603	56
10.01 & above	-	93	907	1000	1000	2922	126	12
all	93	190	717	907	1000	19736	5092	463
		All	villages					
nil(< 0.01)	225	191	584	775	1000	257	50	5
00.01 - 00.20	233	381	385	767	1000	234	482	47
00.21 - 00.50	94	399	507	906	1000	781	1130	99
00.51 - 01.00	16	237	747	984	1000	2881	1462	122

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

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0z1.01 - 02.00	27	167	805	973	1000	8373	2909	254
02.01 - 04.00	40	105	855	960	1000	11713	2202	190
04.01 - 10.00	56	83	861	944	1000	16504	1575	133
10.01 & above	-	56	944	1000	1000	9200	377	33
all	50	183	767	950	1000	49942	10188	883

<sup>1.</sup> Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

<sup>2.</sup> The set of 5 major crops is not a fixed set but varies from household to household; for any particular household it is understood as the 5 most important field crops cultivated, in terms of value of production, by the household in 1997-98, from among a list of crop-season combinations involving 12 crops and crop-groups spanning the entire range of crops cultivated in the country.

Table (4): Per 1000 distribution of field-crop cultivator households by status of irrigation of area under five
major crops, separately for different size-classes of household ownership holding, in villages with
government canals and other villages

State:	Rajasthan							
						estd.	no. of	
size-class of			irrigated			area	households	
ownership	unirri-	with irrigation			all	under 5	1 (00)	
holding (ha)	gated	services hired	others	all		major	estd. (00)	sample
(1)	(2)	(3)	(4)	(5)	(6)	crops*	(8)	(9)
(1)	(2)	(3)	(4)	(3)	(6)	(7)	(8)	(9)
		Villages with	government c	anal				
nil(< 0.01)	-	1000	-	1000	1000	7	16	1
00.01 - 00.20	436	205	359	564	1000	897	457	22
00.21 - 00.50	188	285	526	812	1000	646	979	49
00.51 - 01.00	79	195	726	921	1000	1660	1377	65
01.01 - 02.00	79	173	748	921	1000	3810	1684	88
02.01 - 04.00	26	81	893	974	1000	6608	1535	86
04.01 - 10.00	26	83	891	974	1000	10793	1199	73
10.01 & above	56	-	944	944	1000	6723	365	26
all	94	154	752	906	1000	31144	7613	410
		Villages withou	ut government	canal				
nil(< 0.01)	272	172	557	728	1000	978	290	18
00.01 - 00.20	468	336	197	532	1000	564	1616	88
00.21 - 00.50	295	302	402	705	1000	4785	6720	361
00.51 - 01.00	319	232	448	681	1000	7820	7205	379
01.01 - 02.00	308	161	532	692	1000	18372	9333	495
02.01 - 04.00	329	153	518	671	1000	30079	8130	452
04.01 - 10.00	502	131	368	498	1000	46141	6715	378
10.01 & above	629	70	301	371	1000	25421	1643	98
all	362	193	445	638	1000	134161	41651	2269
		All	villages					
nil(< 0.01)	258	215	528	742	1000	985	306	19
00.01 - 00.20	238 461	307	232	539	1000	1461	2073	110
00.21 - 00.50	279	308	414	721	1000	5472	7782	415
00.51 - 01.00	280	228	492	721	1000	9512	8603	445
00.51 01.00	200	220	772	720	1000	1512	0005	C++

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

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01.01 - 02.00	273	162	565	727	1000	22182	11017	583
02.01 - 04.00	280	143	576	720	1000	36728	9684	539
04.01 - 10.00	430	123	447	570	1000	56934	7914	451
10.01 & above	525	57	418	475	1000	32144	2009	124
all	320	189	492	680	1000	165418	49388	2686

<sup>1.</sup> Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

<sup>2.</sup> The set of 5 major crops is not a fixed set but varies from household to household; for any particular household it is understood as the 5 most important field crops cultivated, in terms of value of production, by the household in 1997-98, from among a list of crop-season combinations involving 12 crops and crop-groups spanning the entire range of crops cultivated in the country.

Table (4): Per 1000 distribution of field-crop cultivator households by status of irrigation of area under five
major crops, separately for different size-classes of household ownership holding, in villages with
government canals and other villages

State	: Sikkim							
size-class of		irrigated				estd. area	no. of FCC households	
ownership holding (ha)	unirri- gated	with irrigation services hired	others	all	all	under 5 major crops*	estd. (00)	sample
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
		Villages with	government c	anal				
nil(< 0.01)	909	-	91	91	1000	2	10	9
00.01 - 00.20	519	-	481	481	1000	5	19	23
00.21 - 00.50	166	-	834	834	1000	8	19	21
00.51 - 01.00	267	68	664	733	1000	9	13	15
01.01 - 02.00	318	82	600	682	1000	10	11	10
02.01 - 04.00	-	-	1000	1000	1000	6	3	3
04.01 - 10.00	-	-	-	-	-	-	-	-
10.01 & above	-	-	-	-	-	-	-	-
all	387	24	589	613	1000	40	75	81
		Villages withou	ıt government	canal				
nil(< 0.01)	728	-	272	272	1000	30	49	65
00.01 - 00.20	669	-	331	331	1000	16	74	86
00.21 - 00.50	564	24	412	436	1000	63	158	192
00.51 - 01.00	465	17	517	535	1000	81	107	118
01.01 - 02.00	515	17	468	485	1000	103	72	80
02.01 - 04.00	478	-	522	522	1000	81	35	38
04.01 - 10.00	-	298	702	1000	1000	13	3	4
10.01 & above	-	-	1000	1000	1000	4	1	1
all	556	16	428	444	1000	392	499	584
		All	villages					
nil(< 0.01)	766	-	234	234	1000	32	60	76
00.01 - 00.20	645	-	355	355	1000	22	95	111
00.21 - 00.50	528	21	451	472	1000	72	180	216
00.51 - 01.00	449	23	528	551	1000	92	123	136

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

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01.01 - 02.00	500	25	475	500	1000	114	85	92
02.01 - 04.00	432	-	568	568	1000	89	38	42
04.01 - 10.00	-	298	702	1000	1000	13	3	4
10.01 & above	-	-	1000	1000	1000	4	1	1
all	541	17	442	459	1000	438	586	678

<sup>1.</sup> Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

<sup>2.</sup> The set of 5 major crops is not a fixed set but varies from household to household; for any particular household it is understood as the 5 most important field crops cultivated, in terms of value of production, by the household in 1997-98, from among a list of crop-season combinations involving 12 crops and crop-groups spanning the entire range of crops cultivated in the country.

						estd.	no. of	
size-class of			igated			area	househ	nolds
ownership holding (ha)	unirri- gated	with irrigation services hired	others	all	all	under 5 major crops*	estd. (00)	sample
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
		Villages with	government c	anal				
nil(< 0.01)	92	423	485	908	1000	78	149	9
00.01 - 00.20	179	196	625	821	1000	272	1768	98
00.21 - 00.50	37	269	694	963	1000	1450	3303	189
00.51 - 01.00	95	254	651	905	1000	2192	2400	128
01.01 - 02.00	98	151	750	902	1000	2763	1632	84
02.01 - 04.00	93	136	771	907	1000	2791	961	50
04.01 - 10.00	106	39	854	894	1000	1653	303	15
10.01 & above	-	-	1000	1000	1000	289	24	1
all	91	218	691	909	1000	11489	10540	574
		Villages withou	ut government	canal				
nil(<0.01)	244	254	503	756	1000	221	557	32
00.01 - 00.20	315	235	450	685	1000	418	2416	149
00.21 - 00.50	239	228	532	761	1000	2991	7146	420
00.51 - 01.00	208	186	606	792	1000	5469	6486	355
01.01 - 02.00	166	172	662	834	1000	6434	4283	234
02.01 - 04.00	115	138	747	885	1000	4217	1723	86
04.01 - 10.00	170	93	737	830	1000	3064	642	26
10.01 & above	-	90	910	1000	1000	313	25	2
all	214	197	589	786	1000	23128	23278	1304
		All	villages					
nil(< 0.01)	211	289	499	789	1000	299	707	41
00.01 - 00.20	257	219	524	743	1000	690	4184	247
00.21 - 00.50	175	241	584	825	1000	4450	10470	610
00.51 - 01.00	176	203	620	824	1000	7714	8949	487
01.01 - 02.00	153	164	683	847	1000	9283	5976	321
02.01 - 04.00	107	138	756	893	1000	7008	2684	136
*Note	/							

Table (4): Per 1000 distribution of field-crop cultivator households by status of irrigation of area under five major crops, separately for different size-classes of household ownership holding, in villages with government canals and other villages

\*Note

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

04.01 - 10.00	147	74	779	853	1000	4817	966	42
10.01 & above	-	46	954	1000	1000	603	49	3
all	176	203	622	824	1000	34863	33985	1887

\*Note

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

size-class of	-	irr	igated			estd. area	no. of househ	
ownership holding (ha)	unirri- gated	with irrigation services hired	others	all	all	under 5 major crops*	estd. (00)	sample
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9
		Villages with	government c	anal				
nil(< 0.01)	-	-	-	-	-	-	-	
00.01 - 00.20	226	177	597	774	1000	14	75	1
00.21 - 00.50	82	155	763	918	1000	38	97	23
00.51 - 01.00	-	309	691	1000	1000	85	107	2
01.01 - 02.00	178	166	655	822	1000	40	28	
02.01 - 04.00	-	-	1000	1000	1000	46	15	
04.01 - 10.00	-	-	-	-	-	-	-	
10.01 & above	-	-	-	-	-	-	-	
all	93	205	702	907	1000	221	322	6
		Villages withou	ıt government	canal				
nil(< 0.01)	1000	-	-	-	1000	4	12	
00.01 - 00.20	588	151	261	412	1000	50	402	9
00.21 - 00.50	444	165	392	556	1000	277	797	16
00.51 - 01.00	378	221	401	622	1000	380	499	10
01.01 - 02.00	479	207	315	521	1000	225	159	2
02.01 - 04.00	313	251	436	687	1000	70	44	1
04.01 - 10.00	415	-	585	585	1000	32	8	
10.01 & above	-	-	-	-	-	-	-	
all	460	180	360	540	1000	1037	1922	39
		All	villages					
nil(< 0.01)	412	353	235	588	1000	15	43	
00.01 - 00.20	543	151	306	457	1000	66	490	11
00.21 - 00.50	410	161	429	590	1000	323	910	18
00.51 - 01.00	327	245	427	673	1000	515	652	13
01.01 - 02.00	488	194	318	512	1000	318	215	4

Table (4): Per 1000 distribution of field-crop cultivator households by status of irrigation of area under five major crops, separately for different size-classes of household ownership holding, in villages with government canals and other villages

\*Note

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

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02.01 - 04.00	249	266	485	751	1000	147	71	16
04.01 - 10.00	415	-	585	585	1000	32	8	2
10.01 & above	-	-	-	-	-	-	-	-
all	417	191	392	583	1000	1415	2389	497

<sup>1.</sup> Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

<sup>2.</sup> The set of 5 major crops is not a fixed set but varies from household to household; for any particular household it is understood as the 5 most important field crops cultivated, in terms of value of production, by the household in 1997-98, from among a list of crop-season combinations involving 12 crops and crop-groups spanning the entire range of crops cultivated in the country.

Table (4): Per 1000 distribution of field-crop cultivator households by status of irrigation of area under five
major crops, separately for different size-classes of household ownership holding, in villages with
government canals and other villages

State:	Uttar Prad	lesh							
						estd.	no. of		
size-class of			igated			area	households		
ownership holding (ha)	unirri-	with irrigation services hired	others	all	all	under 5	a = (00)		
noiding (na)	gated	services mileu	others	all		major crops*	estd. (00)	sample	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	
		Villages with	government c	anal					
nil(< 0.01)	-	832	168	1000	1000	107	88	5	
00.01 - 00.20	70	668	262	930	1000	2485	9437	462	
00.21 - 00.50	36	702	262	964	1000	7776	12355	583	
00.51 - 01.00	30	620	350	970	1000	14666	11509	495	
01.01 - 02.00	7	480	513	993	1000	17581	8086	344	
02.01 - 04.00	20	394	586	980	1000	17370	4475	184	
04.01 - 10.00	33	223	744	967	1000	12765	1569	64	
10.01 & above	-	413	587	1000	1000	1636	115	5	
all	35	592	373	965	1000	74384	47634	2142	
		Villages withou	ıt government	canal					
nil(< 0.01)	6	877	117	994	1000	835	510	24	
00.01 - 00.20	157	726	117	843	1000	5725	20944	961	
00.21 - 00.50	236	625	139	764	1000	21794	37889	1479	
00.51 - 01.00	127	617	256	873	1000	33870	28452	1154	
01.01 - 02.00	121	462	416	879	1000	44191	21094	843	
02.01 - 04.00	23	381	595	977	1000	37094	9353	411	
04.01 - 10.00	6	230	764	994	1000	25521	3464	161	
10.01 & above	-	294	706	1000	1000	3951	281	14	
all	153	583	264	847	1000	172981	121987	5047	
		All	villages						
11/ 0.013	_		-	0.0.7		~			
nil(< 0.01)	5	871	124	995	1000	942	599	29	
00.01 - 00.20	130	707	163	870	1000	8230	30448	1426	
00.21 - 00.50	185	645	170	815	1000	29992	50848	2087	
00.51 - 01.00	98	619	283	902	1000	49080	40361	1665	

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

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01.01 - 02.00	89	469	443	911	1000	62695	29586	1205
02.01 - 04.00	22	384	594	978	1000	55575	14076	606
04.01 - 10.00	14	227	758	986	1000	38392	5049	226
10.01 & above	-	329	671	1000	1000	5587	396	19
all	119	586	295	881	1000	250492	171362	7263

<sup>1.</sup> Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

<sup>2.</sup> The set of 5 major crops is not a fixed set but varies from household to household; for any particular household it is understood as the 5 most important field crops cultivated, in terms of value of production, by the household in 1997-98, from among a list of crop-season combinations involving 12 crops and crop-groups spanning the entire range of crops cultivated in the country.

size-class of		irr	igated			estd. area	no. of househ	
ownership holding (ha)	unirri- gated	with irrigation services hired	others	all	all	under 5 major crops*	estd. (00)	sample
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9
		Villages with	government c	anal				
nil(< 0.01)	359	382	259	641	1000	98	270	1
00.01 - 00.20	167	484	349	833	1000	1025	4588	22
00.21 - 00.50	199	430	371	801	1000	2798	5696	27
00.51 - 01.00	136	538	326	864	1000	3987	3662	15
01.01 - 02.00	105	509	385	895	1000	3467	1830	8
02.01 - 04.00	58	496	446	942	1000	1947	551	2
04.01 - 10.00	-	468	532	1000	1000	232	54	
10.01 & above	-	-	-	-	-	-	-	
all	163	479	358	837	1000	13554	16651	77
		Villages withou	ut government	canal				
nil(< 0.01)	232	605	163	768	1000	1696	1693	7
00.01 - 00.20	374	463	163	626	1000	1821	10315	51
00.21 - 00.50	281	586	133	719	1000	6121	13080	66
00.51 - 01.00	261	512	227	739	1000	10984	10598	47
01.01 - 02.00	184	488	328	816	1000	8783	4753	21
02.01 - 04.00	219	326	455	781	1000	5256	1561	6
04.01 - 10.00	176	695	130	824	1000	1061	137	
10.01 & above	-	1000	-	1000	1000	83	24	
all	283	518	199	717	1000	35804	42161	202
		All	villages					
nil(< 0.01)	254	571	175	746	1000	1795	1976	8
00.01 - 00.20	312	466	221	688	1000	2917	15261	75
00.21 - 00.50	255	534	210	745	1000	9347	19727	97
					1000	15110	1 4 7 1 5	~ ~ ~
00.51 - 01.00	230	518	252	770	1000	15448	14715	65

Table (4): Per 1000 distribution of field-crop cultivator households by status of irrigation of area under five major crops, separately for different size-classes of household ownership holding, in villages with government canals and other villages

\*Note

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

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02.01 - 04.00	172	362	466	828	1000	7423	2164	97
04.01 - 10.00	126	631	243	874	1000	1293	191	9
10.01 & above	-	1000	-	1000	1000	83	24	1
all	250	504	247	750	1000	50792	60788	2876

<sup>1.</sup> Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

<sup>2.</sup> The set of 5 major crops is not a fixed set but varies from household to household; for any particular household it is understood as the 5 most important field crops cultivated, in terms of value of production, by the household in 1997-98, from among a list of crop-season combinations involving 12 crops and crop-groups spanning the entire range of crops cultivated in the country.

# Table (4): Per 1000 distribution of field-crop cultivator households by status of irrigation of area under five major crops, separately for different size-classes of household ownership holding, in villages with government canals and other villages

size-class of		irr	igated			estd. area	no. of househ	
ownership holding (ha)	1	with irrigation services hired	others	all	all	under 5 major crops*	estd. (00)	sample
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
		Villages with	government c	anal				
nil(< 0.01)	-	-	-	-	-	-	-	-
00.01 - 00.20	1000	-	-	-	1000	0	2	2
00.21 - 00.50	-	-	1000	1000	1000	1	3	2
00.51 - 01.00	48	271	682	952	1000	6	9	8
01.01 - 02.00	605	-	395	395	1000	10	6	5
02.01 - 04.00	179	-	821	821	1000	18	6	5
04.01 - 10.00	-	-	1000	1000	1000	5	1	1
10.01 & above	-	-	-	-	-	-	-	-
all	271	91	638	729	1000	40	28	23
		Villages withou	ut government	canal				
nil(< 0.01)	399	-	601	601	1000	25	21	20
00.01 - 00.20	849	-	151	151	1000	0	7	6
00.21 - 00.50	1000	-	-	-	1000	0	3	5
00.51 - 01.00	684	-	316	316	1000	3	7	8
01.01 - 02.00	901	-	99	99	1000	10	10	14
02.01 - 04.00	855	73	73	145	1000	30	14	15
04.01 - 10.00	792	-	208	208	1000	12	4	4
10.01 & above	-	-	-	-	-	-	-	-
all	701	15	283	299	1000	81	68	72
		All	villages					
nil(< 0.01)	615	-	385	385	1000	39	33	25
00.01 - 00.20	884	-	116	116	1000	0	9	8
00.21 - 00.50	532	-	468	468	1000	2	5	7
00.51 - 01.00	321	154	525	679	1000	9	17	16

\*Note

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

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01.01 - 02.00	834	-	166	166	1000	22	22	21
02.01 - 04.00	654	51	295	346	1000	48	20	20
04.01 - 10.00	590	-	410	410	1000	17	6	5
10.01 & above	-	-	-	-	-	-	-	-
all	638	32	330	362	1000	138	113	102

<sup>1.</sup> Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

<sup>2.</sup> The set of 5 major crops is not a fixed set but varies from household to household; for any particular household it is understood as the 5 most important field crops cultivated, in terms of value of production, by the household in 1997-98, from among a list of crop-season combinations involving 12 crops and crop-groups spanning the entire range of crops cultivated in the country.

Table (4): Per 1000 distribution of field-crop cultivator households by status of irrigation of area under five
major crops, separately for different size-classes of household ownership holding, in villages with
government canals and other villages

State	India							
						estd.	no. of FCC	
size-class of			igated					
ownership	unirri-	with irrigation	.1	11	all	under 5	1 (00)	
holding (ha)	gated	services hired	others	all		major crops*	estd. (00)	sample
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
		Villages wi	th governmen	t canal				
nil(< 0.01)	278	374	347	722	1000	1744	2132	117
00.01 - 00.20	268	381	351	732	1000	9307	35384	1981
00.21 - 00.50	202	399	399	798	1000	28978	50633	2859
00.51 - 01.00	168	366	465	832	1000	49787	43894	2242
01.01 - 02.00	149	270	581	851	1000	76531	37755	1927
02.01 - 04.00	122	196	682	878	1000	81964	21856	1141
04.01 - 10.00	95	127	777	905	1000	87310	11434	614
10.01 & above	29	54	917	971	1000	33140	1797	105
all	181	325	494	819	1000	368760	204886	10986
		Villages witho	out governmen	t canal				
nil(< 0.01)	463	332	204	537	1000	9339	8495	773
00.01 - 00.20	429	370	200	571	1000	17086	86999	5670
00.21 - 00.50	409	379	211	591	1000	70458	138500	8446
00.51 - 01.00	404	319	277	596	1000	136668	134644	7917
01.01 - 02.00	401	249	351	599	1000	225302	123538	7201
02.01 - 04.00	378	180	442	622	1000	250683	74996	4513
04.01 - 10.00	341	128	531	659	1000	234176	35692	2084
10.01 & above	339	86	575	661	1000	83521	5288	312
all	401	296	303	599	1000	1027232	608152	36916
		A 11 .	villages					
		All	vulliges					
nil(< 0.01)	427	337	236	573	1000	11503	10806	914
00.01 - 00.20	384	373	243	616	1000	26575	123414	7726
00.21 - 00.50	354	386	261	646	1000	100803	191767	11440
00.51 - 01.00	346	332	323	654	1000	188584	180495	10274

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

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01.01 - 02.00	342	254	404	658	1000	304245	162612	9215
02.01 - 04.00	320	183	497	680	1000	336368	97772	5712
04.01 - 10.00	282	127	590	718	1000	323143	47354	2716
10.01 & above	261	77	662	739	1000	117611	7168	422
all	346	303	350	654	1000	1408832	821388	48419

<sup>1.</sup> Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

<sup>2.</sup> The set of 5 major crops is not a fixed set but varies from household to household; for any particular household it is understood as the 5 most important field crops cultivated, in terms of value of production, by the household in 1997-98, from among a list of crop-season combinations involving 12 crops and crop-groups spanning the entire range of crops cultivated in the country.

		us	e of tractor for	estd. area	no. of hhs. re	porting			
size-class of ownership	by hired	tractor	by other tr	ractor	not	all	under 5 major crops	use of tractor tiller	/ power
holding (ha)	entirely	partly	entirely	partly	used		(00ha)	estd.(00)	sample
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
			A	ndhra Pra	adesh				
nil (< 0.01)	435	-	20	-	545	1000	1109	424	19
00.01 - 00.20	413	127	28	-	431	1000	1077	2028	85
00.21 - 00.50	267	75	84	12	561	1000	6374	4288	197
00.51 - 01.00	290	100	30	19	561	1000	11125	5303	213
01.01 - 02.00	310	112	40	24	514	1000	17640	5155	213
02.01 - 04.00	298	144	53	18	487	1000	19148	3414	152
04.01 - 10.00	242	99	196	33	431	1000	19089	2096	88
10.01 & above	119	76	240	96	469	1000	6700	237	15
all	273	108	97	28	494	1000	82260	22945	982
			Ar	unachal P	radesh				
nil (< 0.01)	-	-	-	-	1000	1000	142	-	-
00.01 - 00.20	-	13	-	-	987	1000	10	1	1
00.21 - 00.50	-	6	16	-	978	1000	61	3	2
00.51 - 01.00	5	43	-	14	938	1000	117	10	10
01.01 - 02.00	22	17	72	5	883	1000	287	22	12
02.01 - 04.00	-	42	106	-	851	1000	307	16	11
04.01 - 10.00	-	14	-	-	986	1000	281	1	1
10.01 & above all	- 5	<u>320</u> 37	- 43	43	637 910	1000	62 1266	4 58	37
	5	51	-13	5	210	1000	1200	50	51
				Assam	l				
nil (< 0.01)	-	-	-	82	918	1000	204	14	1
00.01 - 00.20	4	-	2	-	994	1000	394	27	2
00.21 - 00.50	15	24	-	2	959	1000	1640	126	16
00.51 - 01.00	22	12	-	3	963	1000	6278	252	23
01.01 - 02.00	10	26	8	15	941	1000	11087	456	40
02.01 - 04.00	48	68	45	12	828	1000	7850	404	35
04.01 - 10.00	84	112	99	37	669	1000	3164	194	15
10.01 & above * <i>Note</i>	-	-	-	-	-	-	-	-	

### Table (5): Per 1000 distribution of area under five major crops\* by use of tractor and size-class of household ownership holding

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

all	30	42	25	14	890	1000	30618	1474	134

<sup>1.</sup> Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

<sup>2.</sup> The set of 5 major crops is not a fixed set but varies from household to household; for any particular household it is understood as the 5 most important field crops cultivated, in terms of value of production, by the household in 1997-98, from among a list of crop-season combinations involving 12 crops and crop-groups spanning the entire range of crops cultivated in the country.

		us	e of tractor for	r tilling			estd. area	no. of hhs. re	porting	
size-class of	by hired	tractor	by other tr	actor			under 5	use of tractor/ power tiller		
ownership					not	all	major crops			
holding (ha)	entirely	partly	entirely	partly	used		(00ha)	estd.(00)	sample	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	
				Bihar						
nil (< 0.01)	145	84	23	-	747	1000	3740	552	33	
00.01 - 00.20	151	169	35	5	639	1000	4376	5711	312	
00.21 - 00.50	194	162	21	3	619	1000	14383	8368	452	
00.51 - 01.00	184	162	26	14	614	1000	24522	7206	352	
01.01 - 02.00	185	178	49	14	574	1000	33955	6213	312	
02.01 - 04.00	214	208	89	36	453	1000	28125	3500	172	
04.01 - 10.00	211	211	207	29	343	1000	17326	1383	69	
10.01 & above	78	-	647	70	204	1000	8158	165	9	
all	186	170	105	22	516	1000	134585	33098	1711	
				Gujara	t					
nil (< 0.01)	165	222	91	-	522	1000	113	75	3	
00.01 - 00.20	647	73	19	-	261	1000	467	626	27	
00.21 - 00.50	351	232	9	9	399	1000	4301	3912	196	
00.51 - 01.00	306	233	31	23	408	1000	6386	3242	150	
01.01 - 02.00	389	178	45	13	375	1000	12302	4138	205	
02.01 - 04.00	325	161	125	14	375	1000	19218	3557	176	
04.01 - 10.00	328	116	232	3	321	1000	23963	2537	130	
10.01 & above	233	59	605	-	103	1000	7030	446	25	
all	330	149	177	9	335	1000	73780	18534	912	
				Haryana	a					
$\operatorname{mil}(<0.01)$	221	405	264			1000	266	100	5	
nil (< 0.01) 00.01 - 00.20	331 707	405 155	264	- 96	- 43	1000 1000	266 1365	109 502	5 23	
00.01 - 00.20	628	133 30	193	96 50	45 100	1000	1365	302 1669	23 82	
00.21 - 00.30	628 843	30 94	193	- 50	100 60	1000	1940 2907	1669	82 81	
01.01 - 02.00	843 711	94 101	107	-	81	1000	7757	2776	128	
02.01 - 02.00	456	101	324	10	55	1000	10536	2776	128	
02.01 - 04.00	456 243	155 56	524 611	10 24	55 65	1000		2238 1550	74	
10.01 & above	243 163	- 50	837	- 24	- 00	1000	12695 4622	1550 229	13	
	448	90		- 15						
all	448	90	388	13	58	1000	42089	10828	517	

### Table (5): Per 1000 distribution of area under five major crops\* by use of tractor and size-class of household ownership holding

\*Note

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

<sup>1.</sup> Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

<sup>2.</sup> The set of 5 major crops is not a fixed set but varies from household to household; for any particular household it is understood as the 5 most important field crops cultivated, in terms of value of production, by the household in 1997-98, from among a list of crop-season combinations involving 12 crops and crop-groups spanning the entire range of crops cultivated in the country.

		us	e of tractor for	r tilling			estd. area	no. of hhs. re	eporting	
size-class of	by hired	tractor	by other tr	actor			under 5	use of tractor/ powe		
ownership					not	all	major crops	tiller		
holding (ha)	entirely	partly	entirely	partly	used		(00ha)	estd.(00)	sample	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	
			Hi	machal Pi	radesh					
nil (< 0.01)	218	303	-	-	479	1000	34	21	3	
00.01 - 00.20	140	21	-	2	836	1000	351	232	46	
00.21 - 00.50	82	29	8	-	881	1000	1606	353	67	
00.51 - 01.00	106	27	7	4	855	1000	2228	330	58	
01.01 - 02.00	72	57	15	2	853	1000	2245	173	30	
02.01 - 04.00	37	114	-	11	838	1000	1474	78	13	
04.01 - 10.00	-	200	62	34	704	1000	538	22	4	
10.01 & above	61	-	-	-	939	1000	111	6	1	
all	76	62	11	6	846	1000	8587	1214	222	
			Ja	mmu & Ka	ashmir					
$m^{-1}(z = 0.01)$					1000	1000	F			
nil (< 0.01) 00.01 - 00.20	- 135	- 75	-	- 5	1000 785	1000 1000	5 225	212	48	
00.01 - 00.20	133	114	- 1	3 4	783	1000	1464	936	48 166	
00.21 - 00.50	227	114	-	4 5	657	1000	2149	930 887	100	
01.01 - 02.00	214	111	- 14	15	638	1000	2018	380	89	
02.01 - 04.00	214	119	52	-	568	1000	1335	145	34	
04.01 - 10.00	- 234	140	431	-	393	1000	351	21	8	
10.01 & above	-	-	-	-		-		-	-	
all	201	122	33	6	638	1000	7547	2580	486	
				Karnata	ka					
nil (< 0.01)	-	-	-	-	1000	1000	99	-	-	
00.01 - 00.20	10	-	-	-	990	1000	464	24	1	
00.21 - 00.50	26	27	-	-	948	1000	2910	343	14	
00.51 - 01.00	70	40	7	1	883	1000	9132	967	42	
01.01 - 02.00	72	50	12	2	863	1000	20571	1911	80	
02.01 - 04.00	92	95	51	7	755	1000	22063	1905	77	
04.01 - 10.00	126	126	39	31	677	1000	24961	1442	64	
10.01 & above	111	312	255	-	321	1000	10397	520	22	
all	94	110	56	11	729	1000	90596	7112	300	

### Table (5): Per 1000 distribution of area under five major crops\* by use of tractor and size-class of household ownership holding

\*Note

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.
| by hired the entirely (2) | partly<br>(3)   | by other tr  |  | not  | 11   | under 5  | use of tractor  | / power  |
|---------------------------|---|--|--|--|--|--|---|--|
|                           | 1 1   |  |  | not  | 11   | •  |   |  |
|                           | 1 1   |  | . 1  | not  | all  | major crops  | tiller  |  |
| (2)                       | (3)   |  | partly   | used   |  | (00ha)   | estd.(00)   | sample   |
|                           |   | (4)  | (5)  | (6)  | (7)  | (8)  | (9)   | (10)   |
|                           |   |  | Kerala   | ı  |  |  |   |  |
| -                         | -   | -  | -  | 1000   | 1000   | 1  | -   | -  |
| 31                        | 10  | 11   | 4  | 944  | 1000   | 1332   | 519   | 34   |
| 135                       | 12  | 25   | 2  | 825  | 1000   | 1935   | 1011  | 67   |
| 130                       | 10  | 29   | 2  | 829  | 1000   | 2091   | 912   | 58   |
| 77                        | 18  | 13   | 17   | 875  | 1000   | 2082   | 464   | 28   |
| 212                       | -   | 20   | 8  | 760  | 1000   | 1011   | 194   | 12   |
| 27                        | -   | 18   | 108  | 847  | 1000   | 787  | 49  | 3  |
| -                         | -   | -  | -  | 1000   | 1000   | 360  | -   | -  |
| 101                       | 10  | 19   | 15   | 855  | 1000   | 9599   | 3149  | 202  |
|                           |   | Ν  | ladhya Pra   | adesh  |  |  |   |  |
| 20                        | 7   | 374  | -  | 599  | 1000   | 765  | 66  | 3  |
| 205                       | 38  | 8  | -  | 749  | 1000   | 528  | 437   | 24   |
| 210                       | 24  | 2  | 2  | 763  | 1000   | 4893   | 1964  | 104  |
| 179                       | 53  | 11   | 0  | 757  | 1000   | 15992  | 3032  | 158  |
| 171                       | 57  | 11   | 2  | 759  | 1000   | 42582  | 4547  | 242  |
| 130                       | 67  | 58   | 5  | 739  | 1000   | 66204  | 4210  | 229  |
| 174                       | 105   | 128  | 21   | 572  | 1000   | 63206  | 3116  | 172  |
| 101                       | 39  | 691  | 57   | 111  | 1000   | 19829  | 833   | 51   |
| 154                       | 71  | 124  | 14   | 637  | 1000   | 213999   | 18206   | 983  |
|                           |   |  | Maharasł   | ıtra   |  |  |   |  |
|                           |   |  |  | 1000   | 1000   | 174  |   |  |
|                           |   | -  |  |  |  |  | -   | - 17   |
|                           |   |  |  |  |  |  |   | 45   |
|                           |   |  |  |  |  |  |   | 63   |
|                           |   |  |  |  |  |  |   | 118  |
|                           |   |  |  |  |  |  |   | 71   |
|                           |   |  | -  |  |  |  |   | 54   |
|                           |   |  |  |  |  |  |   | 12   |
|                           | 31<br>135<br>130<br>77<br>212<br>27<br>-<br>-<br>101<br>20<br>205<br>210<br>179<br>171<br>130<br>174<br>101 | $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | 31       10       11       4       944         135       12       25       2       825         130       10       29       2       829         77       18       13       17       875         212       -       20       8       760         27       -       18       108       847         -       -       -       1000         101       10       19       15       855         Madhya Pradesh         20       7       374       -       599         205       38       8       -       749         210       24       2       2       763         179       53       11       0       757         171       57       11       2       759         130       67       58       5       739         174       105       128       21       572         101       39       691       57       111         154       71       124       14       637         97       14       -       1       888 | 31       10       11       4       944       1000         135       12       25       2       825       1000         130       10       29       2       829       1000         77       18       13       17       875       1000         212       -       20       8       760       1000         27       -       18       108       847       1000         -       -       -       1000       1000       1000         101       10       19       15       855       1000         20       7       374       -       599       1000         205       38       8       -       749       1000         210       24       2       2       763       1000         179       53       11       0       757       1000         171       57       111       2       759       1000         130       67       58       5       739       1000         174       105       128       21       572       1000         101       39       691       57 | 31       10       11       4       944       1000       1332         135       12       25       2       825       1000       2091         77       18       13       17       875       1000       2082         212       -       20       8       760       1000       1011         27       -       18       108       847       1000       787         -       -       -       -       1000       1000       360         101       10       19       15       855       1000       9599         Madhya Pradesh         20       7       374       -       599       1000       765         205       38       8       -       749       1000       528         210       24       2       2       763       1000       4893         179       53       11       0       757       1000       15922         171       57       111       2       759       1000       6204         174       105       128       21       572       1000       63206         101 | 31         10         11         4         944         1000         1332         519           135         12         25         2         825         1000         2091         912           77         18         13         17         875         1000         2082         464           212         -         20         8         760         1000         1011         194           27         -         18         108         847         1000         787         49           -         -         -         1000         1000         360         -           101         10         19         15         855         1000         9599         3149           20         7         374         -         599         1000         765         66           205         38         8         -         749         1000         528         437           210         24         2         2         763         1000         4893         1964           179         53         11         0         757         1000         15992         3032           171         < |

# Table (5): Per 1000 distribution of area under five major crops\* by use of tractor and size-class of household ownership holding

\*Note

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

	all	97	23	34	6	840	1000	113969	8072	380
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<sup>1.</sup> Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

<sup>2.</sup> The set of 5 major crops is not a fixed set but varies from household to household; for any particular household it is understood as the 5 most important field crops cultivated, in terms of value of production, by the household in 1997-98, from among a list of crop-season combinations involving 12 crops and crop-groups spanning the entire range of crops cultivated in the country.

		us	e of tractor for	r tilling			estd. area	no. of hhs. re	porting
size-class of	by hired	tractor	by other tr	actor		_	under 5	use of tractor	/ power
ownership					not	all	major crops	tiller	
holding (ha)	entirely	partly	entirely	partly	used		(00ha)	estd.(00)	sample
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
				Manipu	r				
nil (< 0.01)	306	59	-	-	636	1000	224	35	9
00.01 - 00.20	83	45	4	-	868	1000	15	22	7
00.21 - 00.50	234	232	44	7	483	1000	159	268	81
00.51 - 01.00	174	169	5	13	640	1000	564	303	104
01.01 - 02.00	349	183	15	5	427	1000	414	189	66
02.01 - 04.00	562	173	-	14	251	1000	164	58	21
04.01 - 10.00	560	-	-	-	440	1000	28	4	2
10.01 & above	-	-	-	-	-	-	-	-	-
all	292	160	10	8	525	1000	1566	879	290
				Meghala	ya				
nil (< 0.01)	-	-	-	-	1000	1000	2	-	-
00.01 - 00.20	-	-	-	-	1000	1000	102	-	-
00.21 - 00.50	-	-	-	-	1000	1000	302	-	-
00.51 - 01.00	-	-	-	-	1000	1000	658	-	-
01.01 - 02.00	-	5	-	-	995	1000	777	3	1
02.01 - 04.00	7	9	4	2	978	1000	938	13	4
04.01 - 10.00	-	48	-	-	952	1000	391	8	3
10.01 & above	-	-	-	-	-	-	-	-	-
all	2	10	1	1	986	1000	3171	24	8
				Mizora	m				
nil (< 0.01)	_	_	_	1	999	1000	74	0	1
00.01 - 00.20	_	_	_	-	1000	1000	251	-	-
00.21 - 00.50	_	_	_	2	998	1000	31	0	1
00.51 - 01.00	-	-	-	25	975	1000	48	1	2
01.01 - 02.00	_	-	_	-	1000	1000	72	-	-
02.01 - 04.00	-	-	-	-	1000	1000	25	-	-
04.01 - 10.00	-	-	-	-	1000	1000	23 7	-	-
10.01 & above							,		

# Table (5): Per 1000 distribution of area under five major crops\* by use of tractor and size-class of household ownership holding

\*Note

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

all	3	997	1000	508	1	4
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<sup>1.</sup> Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

<sup>2.</sup> The set of 5 major crops is not a fixed set but varies from household to household; for any particular household it is understood as the 5 most important field crops cultivated, in terms of value of production, by the household in 1997-98, from among a list of crop-season combinations involving 12 crops and crop-groups spanning the entire range of crops cultivated in the country.

		us	e of tractor for	r tilling			estd. area	no. of hhs. re	eporting
size-class of	by hired		by other tr				under 5	use of tractor	/ power
ownership					not	all	major crops	tiller	
holding (ha)	entirely	partly	entirely	partly	used		(00ha)	estd.(00)	sample
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
				Nagalan	d				
nil (< 0.01)	-	-	-	-	1000	1000	26	-	-
00.01 - 00.20	-	-	-	-	1000	1000	3	-	-
00.21 - 00.50	-	-	-	-	1000	1000	10	-	-
00.51 - 01.00	-	-	-	-	1000	1000	62	-	-
01.01 - 02.00	4	-	-	-	996	1000	302	1	1
02.01 - 04.00	-	3	-	-	997	1000	813	1	1
04.01 - 10.00	-	-	5	-	995	1000	891	2	2
10.01 & above	-	-	-	-	1000	1000	84	-	-
all	1	1	2	-	996	1000	2190	5	4
				Orissa	l				
nil (< 0.01)	14	36	-	-	950	1000	64	18	1
00.01 - 00.20	27	73	-	2	897	1000	1130	492	32
00.21 - 00.50	17	50	3	7	923	1000	4953	756	46
00.51 - 01.00	15	56	6	7	915	1000	8882	983	51
01.01 - 02.00	33	72	8	14	874	1000	10467	951	53
02.01 - 04.00	25	76	-	54	845	1000	7779	374	20
04.01 - 10.00	43	107	-	101	749	1000	3596	105	5
10.01 & above	-	-	-	-	1000	1000	1406	-	-
all	25	67	4	27	878	1000	38276	3679	208
				Punjat	)				
nil (< 0.01)	458	_	542	-	-	1000	257	50	5
00.01 - 00.20	438 519	263	8	-	210	1000	237	372	34
00.01 - 00.20	753	203 79	8 49	-	119	1000	781	961	83
00.51 - 01.00	555	152	225	18	50	1000	2881	1352	112
01.01 - 02.00	563	71	306	10	50 60	1000	8373	2667	232
02.01 - 04.00	311	69	556	29	35	1000	11713	2115	183
04.01 - 10.00	184	12	773	3	29	1000	16504	1517	128
10.01 & above	32	-	968	U U		1000	9200	377	33

# Table (5): Per 1000 distribution of area under five major crops\* by use of tractor and size-class of household ownership holding

\*Note

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

	all	282	43	632	9	34	1000	49942	9412	810
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<sup>1.</sup> Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

<sup>2.</sup> The set of 5 major crops is not a fixed set but varies from household to household; for any particular household it is understood as the 5 most important field crops cultivated, in terms of value of production, by the household in 1997-98, from among a list of crop-season combinations involving 12 crops and crop-groups spanning the entire range of crops cultivated in the country.

		us	e of tractor for	r tilling			estd. area	no. of hhs. re	porting
size-class of	by hired	tractor	by other tr	ractor			under 5	use of tractor	/ power
ownership					not	all	major crops	tiller	
holding (ha)	entirely	partly	entirely	partly	used		(00ha)	estd.(00)	sample
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
				Rajastha	an				
nil (< 0.01)	864	124	-	-	12	1000	985	306	19
00.01 - 00.20	546	194	96	-	164	1000	1461	878	49
00.21 - 00.50	594	46	22	4	334	1000	5472	4270	239
00.51 - 01.00	545	67	35	4	349	1000	9512	5125	276
01.01 - 02.00	665	73	63	8	191	1000	22182	8301	446
02.01 - 04.00	729	73	91	5	102	1000	36728	8523	479
04.01 - 10.00	634	72	209	30	55	1000	56934	7440	424
10.01 & above	524	49	375	22	31	1000	32144	1973	122
all	632	68	177	17	106	1000	165418	36816	2054
				Sikkin	n				
nil (< 0.01)	-	-	-	-	1000	1000	32	-	-
00.01 - 00.20	-	-	-	-	1000	1000	22	-	-
00.21 - 00.50	-	14	-	-	986	1000	72	1	1
00.51 - 01.00	-	-	-	-	1000	1000	92	-	-
01.01 - 02.00	-	-	-	-	1000	1000	114	-	-
02.01 - 04.00	-	-	-	-	1000	1000	89	-	-
04.01 - 10.00	-	-	-	-	1000	1000	13	-	-
10.01 & above	-	-	-	-	1000	1000	4	-	-
all	-	2	-	-	998	1000	438	1	1
				Tamil Na	du				
nil (< 0.01)	259	150	140	-	452	1000	299	265	15
00.01 - 00.20	319	35	34	7	605	1000	690	1090	59
00.21 - 00.50	321	74	35	7	563	1000	4450	4567	257
00.51 - 01.00	351	91	27	6	525	1000	7714	4232	226
01.01 - 02.00	395	113	56	19	417	1000	9283	3655	198
02.01 - 04.00	474	29	114	15	368	1000	7008	1870	93
04.01 - 10.00	398	59	357	19	167	1000	4817	840	36
10.01 & above	480	-	366	124	30	1000	603	49	3

# Table (5): Per 1000 distribution of area under five major crops\* by use of tractor and size-class of household ownership holding

\*Note

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

	all	391	76	106	15	413	1000	34863	16568	887
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<sup>1.</sup> Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

<sup>2.</sup> The set of 5 major crops is not a fixed set but varies from household to household; for any particular household it is understood as the 5 most important field crops cultivated, in terms of value of production, by the household in 1997-98, from among a list of crop-season combinations involving 12 crops and crop-groups spanning the entire range of crops cultivated in the country.

		us	e of tractor for	r tilling			estd. area	no. of hhs. re	eporting
size-class of	by hired	tractor	by other tr	actor			under 5	use of tractor	/ power
ownership					not	all	major crops	tiller	
holding (ha)	entirely	partly	entirely	partly	used		(00ha)	estd.(00)	sample
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
				Tripura	a				
nil (< 0.01)	-	-	-	322	678	1000	15	5	1
00.01 - 00.20	190	11	13	12	775	1000	66	104	18
00.21 - 00.50	265	50	23	23	638	1000	323	356	63
00.51 - 01.00	240	36	74	22	627	1000	515	275	49
01.01 - 02.00	251	102	-	3	644	1000	318	94	17
02.01 - 04.00	136	11	444	-	409	1000	147	41	8
04.01 - 10.00	-	-	-	-	1000	1000	32	-	-
10.01 & above	-	-	-	-	-	-	-	-	-
all	227	49	79	18	627	1000	1415	874	156
				Uttar Prac	lesh				
nil (< 0.01)	745	37	-	5	213	1000	942	442	22
00.01 - 00.20	523	75	17	1	385	1000	8230	18372	871
00.21 - 00.50	582	73	13	2	330	1000	29992	32507	1503
00.51 - 01.00	554	104	34	3	306	1000	49080	27664	1179
01.01 - 02.00	549	103	66	4	279	1000	62695	20789	894
02.01 - 04.00	506	116	187	5	186	1000	55575	11335	484
04.01 - 10.00	270	97	480	25	128	1000	38392	4315	191
10.01 & above	345	-	646		10	1000	5587	396	19
all	497	98	155	7	244	1000	250492	115819	5163
				West Ben	gal				
nil (< 0.01)	543	69	109	-	278	1000	1795	1199	45
00.01 - 00.20	388	63	5	3	542	1000	2917	5807	291
00.21 - 00.50	320	109	1	6	565	1000	9347	8255	398
00.51 - 01.00	258	121	11	14	596	1000	15448	5944	255
01.01 - 02.00	194	206	21	18	560	1000	12485	2999	131
02.01 - 04.00	270	218	44	35	432	1000	7423	1228	52
04.01 - 10.00	102	535	48	19	296	1000	1293	140	6
10.01 & above	_	1000	-	-	_	1000	83	24	1

### Table (5): Per 1000 distribution of area under five major crops\* by use of tractor and size-class of household ownership holding

\*Note

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

all	269	161	21	16	534	1000	50792	25596	1179

<sup>1.</sup> Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

<sup>2.</sup> The set of 5 major crops is not a fixed set but varies from household to household; for any particular household it is understood as the 5 most important field crops cultivated, in terms of value of production, by the household in 1997-98, from among a list of crop-season combinations involving 12 crops and crop-groups spanning the entire range of crops cultivated in the country.

		us	e of tractor for	r tilling			estd. area	no. of hhs. re	porting
size-class of	by hired	tractor	by other the	ractor			under 5	use of tractor	/ power
ownership					not	all	major crops	tiller	
holding (ha)	entirely	partly	entirely	partly	used		(00ha)	estd.(00)	sample
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
			I	A. & N. Isl	ands				
nil (< 0.01)	-	-	-	-	1000	1000	39	-	-
00.01 - 00.20	-	-	-	-	1000	1000	0	-	-
00.21 - 00.50	-	-	-	-	1000	1000	2	-	-
00.51 - 01.00	116	38	-	-	845	1000	9	2	2
01.01 - 02.00	177	98	-	-	725	1000	22	4	4
02.01 - 04.00	104	227	-	31	639	1000	48	7	6
04.01 - 10.00	253	-	-	-	747	1000	17	1	1
10.01 & above	-	-	-	-	-	-	-	-	-
all	105	98	-	11	787	1000	138	14	13
				India					
nil (< 0.01)	351	70	74	2	503	1000	11503	3605	186
00.01 - 00.20	350	92	20	7	531	1000	26575	37873	2003
00.21 - 00.50	350	85	20	5	540	1000	100803	75916	4097
00.51 - 01.00	311	95	25	7	562	1000	188584	71152	3615
01.01 - 02.00	312	94	46	8	539	1000	304245	68448	3550
02.01 - 04.00	300	100	110	12	478	1000	336368	46740	2447
04.01 - 10.00	275	94	236	22	374	1000	323143	27998	1482
10.01 & above	234	57	491	31	187	1000	117611	5514	329
all	298	92	137	14	460	1000	1408832	337247	17709

### Table (5): Per 1000 distribution of area under five major crops\* by use of tractor and size-class of household ownership holding

\*Note

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

									a Pradesh
· 1 6		1	6 64	· · · · · · · · · · · · · · · · · · ·			. 1	no. of hhs. re	1 0
size-class of	by hired		by other	tor for tilling		all	estd.	cultivation of in the crop-	-
ownership					not used	all	area	Ĩ	
holding (ha) (1)	entirely (2)	partly (3)	entirely (4)	partly (5)	(6)	(7)	(00 ha) (8)	estd.(00) (9)	sample (10
(1)	(2)	(3)	()	(5)	(0)	(7)	(0)		(10
				Paddy(kha	ırif)				
nil (< 0.01)	690	-	31	-	279	1000	363	453	19
00.01 - 00.20	473	89	26	-	412	1000	510	2850	130
00.21 - 00.50	273	107	103	12	506	1000	2789	7666	373
00.51 - 01.00	292	138	31	23	517	1000	4368	7288	342
01.01 - 02.00	362	141	33	40	424	1000	6052	6104	266
02.01 - 04.00	349	208	70	24	349	1000	5333	3545	168
04.01 - 10.00	218	147	354	36	245	1000	4498	1878	8
10.01 & above	138	211	474	52	125	1000	1301	305	18
all	307	152	128	29	384	1000	25215	30089	1405
				Paddy(ra	bi)				
nil (< 0.01)	927	-	68	-	5	1000	164	201	Ģ
00.01 - 00.20	687	70	53	-	190	1000	200	1189	4
00.21 - 00.50	620	106	20	8	246	1000	660	1647	7.
00.51 - 01.00	529	159	23	24	265	1000	1315	2002	79
01.01 - 02.00	634	126	48	24	168	1000	1962	1790	6
02.01 - 04.00	435	263	44	48	210	1000	1881	1066	50
04.01 - 10.00	190	224	385	47	153	1000	1862	827	30
10.01 & above	186	-	647	-	168	1000	101	71	4
all	470	178	126	32	193	1000	8145	8793	365
				other cere	eals				
nil (< 0.01)	-	-	-	-	1000	1000	245	87	:
00.01 - 00.20	82	583	-	-	335	1000	115	324	1
00.21 - 00.50	80	48	49	-	824	1000	517	1790	9
00.51 - 01.00	144	38	19	10	789	1000	1212	2605	12
01.01 - 02.00	156	75	25	10	734	1000	2030	2835	14
02.01 - 04.00	202	68	23 47	26	657	1000	2050 2056	2013	14
001 01.00	202	00		20	557	1000	2000	2015	11

# Table (5.1): Cropwise per 1000 distribution of area under five major crops\* by mode of use of tractor, separately for different size-classes of household ownership holding

\*Note

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

10.01 & above	-	-	55	-	945	1000	583	190	7
all	139	65	37	10	750	1000	8705	10838	553

<sup>1.</sup> Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

<sup>2.</sup> The set of 5 major crops is not a fixed set but varies from household to household; for any particular household it is understood as the 5 most important field crops cultivated, in terms of value of production, by the household in 1997-98, from among a list of crop-season combinations involving 12 crops and crop-groups spanning the entire range of crops cultivated in the country.

								Andhra	Pradesh
								no. of hhs. re	
size-class of	mode of use of t						estd.	cultivation of a crop	
ownership	by hired	tractor	by other	tractor	not	all	area	in the crop-	group
holding (ha)	entirely	partly	entirely	partly	used		(00 ha)	Estd.(00)	sample
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
				Pulses					
nil (< 0.01)	-	-	-	-	1000	1000	85	48	2
00.01 - 00.20	159	36	55	-	750	1000	64	296	15
00.21 - 00.50	111	38	286	15	551	1000	637	1600	75
00.51 - 01.00	297	33	58	25	587	1000	941	1876	80
01.01 - 02.00	278	45	39	-	638	1000	1527	1885	88
02.01 - 04.00	223	49	47	1	680	1000	1536	1293	62
04.01 - 10.00	210	38	193	43	516	1000	1915	908	39
10.01 & above	290	-	218	-	491	1000	347	165	5
all	231	39	116	17	597	1000	7051	8069	366
				oil seed	s				
nil (< 0.01)	150	-	-	-	850	1000	132	82	6
00.01 - 00.20	259	26	-	-	715	1000	69	455	25
00.21 - 00.50	132	-	9	1	859	1000	621	1730	81
00.51 - 01.00	351	29	-	-	620	1000	1176	2051	97
01.01 - 02.00	223	75	25	-	677	1000	2317	2621	127
02.01 - 04.00	322	58	3	1	616	1000	2875	1742	82
04.01 - 10.00	327	42	35	-	596	1000	3159	1165	52
10.01 & above	140	-	123	214	523	1000	2687	302	15
all	259	39	40	44	618	1000	13035	10148	485
				mixed cr	ор				
nil (< 0.01)	-	-	-	-	-	-	-	-	-
00.01 - 00.20	-	-	-	-	1000	1000	18	102	4
00.21 - 00.50	-	102	-	115	783	1000	186	511	23
00.51 - 01.00	140	22	-	55	783	1000	367	537	25
01.01 - 02.00	117	140	-	79	664	1000	795	740	34
02.01 - 04.00	52	126	86	9	727	1000	1116	593	29
04.01 - 10.00	222	5	220	_	553	1000	1435	437	20

# Table (5.1): Cropwise per 1000 distribution of area under five major crops\* by mode of use of tractor, separately for different size-classes of household ownership holding

\*Note

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

10.01 & above	-	398	177	-	426	1000	491	55	3
all	118	109	113	26	633	1000	4407	2976	138

<sup>1.</sup> Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

<sup>2.</sup> The set of 5 major crops is not a fixed set but varies from household to household; for any particular household it is understood as the 5 most important field crops cultivated, in terms of value of production, by the household in 1997-98, from among a list of crop-season combinations involving 12 crops and crop-groups spanning the entire range of crops cultivated in the country.

									n Pradesh
• 1 6		1	с с,				. 1	no. of hhs. re	
size-class of ownership	by hired		by other	ctor for tilling	-	all	estd. area	cultivation of in the crop-	-
holding (ha)			entirely		not	all	(00  ha)	estd.(00)	
(1)	entirely (2)	partly (3)	(4)	partly (5)	used (6)	(7)	(00 11a)	(9)	sample (10)
(1)	(2)	(3)	(+)	(3)	(0)	(7)	(8)	())	(10
				sugar ca	ne				
nil (< 0.01)	1000	-	-	-	-	1000	21	52	2
00.01 - 00.20	639	150	-	-	211	1000	25	213	9
00.21 - 00.50	325	51	-	8	617	1000	137	518	24
00.51 - 01.00	294	265	81	-	361	1000	242	475	21
01.01 - 02.00	348	89	158	-	405	1000	335	500	22
02.01 - 04.00	494	88	181	82	155	1000	452	446	21
04.01 - 10.00	441	-	364	-	194	1000	474	291	13
10.01 & above	-	-	-	-	-	-	-	-	
all	416	86	194	23	282	1000	1686	2496	112
				vegetabl	es				
nil (< 0.01)	-	-	-	-	1000	1000	0	31	1
00.01 - 00.20	92	-	-	-	908	1000	10	63	4
00.21 - 00.50	671	139	-	-	190	1000	81	209	12
00.51 - 01.00	46	-	107	-	847	1000	200	484	24
01.01 - 02.00	267	209	196	-	328	1000	190	400	20
02.01 - 04.00	312	18	44	57	569	1000	220	593	3
04.01 - 10.00	153	12	230	-	605	1000	158	315	16
10.01 & above	-	-	553	-	447	1000	249	57	4
all	188	51	219	11	531	1000	1109	2152	112
				fodder					
-1((001)					1000	1000	0	10	
nil (< 0.01) 00.01 - 00.20	-	-	-	-	1000	1000	8	19	1
00.01 - 00.20	- 145	- 01	- 222	-	-	- 1000	-	275	14
		81	LLL	-	553		54		15
00.51 - 01.00	49	-	-	-	951	1000	19	140	5
01.01 - 02.00	-	-	-	-	1000	1000	203	352	12
02.01 - 04.00	414	185	37	-	364	1000	236	206	1.
04.01 - 10.00	580	-	-	-	420	1000	200	146	
10.01 & above *Note	-	-	-	-	-	-	-	-	

# Table (5.1): Cropwise per 1000 distribution of area under five major crops\* by mode of use of tractor, separately for different size-classes of household ownership holding

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

all	309	67	29	-	595	1000	720	1137	56
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\*Note

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

								Andhr	a Pradesh
								no. of hhs. re	
size-class of				ctor for tilling			estd. area	cultivation of	-
ownership	by hired tractor		by other tractor		not			in the crop-group	
holding (ha)	entirely	partly	entirely	partly	used		(00 ha)	estd.(00)	sample
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
				fruits & n	uts				
nil (< 0.01)	-	-	-	-	1000	1000	7	19	1
00.01 - 00.20	183	-	-	-	817	1000	24	151	9
00.21 - 00.50	34	-	88	-	877	1000	128	413	19
00.51 - 01.00	-	50	-	-	950	1000	167	243	12
01.01 - 02.00	155	140	159	-	547	1000	267	270	13
02.01 - 04.00	174	201	-	-	626	1000	383	198	8
04.01 - 10.00	65	-	66	414	455	1000	514	224	8
10.01 & above	-	-	573	-	427	1000	238	34	2
all	87	71	130	123	590	1000	1728	1551	72
				athan aach a					
			•	other cash c	rops				
nil (< 0.01)	1000	-	-	-	-	1000	39	35	3
00.01 - 00.20	287	80	-	-	634	1000	28	165	8
00.21 - 00.50	404	37	-	15	544	1000	546	1327	65
00.51 - 01.00	234	118	47	23	578	1000	967	2104	101
01.01 - 02.00	228	162	55	22	533	1000	1643	2148	99
02.01 - 04.00	293	175	58	2	472	1000	2568	1840	93
04.01 - 10.00	370	209	100	-	321	1000	2078	1001	48
10.01 & above	241	80	241	-	438	1000	514	160	9
all	300	158	74	8	460	1000	8384	8779	426
				others					
				outers					
nil (< 0.01)	-	-	-	-	1000	1000	44	107	2
00.01 - 00.20	-	-	283	-	717	1000	11	88	4
00.21 - 00.50	438	-	-	-	562	1000	17	119	7
00.51 - 01.00	-	-	-	-	1000	1000	97	189	9
01.01 - 02.00	206	-	85	77	633	1000	232	347	17
02.01 - 04.00	200	39	21	12	727	1000	397	405	23
04.01 - 10.00	148	39	132	-	682	1000	641	349	15
10.01 & above					1000	1000	190	95	

Table (5.1): Cropwise per 1000 distribution of area under five major crops* by mode of use of tractor, separately for	
different size-classes of household ownership holding	

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

\*Note

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

	rent size-clas			1 0					al Pradesh
size-class of		modo	of use of tra	ctor for tillin	a		estd.	no. of hhs. re	
ownership	by hired		by other		g not	all	area	cultivation of a crop in the crop-group	
holding (ha)	-		entirely		used	an	(00  ha)	estd.(00)	
(1)	entirely (2)	partly (3)	(4)	partly (5)	(6)	(7)	(00 11a) (8)	(9)	sample (10)
(1)	(2)	(3)	(4)	(5)	(0)	(7)	(8)	())	(10)
				Paddy(kha	ırif)				
nil (< 0.01)	-	-	-	-	1000	1000	27	53	26
00.01 - 00.20	-	41	-	-	959	1000	2	30	12
00.21 - 00.50	-	12	15	-	973	1000	29	157	66
00.51 - 01.00	10	55	-	22	912	1000	53	134	63
01.01 - 02.00	19	15	64	6	896	1000	166	227	90
02.01 - 04.00	-	81	122	-	796	1000	157	132	73
04.01 - 10.00	-	26	-	-	974	1000	148	125	69
10.01 & above	-	226	-	38	735	1000	44	11	8
all	6	52	48	6	888	1000	626	870	407
				Paddy(ra	bi)				
nil (< 0.01)	-	-	-	-	1000	1000	80	96	20
00.01 - 00.20	-	-	-	-	1000	1000	2	9	3
00.21 - 00.50	-	-	-	-	1000	1000	0	5	2
00.51 - 01.00	-	-	-	-	1000	1000	1	9	3
01.01 - 02.00	-	-	-	-	1000	1000	16	16	7
02.01 - 04.00	-	-	-	-	1000	1000	26	16	7
04.01 - 10.00	-	-	-	-	-	-	-	-	
10.01 & above	-	-	-	-	-	-	-	-	
all	-	-	-	-	1000	1000	126	149	42
				Wheat	t				
nil (< 0.01)	_	-	-	-	-	-	-	-	
00.01 - 00.20	-	-	-	-	-	-	-	-	
00.21 - 00.50	-	-	-	-	1000	1000	1	8	5
00.51 - 01.00	-	-	-	-	1000	1000	7	26	14
01.01 - 02.00	-	-	-	-	1000	1000	6	14	-
02.01 - 04.00	-	-	-	-	1000	1000	21	43	20
04.01 - 10.00	-	-	-	-	1000	1000	3	7	2
10.01 & above	-	-	-	-	-	-	-	-	
all	-	-	-	-	1000	1000	38	98	50

### Table (5.1): Cropwise per 1000 distribution of area under five major crops\* by mode of use of tractor, separately for different size-classes of household ownership holding

\*Note

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

	rent size-clas								al Pradesh
size-class of		mode	of use of trac	tor for tilling	т		estd.	no. of hhs. re cultivation of	
ownership	mode of use of tractor for tilling by hired tractor by other tractor				not all		area	in the crop-group	
holding (ha)	entirely	partly	entirely	partly	used	un	(00 ha)	estd.(00)	sample
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
				other cere	eals				
nil (< 0.01)	-	-	-	-	1000	1000	1	3	2
00.01 - 00.20	-	134	-	-	866	1000	0	9	7
00.21 - 00.50	-	-	-	-	1000	1000	4	63	3
00.51 - 01.00	-	53	-	22	925	1000	18	79	43
01.01 - 02.00	142	112	143	21	582	1000	22	81	45
02.01 - 04.00	-	-	138	-	862	1000	28	99	57
04.01 - 10.00	-	-	-	-	1000	1000	40	83	40
10.01 & above	-	427	-	44	529	1000	7	7	4
all	27	53	59	10	852	1000	119	424	235
				Pulses					
nil (< 0.01)	-	-	-	-	1000	1000	2	2	2
00.01 - 00.20	-	-	-	-	1000	1000	0	2	
00.21 - 00.50	-	-	-	-	1000	1000	0	13	
00.51 - 01.00	-	-	-	-	1000	1000	2	18	1
01.01 - 02.00	-	-	-	-	1000	1000	2	21	1:
02.01 - 04.00	-	-	-	-	1000	1000	10	65	40
04.01 - 10.00	-	-	-	-	1000	1000	8	45	29
10.01 & above	-	854	-	146	-	1000	2	3	,
all	-	52	-	9	939	1000	27	169	10:
				oil seed	<b>S</b>				
nil (< 0.01)	-	-	-	-	1000	1000	0	2	1
00.01 - 00.20	-	-	-	-	-	-	-	-	
00.21 - 00.50	-	-	-	-	1000	1000	0	13	(
00.51 - 01.00	-	-	-	-	1000	1000	1	10	
01.01 - 02.00	-	-	-	-	1000	1000	2	17	12
02.01 - 04.00	-	-	-	-	1000	1000	3	26	10
04.01 - 10.00	-	-	-	-	1000	1000	2	7	2
10.01 & above		-	-	1000	-	1000	0	0	-
all	_	-	-	28	972	1000	9	76	40

### Table (5.1): Cropwise per 1000 distribution of area under five major crops\* by mode of use of tractor, separately for different size-classes of household ownership holding

\*Note

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

								Arunacha	al Pradesh
size-class of		mode	of use of trac	ctor for tilling	σ		estd.	no. of hhs. re cultivation of	
ownership	by hired	by other		not	all	area	in the crop-group		
holding (ha)	entirely	partly	entirely	partly	used		(00  ha)	estd.(00)	sample
(1)	(2)	(3)	(4)	(5)	(6)		(8)	(9)	(10)
				mixed cr	op				
nil (< 0.01)	-	-	-	-	1000	1000	0	5	2
00.01 - 00.20	-	-	-	-	1000	1000	4	28	14
00.21 - 00.50	-	-	-	-	1000	1000	6	58	21
00.51 - 01.00	-	-	-	-	1000	1000	13	53	28
01.01 - 02.00	-	-	78	-	922	1000	28	106	50
02.01 - 04.00	-	-	228	-	772	1000	16	73	40
04.01 - 10.00	-	-		-	1000	1000	71	133	70
10.01 & above	-	-	-	-	-	-	-	-	-
all	-	-	42	-	958	1000	137	456	225
				<b>T</b> 7 4 1 1					
				Vegetab	les				
nil (< 0.01)	-	-	-	-	1000	1000	22	168	58
00.01 - 00.20	-	-	-	-	1000	1000	1	26	12
00.21 - 00.50	-	-	90	-	910	1000	6	98	45
00.51 - 01.00	-	30	-	-	970	1000	13	101	58
01.01 - 02.00	-	-	122	-	878	1000	21	127	66
02.01 - 04.00	-	-	169	-	831	1000	17	114	64
04.01 - 10.00	-	-	-	-	1000	1000	8	47	30
10.01 & above	-	-	-	-	1000	1000	4	7	4
all	-	4	65	-	930	1000	93	689	337
				fruits & n	uts				
nil (< 0.01)	-	-	-	-	1000	1000	0	8	5
00.01 - 00.20	-	-	-	-	-	-	-	-	-
00.21 - 00.50	-	-	-	-	1000	1000	1	29	12
00.51 - 01.00	-	-	-	-	1000	1000	1	14	7
01.01 - 02.00	-	-	-	-	1000	1000	6	28	17
02.01 - 04.00	-	-	-	-	1000	1000	3	22	13
04.01 - 10.00	-	-	-	-	-	-	-	-	-
10.01 & above									

Table (5.1): Cropwise per 1000 distribution of area under five major crops\* by mode of use of tractor, separately for different size-classes of household ownership holding

\*Note

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

all	21	979 1000	11	101	55
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<sup>1.</sup> Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

<sup>2.</sup> The set of 5 major crops is not a fixed set but varies from household to household; for any particular household it is understood as the 5 most important field crops cultivated, in terms of value of production, by the household in 1997-98, from among a list of crop-season combinations involving 12 crops and crop-groups spanning the entire range of crops cultivated in the country.

different size-cia	sses of nouse.		ship holding					Arunacha	al Pradesh
size-class of		mode	of use of trac	tor for tilling	5		estd.	no. of hhs. re cultivation of	
ownership	by hired tractor		by other tractor		not	all	area	in the crop-group	
holding (ha)	entirely	partly	entirely	partly	used		(00 ha)	estd.(00)	sample
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
				other cash o	rops				
nil (< 0.01)	-	-	-	-	1000	1000	5	22	6
00.01 - 00.20	-	-	-	-	1000	1000	0	9	2
00.21 - 00.50	-	-	-	-	1000	1000	1	10	7
00.51 - 01.00	-	-	-	-	1000	1000	5	55	23
01.01 - 02.00	-	-	-	-	1000	1000	9	35	13
02.01 - 04.00	-	-	-	-	1000	1000	12	10	6
04.01 - 10.00	-	-	-	-	-	-	-	-	-
10.01 & above	-	-	-	-	-	-	-	-	-
all	-	-	-	-	1000	1000	33	140	57
				Others	6				
nil (< 0.01)	-	-	-	-	1000	1000	3	29	11
00.01 - 00.20	-	-	-	-	1000	1000	0	15	4
00.21 - 00.50	-	-	-	-	1000	1000	4	27	12
00.51 - 01.00	-	496	-	-	504	1000	2	44	20
01.01 - 02.00	-	-	243	-	757	1000	8	63	30
02.01 - 04.00	-	2	254	-	744	1000	12	31	17
04.01 - 10.00	-	-	-	-	1000	1000	1	3	1
10.01 & above	-	1000		-	-	1000	6	3	1
all	-	179	141	-	680	1000	36	212	96

Table (5.1): Cropwise per 1000 distribution of area under five major crops\* by mode of use of tractor, separately for different size-classes of household ownership holding

\*Note

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

									Assam
							estd.	no. of hhs. re	
size-class of				ctor for tilling	-			cultivation of	-
ownership		<u> </u>			area	in the crop-	6 1		
holding (ha)	entirely	partly	entirely	partly	used		(00 ha)	estd.(00)	sample
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
				Paddy(kh	arif)				
Nil (< 0.01 ha)	-	-	-	176	824	1000	87	179	25
00.01 - 00.20	11	-	-	-	989	1000	131	755	69
00.21 - 00.50	20	49	-	-	932	1000	809	2769	279
00.51 - 01.00	33	9	-	4	954	1000	3555	6240	527
01.01 - 02.00	12	32	9	16	931	1000	7214	6641	547
02.01 - 04.00	53	74	43	8	822	1000	4707	2418	194
04.01 - 10.00	123	134	91	30	622	1000	1921	509	41
10.01 & above	-	-	-	-	-	-	-	-	-
all	39	49	24	13	875	1000	18424	19511	1682
				Paddy(ra	bi)				
nil (< 0.01)	-	-	-	-	1000	1000	39	100	10
00.01 - 00.20	-	-	-	-	1000	1000	19	118	11
00.21 - 00.50	21	-	-	-	979	1000	210	581	59
00.51 - 01.00	22	-	-	-	978	1000	895	1481	130
01.01 - 02.00	1	-	-	-	999	1000	1370	1221	116
02.01 - 04.00	58	37	87	25	792	1000	1174	614	52
04.01 - 10.00	127	-	589	-	284	1000	224	75	6
10.01 & above	-	-	-	-	-	-	-	-	-
all	31	11	60	8	891	1000	3931	4190	384
				whea	t				
nil (< 0.01)	_	-	_	_	1000	1000	4	11	1
00.01 - 00.20	-	-	-	-	1000	1000	21	296	28
00.21 - 00.50	-	-	-	-	1000	1000	65	325	30
00.51 - 01.00	-	-	-	-	1000	1000	223	877	75
01.01 - 02.00	1	10	59	-	930	1000	183	584	54
02.01 - 04.00	27	130		- 9	834	1000	270	398	42
04.01 - 10.00	2 / -	130	-	214	644	1000	270	199	42
10.01 & above	-	-	-	- 214		-	-	-	-
10.01 & 00000	-	-	3	-	-	-	-	-	_

# Table (5.1): Cropwise per 1000 distribution of area under five major crops\* by mode of use of tractor, separately for different size-classes of household ownership holding

\*Note

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

all 7 73 10 58 851 1000	1039 2690 247
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<sup>1.</sup> Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

<sup>2.</sup> The set of 5 major crops is not a fixed set but varies from household to household; for any particular household it is understood as the 5 most important field crops cultivated, in terms of value of production, by the household in 1997-98, from among a list of crop-season combinations involving 12 crops and crop-groups spanning the entire range of crops cultivated in the country.

									Assam
								no. of hhs. re	
size-class of		mode of use of tractor for tilling				estd.	cultivation of a crop		
ownership	by hired		by other		not	all	area	in the crop-group	
holding (ha)	entirely	partly	entirely	partly	used		(00 ha)	estd.(00)	sample
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
				other cere	eals				
nil (< 0.01)	-	-	-	-	1000	1000	2	11	1
00.01 - 00.20	-	-	-	-	1000	1000	4	25	3
00.21 - 00.50	-	-	-	-	1000	1000	15	86	11
00.51 - 01.00	-	-	-	-	1000	1000	54	232	20
01.01 - 02.00	-	-	-	81	919	1000	113	319	29
02.01 - 04.00	-	226	93	-	681	1000	98	213	19
04.01 - 10.00	-	286	-	-	714	1000	43	92	8
10.01 & above	-	-	-	-	-	-	-	-	-
all	-	105	28	28	840	1000	329	978	91
				pulses					
nil (< 0.01)	-	-	-	-	-	-	-	-	-
00.01 - 00.20	-	-	-	-	1000	1000	11	245	18
00.21 - 00.50	-	-	-	-	1000	1000	60	606	54
00.51 - 01.00	-	-	-	-	1000	1000	232	900	78
01.01 - 02.00	-	17	-	24	959	1000	336	999	86
02.01 - 04.00	47	37	-	30	886	1000	380	728	58
04.01 - 10.00	-	16	-	-	984	1000	172	183	15
10.01 & above	-	-	-	-	-	-	-	-	-
all	15	19	-	16	950	1000	1190	3662	309
				oil seed	s				
nil (< 0.01)	_	_	_	-	1000	1000	1	2	1
00.01 - 00.20	_	_	_	_	1000	1000	4	27	3
00.21 - 00.50	-	-	-	-	1000	1000	38	244	21
00.51 - 01.00	-	-	-	-	1000	1000	182	770	60
			20						
01.01 - 02.00 02.01 - 04.00	-	-	29 71	-	971 760	1000	196	618 224	49 21
02.01 - 04.00 04.01 - 10.00	169	-	/1	-	760 1000	1000 1000	115 36	224 27	21 2
10.01 & above	-	-	-	-	- 1000	-1000	- 30	21	2
	-	-	-	-	-	-	-	-	-

Table (5.1): Cropwise per 1000 distribution of area under five major crops\* by mode of use of tractor, separately for different size-classes of household ownership holding

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

all 34 - 24 -	942 1000 571	1911 157
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\*Note

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

				1 0					Assam
			_					no. of hhs. re	
size-class of				ctor for tillin	-		estd.	cultivation of a crop	
ownership	by hired		by other		not	all	area	in the crop-	
holding (ha)	entirely	partly	entirely	partly	used		(00 ha)	estd.(00)	sample
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
				sugar ca	ne				
nil (< 0.01)	-	-	-	-	1000	1000	2	7	4
00.01 - 00.20	-	-	-	-	1000	1000	2	18	3
00.21 - 00.50	-	-	-	-	1000	1000	3	16	3
00.51 - 01.00	-	-	-	-	1000	1000	88	231	17
01.01 - 02.00	-	85	-	5	910	1000	154	228	18
02.01 - 04.00	209	-	-	-	791	1000	79	147	14
04.01 - 10.00	-	-	-	-	1000	1000	30	43	4
10.01 & above	-	-	-	-	-	-	-	-	-
all	47	36	-	2	915	1000	357	692	63
				vegetabl	les				
nil (< 0.01)	-	-	-	21	979	1000	67	471	50
00.01 - 00.20	-	-	4	-	996	1000	184	2722	264
00.21 - 00.50	11	-	-	10	979	1000	377	2528	286
00.51 - 01.00	2	57	-	3	938	1000	791	4346	395
01.01 - 02.00	14	26	11	12	938	1000	1209	4689	413
02.01 - 04.00	-	35	27	7	930	1000	671	1879	156
04.01 - 10.00	-	63	21	-	916	1000	313	418	33
10.01 & above	-	-	-	-	-	-	-	-	-
all	6	33	11	7	943	1000	3612	17054	1597
				fruits & r	nuts				
nil (< 0.01)					1000	1000	0	13	1
00.01 - 00.20	-	-	-	-	1000	1000	4	78	9
00.01 - 00.20	-	-	-	-	1000	1000	4	66	9
00.51 - 01.00	-	-	-	-	1000	1000	34	253	22
01.01 - 02.00	-	-	-	22	978 1000	1000	33	178	18
02.01 - 04.00 04.01 - 10.00	-	-	-	-	1000	1000	17	59	7
10.01 & above	-	-	-	-	-	-	-	-	-
10.01 & above	-	-	-	-	-	-	-	-	-

Table (5.1): Cropwise per 1000 distribution of area under five major crops* by mode of use of tractor, separately	for
different size-classes of household ownership holding	

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

all	8	992 1000	96	647	66
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<sup>1.</sup> Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

<sup>2.</sup> The set of 5 major crops is not a fixed set but varies from household to household; for any particular household it is understood as the 5 most important field crops cultivated, in terms of value of production, by the household in 1997-98, from among a list of crop-season combinations involving 12 crops and crop-groups spanning the entire range of crops cultivated in the country.

				1 0					Assam
size-class of		mode	of use of trac	ctor for tilling	σ		estd.	no. of hhs. re cultivation of	
ownership	by hired		by other		not	ot all	area	in the crop-group	
holding (ha)	entirely	partly	entirely	partly	used		(00 ha)	estd.(00)	sample
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
				other cash o	crops				
nil (< 0.01)	-	-	-	-	-	-	-	-	-
00.01 - 00.20	-	-	-	-	1000	1000	2	46	4
00.21 - 00.50	-	-	-	-	1000	1000	2	19	2
00.51 - 01.00	-	-	-	45	955	1000	31	147	12
01.01 - 02.00	-	-	-	363	637	1000	53	154	17
02.01 - 04.00	-	-	404	-	596	1000	25	25	3
04.01 - 10.00	-	-	-	-	1000	1000	22	17	2
10.01 & above	-	-	-	-	-	-	-	-	-
all	-	-	76	152	773	1000	135	408	40
				others	1				
nil (< 0.01)	-	-	-	-	1000	1000	2	57	6
00.01 - 00.20	-	-	-	-	1000	1000	11	160	13
00.21 - 00.50	-	-	-	-	1000	1000	47	295	27
00.51 - 01.00	-	-	-	-	1000	1000	182	954	80
01.01 - 02.00	-	17	-	-	983	1000	221	712	62
02.01 - 04.00	-	157	-	14	829	1000	284	427	43
04.01 - 10.00	-	212	-	-	788	1000	107	105	10
10.01 & above	-	-	-	-	-	-	-	-	-
all	-	83	-	5	912	1000	854	2710	241

Table (5.1): Cropwise per 1000 distribution of area under five major crops* by mode of use of tractor, separately for	
different size-classes of household ownership holding	

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

size-class of		mode	of use of the	tor for tilling			astd	no. of hhs. re	
	1 1 1 1	ctor for tilling	-		estd.	cultivation of a crop			
ownership	by hired		by other		not	all	area	in the crop-	
holding (ha)	entirely	partly	entirely	partly	used		(00 ha)	estd.(00)	sample
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
				Paddy(kha	urif)				
nil (< 0.01)	138	68	24	-	770	1000	2098	3572	189
00.01 - 00.20	121	174	35	5	661	1000	1997	15331	783
00.21 - 00.50	179	150	23	3	645	1000	7050	20988	1095
00.51 - 01.00	157	153	22	15	654	1000	12135	18658	906
01.01 - 02.00	160	159	45	13	622	1000	16619	14869	727
02.01 - 04.00	188	196	85	38	493	1000	13720	6491	313
04.01 - 10.00	217	183	187	23	390	1000	8110	2071	103
10.01 & above	87	-	644	61	209	1000	3529	257	13
all	169	157	96	21	558	1000	65258	82238	4129
				Paddy(rai	bi)				
nil (< 0.01)	-	-	-	_	_	-	-	-	_
00.01 - 00.20	340	505	9	-	146	1000	50	328	21
00.21 - 00.50	30	396	-	-	574	1000	163	801	26
00.51 - 01.00	62	242	62	59	575	1000	366	756	24
01.01 - 02.00	146	121	69	55	609	1000	317	514	14
02.01 - 04.00	194	193	-	80	533	1000	350	394	13
04.01 - 10.00	-	1000	-	-	-	1000	136	58	2
10.01 & above	-	-	-	-	-	-	-	-	-
all	115	304	32	49	500	1000	1383	2853	100
				wheat					
nil (< 0.01)	135	145	_	_	720	1000	524	1503	84
00.01 - 00.20	204	145	39	5	577	1000	1442	12434	646
00.21 - 00.50	259	190	25	3	523	1000	4584	16178	850
00.51 - 01.00	263	183	44	16	495	1000	7114	13815	656
01.01 - 02.00	262	246	67	17	408	1000	9716		539
02.01 - 02.00	262 258	246 231	67 116	42	408 353	1000	9718 8294	11132 5445	262
02.01 - 04.00 04.01 - 10.00	238 264	231 229	243	42 26	238	1000	8294 5172	2048	262 98
01.01 - 10.00	107	449	243 700	20	230	1000	5112	2040	90

Table (5.1): Cropwise per 1000 distribution of area under five major crops* by mode of use of tractor, separately for	r
different size-classes of household ownership holding	

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

<sup>1.</sup> Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

<sup>2.</sup> The set of 5 major crops is not a fixed set but varies from household to household; for any particular household it is understood as the 5 most important field crops cultivated, in terms of value of production, by the household in 1997-98, from among a list of crop-season combinations involving 12 crops and crop-groups spanning the entire range of crops cultivated in the country.

	rent size-clas			1					Bihar
size-class of	mode of use of tractor for tilling						estd.	no. of hhs. reporting cultivation of a crop	
ownership holding (ha)	by hired	tractor	by other tractor		not all		area	in the crop-group	
	entirely	partly	entirely	partly	used		(00 ha)	estd.(00)	sample
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
				other cere	eals				
nil (< 0.01)	228	125	46	-	601	1000	628	1633	85
00.01 - 00.20	172	228	26	5	570	1000	356	4176	222
00.21 - 00.50	136	214	8	1	641	1000	885	6088	294
00.51 - 01.00	174	196	5	3	621	1000	1547	6510	317
01.01 - 02.00	102	160	20	20	697	1000	2297	6172	286
02.01 - 04.00	249	198	45	42	467	1000	1639	2943	132
04.01 - 10.00	166	131	205	3	495	1000	863	1000	48
10.01 & above	21	-	317	216	446	1000	371	208	10
all	162	170	54	24	590	1000	8585	28731	1394
				pulses					
nil (< 0.01)	105	-	-	-	895	1000	111	686	37
00.01 - 00.20	140	21	44	-	795	1000	215	2355	121
00.21 - 00.50	176	62	5	-	758	1000	647	5644	290
00.51 - 01.00	117	104	7	4	769	1000	1522	8221	380
01.01 - 02.00	128	118	17	13	725	1000	2635	8251	393
02.01 - 04.00	228	262	45	13	452	1000	1969	3816	182
04.01 - 10.00	169	313	157	44	318	1000	1413	1463	68
10.01 & above	18	-	592	185	205	1000	888	232	11
all	146	156	96	31	570	1000	9398	30667	1482
				oil seed	S				
nil (< 0.01)	-	-	-	-	1000	1000	4	34	2
00.01 - 00.20	19	55	-	-	926	1000	32	414	24
00.21 - 00.50	72	104	21	-	802	1000	126	1168	61
00.51 - 01.00	174	188	5	-	633	1000	288	2105	110
01.01 - 02.00	59	149	23	4	764	1000	472	2585	129
02.01 - 04.00	172	224	36	-	568	1000	554	1513	77
04.01 - 10.00	169	165	138	23	505	1000	513	826	37
10.01 & above			722	10	268	1000	372	154	7

Table (5.1): Cropwise per 1000 distribution of area under five major crops* by mode of use of tractor, separately for
different size-classes of household ownership holding

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

<sup>1.</sup> Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

<sup>2.</sup> The set of 5 major crops is not a fixed set but varies from household to household; for any particular household it is understood as the 5 most important field crops cultivated, in terms of value of production, by the household in 1997-98, from among a list of crop-season combinations involving 12 crops and crop-groups spanning the entire range of crops cultivated in the country.

unit	erent size-clas	Sec of nous		omp nonomg					Biha
		mode of use of tractor for tilling						no. of hhs. reporting cultivation of a crop	
size-class of	<u> </u>								
ownership	by hired tractor		by other tractor		not all		area	in the crop-group	
holding (ha)	entirely	partly	entirely	partly	used		(00 ha)	estd.(00)	sample
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
				mixed cr	op				
nil (< 0.01)	-	-	-	-	1000	1000	89	391	18
00.01 - 00.20	140	239	-	62	560	1000	27	393	21
00.21 - 00.50	61	82	-	-	857	1000	92	620	40
00.51 - 01.00	192	8	5	3	792	1000	281	1239	70
01.01 - 02.00	140	13	16	-	831	1000	401	1158	63
02.01 - 04.00	40	-	36	-	924	1000	264	482	28
04.01 - 10.00	-	106	206	-	688	1000	294	341	20
10.01 & above	387	-	387	-	226	1000	41	51	3
all	98	35	63	2	802	1000	1488	4673	263
				sugar ca	ne				
nil (< 0.01)	_	-	-	-	-	-	-	_	
00.01 - 00.20	-	1000	-	-	-	1000	3	35	-
00.21 - 00.50	39	814	18	-	129	1000	66	457	2
00.51 - 01.00	211	541	61	-	187	1000	151	482	2:
01.01 - 02.00	167	486	232	18	97	1000	233	444	2:
02.01 - 04.00	247	205	453	-	95	1000	295	298	1
04.01 - 10.00	6	75	713	101	105	1000	264	123	:
10.01 & above	-	-	-	-	-	-	-	-	
all	146	328	382	31	114	1000	1011	1838	103
				vegetabl	es				
nil (< 0.01)	100	59	26		816	1000	297	1102	6
00.01 - 00.20	31	59 67	26 2	- 5	895	1000	287 177	1192 3793	6 19
00.01 - 00.20	31 92	36	2 9	5 19	895 844	1000	177 494	3793 4051	210
00.21 - 00.30	92 77		8	19 28	844 788	1000	494 635	4031 4221	210
01.01 - 02.00	102	89	66	4	739	1000	673	3612	17-
02.01 - 04.00	265	67	79 172	9	581	1000	513	1816	9
04.01 - 10.00	184	24	172	262	358	1000	273	456	2
10.01 & above	-	-	807	-	193	1000	229	114	-

Table (5.1): Cropwise per 1000 distribution of area under five major crops* by mode of use of tractor, separately	for
different size-classes of household ownership holding	

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.
\*Note

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

unie	Tent Size-elas	ses of house		sinp notaing					Bihar
size-class of		mode	of use of trac	estd.	no. of hhs. reporting cultivation of a crop				
ownership	by hired	tractor	by other	tractor	not	all	area	in the crop-	group
holding (ha)	entirely	partly	entirely	partly	used		(00 ha)	estd.(00)	sample
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
				fodder	•				
nil (< 0.01)	-	-	-	-	-	-	-	13	1
00.01 - 00.20	-	-	-	-	1000	1000	4	125	7
00.21 - 00.50	245	53	-	-	701	1000	23	458	27
00.51 - 01.00	240	62	-	-	698	1000	36	495	27
01.01 - 02.00	49	42	26	-	883	1000	63	516	29
02.01 - 04.00	31	76	<u> </u>	_	797	1000	51	269	16
04.01 - 10.00	53	-	15	-	932	1000	48	168	10
10.01 & above	-	-	47	-	953	1000	17	32	2
all	89	4.1	33		837	1000	242	2077	
all	89	41	33	-	837	1000	242	2077	120
				fruits & 1	nuts				
nil (< 0.01) 00.01 - 00.20	-	-	-	-	-	-	-	-	-
00.01 - 00.20	112	-	-	-	888	1000	18	- 84	- 4
00.51 - 01.00	-	290	-	-	888 710	1000	47	201	4 10
	-		-	-					
01.01 - 02.00	-	154	-	-	846	1000	28	131	7
02.01 - 04.00	83	666	-	-	251	1000	76	118	6
04.01 - 10.00	-	-	-	-	1000	1000	9	37	2
10.01 & above	-	-	-	-	-	-	-	-	-
all	47	385	-	-	568	1000	177	571	29
				other cash o	crops				
nil (< 0.01)	_	_	_	_	_	_	_	-	_
00.01 - 00.20	105	102	-	-	792	1000	53	405	22
00.21 - 00.50	209	96	-	_	694	1000	191	871	39
00.51 - 01.00	263	155	-	41	542	1000	260	781	32
01.01 - 02.00			60			1000		592	27
01.01 - 02.00 02.01 - 04.00	220	156	60 17	- 65	564 407		232		
02.01 - 04.00	190	231	17	65	497	1000	285	388	18

Table (5.1): Cropwise per 1000 distribution of area under five major crops* by mode of use of tractor, separately for	or
different size-classes of household ownership holding	

04.01 - 10.00

10.01 & above

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

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2. The set of 5 major crops is not a fixed set but varies from household to household; for any particular household it is understood as the 5 most important field crops cultivated, in terms of value of production, by the household in 1997-98, from among a list of crop-season combinations involving 12 crops and crop-groups spanning the entire range of crops cultivated in the country.

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Report no. 45	1								
Appendix I Cultivation Pre	actices in India								
	175	250	40	22	502	1000	1250	2006	1.47
all	175	250	48	23	503	1000	1250	3226	147

### Table (5.1): Cropwise per 1000 distribution of area under five major crops\* by mode of use of tractor, separately for different size-classes of household ownership holding

									Bihar		
size-class of		mode	estd.	no. of hhs. reporting cultivation of a crop							
ownership	by hired	tractor	by other	tractor	not all	not all	not all	not all	area	in the crop-	group
holding (ha)	entirely	partly	entirely	partly	used		(00 ha)	estd.(00)	sample		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)		
				Other	s						
nil (< 0.01)	-	-	-	-	-	-	-	-	-		
00.01 - 00.20	-	-	310	-	690	1000	18	257	8		
00.21 - 00.50	-	-	-	-	1000	1000	27	229	9		
00.51 - 01.00	-	-	-	-	1000	1000	126	287	15		
01.01 - 02.00	-	-	46	-	954	1000	57	182	10		
02.01 - 04.00	-	-	-	-	1000	1000	109	106	2		
04.01 - 10.00	-	-	1000	-	-	1000	3	16	1		
10.01 & above	-	-	-	-	-	-	-	-	-		
all	-	-	33	-	967	1000	340	1077	45		

\*Note

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

								no. of hhs. re	Gujarat	
size-class of		mode	of use of trac	estd.	cultivation of					
ownership	by hired		by other		not	all	area	in the crop-	-	
holding (ha)	entirely	partly	entirely	partly	used		(00 ha)	estd.(00)	sample	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	
				Paddy(kha	urif)					
nil (< 0.01)	-	-	-	-	1000	1000	31	76	2	
00.01 - 00.20	188	142	45	-	624	1000	61	522	27	
00.21 - 00.50	316	132	18	6	528	1000	654	2348	112	
00.51 - 01.00	315	197	73	56	359	1000	1050	2139	95	
01.01 - 02.00	376	147	87	26	365	1000	1047	1326	64	
02.01 - 04.00	316	197	181	-	306	1000	1480	1049	55	
04.01 - 10.00	375	139	423	16	47	1000	1320	508	24	
10.01 & above	-	-	-	-	-	-	-	-		
all	338	165	179	20	299	1000	5643	7968	379	
				Paddy(ra	bi)					
nil (< 0.01)	-	-	-	-	-	-	-	-	-	
00.01 - 00.20	-	1000	-	-	-	1000	5	23	1	
00.21 - 00.50	886	-	-	-	114	1000	64	189	7	
00.51 - 01.00	482	-	186	107	225	1000	134	231	10	
01.01 - 02.00	169	-	-	-	831	1000	131	255	12	
02.01 - 04.00	252	-	499	-	249	1000	208	152	7	
04.01 - 10.00	-	-	-	-	-	-	-	-		
10.01 & above All	362	- 9	- 237	- 26	- 366	- 1000	- 541	- 849	37	
All	502	7	231	20	300	1000	541	047	51	
				wheat						
nil (< 0.01)	-	-	-	-	-	-	-	-		
00.01 - 00.20	135	177	-	-	688	1000	37	224	14	
00.21 - 00.50	314	319	4	23	340	1000	822	2568	138	
00.51 - 01.00	260	388	1	12	339	1000	1112	2173	107	
01.01 - 02.00	435	273	9	7	275	1000	2111	2818	14	
02.01 - 04.00	387	298	94	28	192	1000	2416	1890	94	
04.01 - 10.00	255	173	235	-	337	1000	2336	1232	6	
10.01 & above	16	128	856	-	-	1000	313	104	7	

Table (5.1): Cropwise per 1000 distribution of area under five major crops* by mode of use of tractor, separately f	or
different size-classes of household ownership holding	

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

\*Note

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

									Gujarat
			<b>C C</b> .				. 1	no. of hhs. re	
size-class of			11	estd.	cultivation of a crop				
ownership	by hired		-	by other tractor			area	in the crop-	
holding (ha)	entirely	partly	entirely	partly	used		(00 ha)	estd.(00)	sample
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
				other cere	eals				
nil (< 0.01)	-	-	-	-	1000	1000	10	25	1
00.01 - 00.20	446	143	-	-	411	1000	99	499	32
00.21 - 00.50	370	202	9	12	407	1000	1364	4279	234
00.51 - 01.00	254	206	-	16	523	1000	1972	3746	191
01.01 - 02.00	370	194	56	11	368	1000	3497	4364	223
02.01 - 04.00	345	173	158	14	310	1000	4234	3547	174
04.01 - 10.00	392	166	180	17	245	1000	3398	2350	118
10.01 & above	244	-	698	-	58	1000	1353	426	22
all	343	168	153	13	323	1000	15927	19237	995
				pulses					
				puises					
nil (< 0.01)	-	-	-	-	-	-	-	-	-
00.01 - 00.20	-	-	-	-	1000	1000	4	31	3
00.21 - 00.50	341	74	-	4	581	1000	252	1107	64
00.51 - 01.00	234	137	34	31	565	1000	429	1409	73
01.01 - 02.00	183	210	20	18	569	1000	816	1619	89
02.01 - 04.00	265	118	53	-	564	1000	1480	1414	70
04.01 - 10.00	325	96	215	-	365	1000	798	593	29
10.01 & above	486	-	-	-	514	1000	85	50	4
all	266	129	73	8	524	1000	3863	6224	332
				oil seed	s				
1(.001)									
nil (< 0.01)	-	-	-	-	-	-	-	-	-
00.01 - 00.20	813	-	-	-	187	1000	4	33	2
00.21 - 00.50	286	269 402	23	-	422	1000	306	972	46 51
00.51 - 01.00	331	402	-	18	249	1000	493	965	51
01.01 - 02.00	452	150	14	16	368	1000	1686	2176	115
02.01 - 04.00	247	174	67	30	482	1000	3420	2438	122
04.01 - 10.00	300	124	78	-	498	1000	5927	2130	116
10.01 & above	201	28	623	-	147	1000	1593	367	20

Table (5.1): Cropwise per 1000 distribution of area under five major crops* by mode of use of tractor, separately for
different size-classes of household ownership holding

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

all 295 142	128	10	425	1000	13428	9082	472
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\*Note

<sup>1.</sup> Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

<sup>2.</sup> The set of 5 major crops is not a fixed set but varies from household to household; for any particular household it is understood as the 5 most important field crops cultivated, in terms of value of production, by the household in 1997-98, from among a list of crop-season combinations involving 12 crops and crop-groups spanning the entire range of crops cultivated in the country.

									Gujarat	
			<b>6 6 .</b>				. 1	no. of hhs. re		
size-class of	mode of use of tractor for tilling           by hired tractor         by other tractor         not						estd.	cultivation of a crop		
ownership	-		by other		not	all	area	in the crop-		
holding (ha)	entirely	partly	entirely	partly	used		(00 ha)	estd.(00)	sample	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	
				mixed c r	op					
nil (< 0.01)	-	-	-	-	-	-	-	-	-	
00.01 - 00.20	-	-	-	-	-	-	-	-	-	
00.21 - 00.50	188	428	-	-	384	1000	233	672	34	
00.51 - 01.00	340	242	-	-	418	1000	264	440	21	
01.01 - 02.00	172	130	154	28	516	1000	533	584	28	
02.01 - 04.00	231	120	196	-	453	1000	972	458	24	
04.01 - 10.00	179	122	590	-	109	1000	1416	542	28	
10.01 & above	310	-	690	-	-	1000	606	135	5	
all	221	130	379	4	266	1000	4023	2831	140	
				sugar ca	ne					
				8						
nil (< 0.01) 00.01 - 00.20	-	-	-	-	-	-	-	-	-	
00.01 - 00.20	- 952	-	- 48	-	-	1000	106	180	10	
00.51 - 01.00	932 761	-	40 89	24	126	1000	106	299	10	
01.01 - 02.00	466	149	57	33	295	1000	172	228	12	
02.01 - 04.00	392	21	347	-	240	1000	506	268	14	
04.01 - 10.00 10.01 & above	28	-	749 1000	-	223	1000	697 261	198	11	
all	260	20	532	- 4	- 184	1000 1000	261 1848	42 1214	2 64	
an	200	20	552	<del>_</del>	104	1000	1040	1217		
				vegetable	es					
nil (< 0.01)	-	-	-	-	-	-	-	-	-	
00.01 - 00.20	339	-	236	-	424	1000	15	85	4	
00.21 - 00.50	311	449	-	14	226	1000	72	229	13	
00.51 - 01.00	436	58	331	-	175	1000	204	435	17	
01.01 - 02.00	280	169	133	34	385	1000	282	633	30	
02.01 - 04.00	340	105	-	74	570	1000	252	314	15	
04.01 - 10.00	315	-	571	-	114	1000	218	198	9	
10.01 & above	407		593			1000	195	97		

Table (5.1): Cropwise per 1000 distribution of area under	r five major crops* by mode of use of tractor, separately for
different size-classes of household ownership	holding

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

\*Note

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

unit	rent size-eias	ses of nous		ship holding					Gujarat	
size-class of		mode	of use of tra	ctor for tilling	α.		estd.	no. of hhs. re cultivation of		
ownership	by hired		by other		s not	all	area		in the crop-group	
holding (ha)	entirely	partly	entirely	partly	used		(00 ha)	estd.(00)	sample	
(1)	(2)	(3)	(4)	(5)	(6)		(8)	(9)	(10)	
				fodder						
nil (< 0.01)	-	-	-	-	1000	1000	17	74	2	
00.01 - 00.20	-	-	-	-	1000	1000	4	22	1	
00.21 - 00.50	329	57	-	-	614	1000	115	732	37	
00.51 - 01.00	372	52	-	-	576	1000	240	1017	45	
01.01 - 02.00	405	29	19	-	546	1000	400	1366	68	
02.01 - 04.00	424	31	98	-	448	1000	804	1876	95	
04.01 - 10.00	383	76	185	-	356	1000	1096	1592	86	
10.01 & above	366	30	503	-	102	1000	488	309	19	
all	388	48	169	-	394	1000	3163	6989	353	
				fruits & n	uts					
nil (< 0.01)	-	-	-	-	-	-	-	-	-	
00.01 - 00.20	-	-	-	-	-	-	-	-	-	
00.21 - 00.50	-	-	-	-	1000	1000	2	23	1	
00.51 - 01.00	-	362	-	-	638	1000	44	69	3	
01.01 - 02.00	454	-	306	-	239	1000	104	153	6	
02.01 - 04.00	145	162	454	75	165	1000	179	141	6	
04.01 - 10.00	-	-	982	-	18	1000	133	48	2	
10.01 & above all	- 159	- 97	- 527	- 29	- 188	-	462	- 434	- 10	
all	139	97	521	29	100	1000	402	434	18	
				other cash c	rops					
nil (< 0.01)	-	709	291	-	-	1000	35	46	2	
00.01 - 00.20	975	-	11	-	14	1000	239	88	4	
00.21 - 00.50	389	325	-	-	285	1000	221	663	31	
00.51 - 01.00	472	209	-	13	306	1000	326	687	37	
01.01 - 02.00	549	72	28	7	343	1000	1420	1679	82	
02.01 - 04.00	382	119	95	-	403	1000	3194	2262	115	
04.01 - 10.00	396	84	209	-	311	1000	6595	2273	124	
10.01 & above	234	147	468	-	151	1000	2121	408	23	

### Table (5.1): Cropwise per 1000 distribution of area under five major crops\* by mode of use of tractor, separately for different size-classes of household ownership holding

\*Note

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

2. The set of 5 major crops is not a fixed set but varies from household to household; for any particular household it is understood as the 5 most important field crops cultivated, in terms of value of production, by the household in 1997-98, from among a list of crop-season combinations involving 12 crops and crop-groups spanning the entire range of crops cultivated in the country.

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all	395	107	193	1	305	1000	14152	8106	418

### Table (5.1): Cropwise per 1000 distribution of area under five major crops\* by mode of use of tractor, separately for different size-classes of household ownership holding

									Gujarat
size-class of		mode	of use of trac	estd.	no. of hhs. reporting cultivation of a crop				
ownership	by hired	tractor	by other	tractor	not	all	area	in the crop-	group
holding (ha)	entirely	partly	entirely	partly	used		(00 ha)	estd.(00)	sample
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
				others	1				
nil (< 0.01)	1000	-	-	-	-	1000	19	28	1
00.01 - 00.20	-	-	-	-	-	-	-	-	-
00.21 - 00.50	141	733	-	-	126	1000	83	178	8
00.51 - 01.00	-	1000	-	-	-	1000	13	28	1
01.01 - 02.00	-	1000	-	-	-	1000	102	81	3
02.01 - 04.00	45	67	75	-	813	1000	74	152	7
04.01 - 10.00	678	-	322	-	-	1000	30	69	4
10.01 & above	-	-	1000	-	-	1000	18	21	1
all	159	535	97	-	209	1000	338	556	25

\*Note

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

									Haryana
								no. of hhs. re	
size-class of				ctor for tilling			estd.	cultivation of	-
ownership	by hired tractor		by other		not	all	area	in the crop-group	
holding (ha)	entirely	partly	entirely	partly	used		(00 ha)	estd.(00)	sample
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
				Paddy(kha	rif)				
nil (< 0.01)	171	829	-	-	-	1000	80	61	3
00.01 - 00.20	548	167	-	285	-	1000	228	182	9
00.21 - 00.50	682	89	193	-	36	1000	318	555	26
00.51 - 01.00	1000	-	-	-	-	1000	418	679	29
01.01 - 02.00	738	104	101	-	57	1000	1290	1191	50
02.01 - 04.00	408	134	458	-	-	1000	1906	955	45
04.01 - 10.00	144	26	768	-	62	1000	2489	862	39
10.01 & above	209	-	791	-	-	1000	1347	149	8
all	389	73	500	8	30	1000	8077	4634	209
				wheat					
nil (< 0.01)	419	201	379	-	-	1000	144	109	5
00.01 - 00.20	721	143	-	109	27	1000	578	479	22
00.21 - 00.50	639	30	186	31	114	1000	738	1500	73
00.51 - 01.00	849	94	4	-	53	1000	1113	1595	74
01.01 - 02.00	739	100	125	-	35	1000	2840	2575	120
02.01 - 04.00	451	126	378	-	46	1000	4113	2149	106
04.01 - 10.00	288	25	640	21	26	1000	4703	1480	71
10.01 & above	179	-	821	-	-	1000	1862	212	12
all	468	72	413	11	35	1000	16092	10099	483
				other cere	als				
nil (< 0.01)	-	-	-	-	-	-	-	-	-
00.01 - 00.20	709	291	-	-	-	1000	68	130	6
00.21 - 00.50	662	-	165	99	74	1000	230	485	23
00.51 - 01.00	710	114	-	-	176	1000	352	558	26
01.01 - 02.00	637	78	125	-	160	1000	801	956	48
02.01 - 04.00	477	276	145	-	102	1000	986	779	40
04.01 - 10.00	313	192	387	-	108	1000	990	541	25
10.01 & above	385	-	615	-	-	1000	289	63	3

Table (5.1): Cropwise per 1000 distribution of area under five major crops* by mode of use of tractor, separately for	or
different size-classes of household ownership holding	

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

all	498	157	227	6	111	1000	3717	3512	171
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\*Note

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

									Haryana
								no. of hhs. re	
size-class of				ctor for tilling			estd.	cultivation of	-
ownership	by hired		by other		not	all	area	in the crop-group	
holding (ha)	entirely	partly	entirely	partly	used		(00 ha)	estd.(00)	sample
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
				pulses					
nil (< 0.01)	-	-	-	-	-	-	-	-	-
00.01 - 00.20	1000	-	-	-	-	1000	15	25	1
00.21 - 00.50	860	-	-	-	140	1000	55	175	9
00.51 - 01.00	1000	-	-	-	-	1000	92	192	9
01.01 - 02.00	656	62	54	-	228	1000	439	648	31
02.01 - 04.00	658	44	184	-	114	1000	648	545	27
04.01 - 10.00	311	92	396	-	201	1000	657	396	19
10.01 & above	-	-	1000	-	-	1000	94	41	2
all	536	58	249	-	157	1000	2000	2022	98
				oil seeds	5				
1( 0.01)									
nil (< 0.01) 00.01 - 00.20	- 1000	-	-	-	-	-	-	-	-
00.01 - 00.20	627	- 17	- 262	-	- 93	1000 1000	50 108	73 242	4 11
00.51 - 01.00	982	- 17	18	-	- 95	1000	108	351	11
01.01 - 02.00	737	61	90	-	112	1000	632	796	42
02.01 - 04.00	599	215	154	-	32	1000	638	628	34
04.01 - 10.00 10.01 & above	252	14	552 1000	55	127	1000	1128 154	467	25
all	- 490	- 67	336	- 21	- 85	1000 1000	2868	37 2594	2 135
un	470	07	550	21	05	1000	2000	2374	155
				sugar ca	ne				
nil (< 0.01)	-	-	-	-	-	-	-	-	-
00.01 - 00.20	-	-	-	-	-	-	-	-	-
00.21 - 00.50	1000	-	-	-	-	1000	15	25	1
00.51 - 01.00	991	-	-	-	9	1000	15	131	7
01.01 - 02.00	510	257	167	-	65	1000	47	138	8
02.01 - 04.00	174	81	745	-	-	1000	195	331	20
04.01 - 10.00	2	-	997	-	1	1000	317	286	16
10.01 & above			1000			1000	3	1	3

Table (5.1): Cropwise per 1000 distribution of area under five major crops* by mode of use of tractor, separately for	r
different size-classes of household ownership holding	

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

all	150	47	797	-	6 1000	592	912	55
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\*Note

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

				1 8					Haryana
			<b>C C</b> ·				estd.	no. of hhs. re	
size-class of	mode of use of tractor for tilling							cultivation of	-
ownership	by hired tractor		by other		not	all	area	in the crop-	
holding (ha)	entirely	partly	entirely	partly	used		(00 ha)	estd.(00)	sample
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
				vegetable	es				
nil (< 0.01)	-	-	-	-	-	-	-	-	-
00.01 - 00.20	578	-	-	422	-	1000	8	40	2
00.21 - 00.50	392	-	261	136	211	1000	42	172	8
00.51 - 01.00	1000	-	-	-	-	1000	36	79	4
01.01 - 02.00	341	-	231	-	428	1000	53	133	7
02.01 - 04.00	510	48	418	-	24	1000	71	230	12
04.01 - 10.00	27	-	726	-	247	1000	119	113	5
10.01 & above	-	-	1000	-	-	1000	12	24	1
all	337	10	443	27	183	1000	341	791	39
				fodder					
nil (< 0.01)	316	684	-	-	-	1000	18	89	4
00.01 - 00.20	680	86	-	-	234	1000	131	447	21
00.21 - 00.50	682	7	124	23	164	1000	244	957	45
00.51 - 01.00	835	22	4	-	139	1000	386	1061	50
01.01 - 02.00	694	98	83	-	125	1000	816	1962	90
02.01 - 04.00	440	153	240	99	68	1000	972	1626	76
04.01 - 10.00	240	29	571	69	90	1000	1102	1241	59
10.01 & above	122	-	878	-	-	1000	229	190	11
all	480	76	298	46	100	1000	3898	7573	356
				other cash c	rops				
-1((0.01)	251		640			1000	24	40	2
nil (< 0.01)	351	-	649	-	-	1000	24	48	2
00.01 - 00.20	737	219	-	-	44 84	1000	271	181	8
00.21 - 00.50	273	-	405	239	84	1000	167 152	178	7
00.51 - 01.00	211	789	-	-	-	1000	152	120	6
01.01 - 02.00	653	151	147	-	49	1000	535	553	24
02.01 - 04.00	393	259	277	-	70	1000	475	372	17
04.01 - 10.00	264	134	548	-	54	1000	616	398	17
10.01 & above	-	-	1000	-	-	1000	266	65	3

# Table (5.1): Cropwise per 1000 distribution of area under five major crops\* by mode of use of tractor, separately for different size-classes of household ownership holding

\*Note

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

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all	393	186	358	16	47	1000	2506	1914	84

# Table (5.1): Cropwise per 1000 distribution of area under five major crops\* by mode of use of tractor, separately for different size-classes of household ownership holding

				1					Haryana
size-class of		mode	of use of trac	ctor for tilling	5		estd.	no. of hhs. re cultivation of	
ownership	by hired	tractor	by other	tractor	not	all	area	in the crop-	group
holding (ha)	entirely	partly	entirely	partly	used		(00 ha)	estd.(00)	sample
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
				others					
nil (< 0.01)	-	-	-	-	-	-	-	-	-
00.01 - 00.20	1000	-	-	-	-	1000	16	26	1
00.21 - 00.50	826	174	-	-	-	1000	24	112	5
00.51 - 01.00	1000	-	-	-	-	1000	183	21	1
01.01 - 02.00	721	279	-	-	-	1000	234	210	9
02.01 - 04.00	258	321	180	20	222	1000	421	302	13
04.01 - 10.00	284	309	390	-	17	1000	486	218	9
10.01 & above	-	-	1000	-	-	1000	365	69	3
all	367	205	365	5	59	1000	1729	958	41

\*Note

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

									al Pradesh
size-class of		mode	of use of trac	tor for tilling	g		estd.	no. of hhs. re cultivation of	
ownership	by hired		by other		not	all	area	in the crop-	-
holding (ha)	entirely	partly	entirely	partly	used	uii	(00 ha)	estd.(00)	sample
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
				Paddy(kha	arif)				
nil (< 0.01)	-	-	-	-	1000	1000	0	5	1
00.01 - 00.20	104	19	-	13	864	1000	44	507	92
00.21 - 00.50	65	22	-	-	913	1000	174	885	163
00.51 - 01.00	84	21	19	-	875	1000	162	683	127
01.01 - 02.00	59	41	21	-	880	1000	174	470	93
02.01 - 04.00	14	135	-	-	851	1000	76	153	31
04.01 - 10.00	-	216	-	-	784	1000	18	66	14
10.01 & above	59	-	-	-	941	1000	8	14	3
all	63	45	10	1	881	1000	655	2783	524
				wheat					
nil (< 0.01)	226	338	-	-	436	1000	15	38	7
00.01 - 00.20	156	21	-	-	822	1000	158	1551	292
00.21 - 00.50	86	33	8	-	873	1000	685	2771	521
00.51 - 01.00	114	28	8	4	845	1000	969	2135	392
01.01 - 02.00	82	69	15	2	831	1000	921	1195	228
02.01 - 04.00	39	136	-	11	814	1000	634	504	96
04.01 - 10.00	-	234	79	42	645	1000	211	108	22
10.01 & above	67	-	-	-	933	1000	41	30	6
all	83	71	12	6	828	1000	3634	8331	1564
				other cere	eals				
nil (< 0.01)	242	336	-	-	422	1000	15	38	7
00.01 - 00.20	137	22	-	1	840	1000	128	1341	255
00.21 - 00.50	90	34	11	-	865	1000	554	2514	477
00.51 - 01.00	117	33	7	6	837	1000	752	1936	357
01.01 - 02.00	89	78	19	3	812	1000	697	1081	206
02.01 - 04.00	41	125	-	15	819	1000	491	467	89
04.01 - 10.00	-	242	55	40	663	1000	201	92	19
10.01 & above	67	-	-	-	933	1000	43	30	6

Table (5.1): Cropwise per 1000 distribution of area under five major crops* by mode of use of tractor, separately for
different size-classes of household ownership holding

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

all	85	75	12	8	820 10	000 2881	7500	1416
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\*Note

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

	Tent Size-etas			sinp norung				Himach	al Pradesh	
			<b>C C</b> .				. 1	no. of hhs. re		
size-class of				tor for tilling			estd.	cultivation of a crop		
ownership	by hired		by other		not	all	area	in the crop-		
holding (ha)	entirely	partly	entirely	partly	used		(00 ha)	estd.(00)	sample	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	
				pulses						
nil (< 0.01)	-	-	-	-	-	-	-	-	-	
00.01 - 00.20	-	-	-	-	1000	1000	3	72	13	
00.21 - 00.50	5	-	-	-	995	1000	20	268	52	
00.51 - 01.00	32	-	-	-	968	1000	34	272	50	
01.01 - 02.00	50	7	-	-	943	1000	47	216	43	
02.01 - 04.00	-	-	-	-	1000	1000	17	54	11	
04.01 - 10.00	-	-	-	40	960	1000	18	25	5	
10.01 & above	-	-	-	-	1000	1000	0	5	1	
all	25	2	-	5	967	1000	139	912	175	
				oil seed	8					
nil (< 0.01)	1000	-	-	-	-	1000	0	6	1	
00.01 - 00.20	19	73	-	-	908	1000	3	52	10	
00.21 - 00.50	81	24	14	-	881	1000	18	338	64	
00.51 - 01.00	369	38	-	-	593	1000	24	279	49	
01.01 - 02.00	236	48	100	18	599	1000	27	206	38	
02.01 - 04.00	121	290	-	30	558	1000	10	67	12	
04.01 - 10.00	-	485	260	85	170	1000	9	34	6	
10.01 & above	-	-	-	-	1000	1000	7	15	3	
all	186	103	53	16	643	1000	98	997	183	
				mixed cr	on					
				illixeu ei	op					
nil (< 0.01)	-	-	-	-	-	-	-	-	-	
00.01 - 00.20	-	-	-	-	-	-	-	-	-	
00.21 - 00.50	-	-	-	-	1000	1000	8	29	5	
00.51 - 01.00	-	-	-	-	1000	1000	3	29	6	
01.01 - 02.00	41	-	-	-	959	1000	5	20	4	
02.01 - 04.00	-	-	-	-	1000	1000	8	14	3	
04.01 - 10.00	-	-	-	-	1000	1000	3	9	2	
10.01 & above	-	-	-	-	-	-	-	-	-	

Table (5.1): Cropwise per 1000 distribution of area under five major crops* by mode of use of tractor, separately for
different size-classes of household ownership holding

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

all 8 992 1000 27 101
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\*Note

<sup>1.</sup> Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

<sup>2.</sup> The set of 5 major crops is not a fixed set but varies from household to household; for any particular household it is understood as the 5 most important field crops cultivated, in terms of value of production, by the household in 1997-98, from among a list of crop-season combinations involving 12 crops and crop-groups spanning the entire range of crops cultivated in the country.

no. of hhs. rep.           ownership         by hired tractor         by other tractor         other tra	Pradesh	Himacha				1 0				
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	-	-					_			
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$										
(1)       (2)       (3)       (4)       (5)       (6)       (7)       (8)       (9)         sugar cane         nil (< 0.01)	-			all			-		-	
sugar cane         nil (< 0.01)	sample								-	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	(10)	(9)	(8)	(7)	(6)	(5)	(4)	(3)	(2)	(1)
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$					ne	sugar cai				
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	1	5	0	1000	1000	-	-	-	-	nil (< 0.01)
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	1	8	0	1000	-	-	-	-	1000	00.01 - 00.20
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	8	43	3	1000	947	-	-	53	-	00.21 - 00.50
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	9	43	3	1000	829	-	-	40	131	00.51 - 01.00
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	8	38	8	1000	893	-	-	95	12	01.01 - 02.00
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	3			1000		103	-	-		
all2064810022625100022161vegetablesnil (< 0.01)	1	6	2	1000	-	-	1000	-	-	04.01 - 10.00
vegetables           nil (< 0.01)         -	1	5	0	1000	1000	-	-	-	-	10.01 & above
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	32	161	22	1000	625	22	100	48	206	all
$\begin{array}{cccccccccccccccccccccccccccccccccccc$					es	vegetable				
$\begin{array}{cccccccccccccccccccccccccccccccccccc$		-	-	_	-	-	_	-	-	nil (< 0.01)
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	44	239	5	1000	939	-	-	-	61	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	106	570	31	1000	902	-	-	-	98	00.21 - 00.50
02.01 - 04.00 1000 1000 16 136 04.01 - 10.00 1000 1000 5 16 10.01 & above	85	444	51	1000	945	-	-	-	55	00.51 - 01.00
02.01 - 04.00 1000 1000 16 136 04.01 - 10.00 1000 1000 5 16 10.01 & above	63	310	53	1000	994	-	-	-	6	01.01 - 02.00
04.01 - 10.00 1000 1000 5 16 10.01 & above 960 1000 162 1717 all 40 960 1000 162 1717 rol (< 0.01) 960 1000 162 1717 rol (< 0.01)	27					-	-	-		
all       40       -       -       960       1000       162       1717         fodder       fodder       -       -       -       960       1000       162       1717         nil (< 0.01)       -	4					-	-	-	-	
fodder         nil (< 0.01)	-	-	-	-	-	-	-	-	-	10.01 & above
nil (< 0.01) 400 1000 3 99 00.21 - 00.50 299 25 30 - 646 1000 17 262 00.51 - 01.00 326 159 515 1000 22 267 01.01 - 02.00 104 47 35 14 799 1000 34 175	329	1717	162	1000	960	-	-	-	40	all
00.01 - 00.20       514       85       -       -       400       1000       3       99         00.21 - 00.50       299       25       30       -       646       1000       17       262         00.51 - 01.00       326       159       -       -       515       1000       22       267         01.01 - 02.00       104       47       35       14       799       1000       34       175						fodder				
00.01 - 00.20       514       85       -       -       400       1000       3       99         00.21 - 00.50       299       25       30       -       646       1000       17       262         00.51 - 01.00       326       159       -       -       515       1000       22       267         01.01 - 02.00       104       47       35       14       799       1000       34       175		_	_	_	_	_	_	_	_	nil (< 0.01)
00.21 - 00.50       299       25       30       -       646       1000       17       262         00.51 - 01.00       326       159       -       -       515       1000       22       267         01.01 - 02.00       104       47       35       14       799       1000       34       175	19	99	3	1000	400	_	-	85	514	
00.51 - 01.00         326         159         -         -         515         1000         22         267           01.01 - 02.00         104         47         35         14         799         1000         34         175	48					-	30			
01.01 - 02.00 104 47 35 14 799 1000 34 175	49					-	-			
	33						35			
	15	78	16	1000	469	14	-	439	82	02.01 - 04.00
04.01 - 10.00 - 121 88 - 791 1000 13 21	4					-	88		-	
10.01 & above			-	-	-	-	-	-	-	

Table (5.1): Cropwise per 1000 distribution of area under five major crops* by mode of use of tractor, separately for
different size-classes of household ownership holding

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

\*Note

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

diffe				1 0				Himach	al Pradesh
								no. of hhs. re	
size-class of				ctor for tillin	g		estd.	cultivation of	-
ownership	by hired		by other	tractor	not	all	area	in the crop-	group
holding (ha)	entirely	partly	entirely	partly	used		(00 ha)	estd.(00)	sample
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
				fruits & r	uts				
nil (< 0.01)	-	-	-	-	1000	1000	3	6	1
00.01 - 00.20	-	-	-	-	1000	1000	3	25	6
00.21 - 00.50	-	-	-	-	1000	1000	25	125	20
00.51 - 01.00	3	-	-	-	997	1000	85	238	40
01.01 - 02.00	-	-	-	-	1000	1000	155	181	32
02.01 - 04.00	-	-	-	-	1000	1000	111	61	12
04.01 - 10.00	-	-	-	-	1000	1000	33	5	1
10.01 & above	-	-	-	-	-	-	-	-	-
all	1	-	-	-	999	1000	413	641	112
				other cash o	rone				
					rops				
nil (< 0.01)	-	-	-	-	-	-	-	-	-
00.01 - 00.20	157	-	-	-	843	1000	3	37	8
00.21 - 00.50	37	-	-	-	963	1000	47	280	45
00.51 - 01.00	8	-	-	-	992	1000	79	234	42
01.01 - 02.00	-	-	-	-	1000	1000	85	174	32
02.01 - 04.00	32	-	-	-	968	1000	85	111	21
04.01 - 10.00	-	-	-	-	1000	1000	9	21	5
10.01 & above	-	-	-	-	1000	1000	10	14	3
all	17	-	-	-	983	1000	317	872	156
				others					
nil (< 0.01)	-	-	-	-	-	-	-	-	-
00.01 - 00.20	-	-	-	-	1000	1000	2	33	6
00.21 - 00.50	12	-	-	-	988	1000	19	122	21
00.51 - 01.00	84	-	-	-	916	1000	43	148	27
01.01 - 02.00	41	-	-	-	959	1000	35	146	29
02.01 - 04.00	-	-	-	-	1000	1000	4	30	6
04.01 - 10.00	-	-	-	-	1000	1000	17	37	8
10.01 & above	353			-	647	1000	2	10	2

# Table (5.1): Cropwise per 1000 distribution of area under five major crops\* by mode of use of tractor, separately for different size-classes of household ownership holding

\*Note

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

all 48 952 1000 122 525
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\*Note

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

				simp notaing				Jammu a	& Kashmir
			<b>6</b>					no. of hhs. re	
size-class of				ctor for tillin			estd. area	cultivation of a crop	
ownership	by hired tractor		-	by other tractor		not all		in the crop-group	
holding (ha)	entirely	partly	entirely	partly	used		(00 ha)	estd.(00)	sample
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
				Paddy(kha	arif)				
nil (< 0.01)	-	-	-	-	1000	1000	1	6	1
00.01 - 00.20	98	134	-	-	768	1000	78	529	110
00.21 - 00.50	206	163	1	-	631	1000	557	2123	418
00.51 - 01.00	294	195	-	7	504	1000	564	1293	265
01.01 - 02.00	293	150	29	7	520	1000	535	711	185
02.01 - 04.00	278	204	98	-	419	1000	339	283	71
04.01 - 10.00	-	212	447	-	341	1000	117	49	16
10.01 & above	-	-	-	-	-	-	-	-	-
all	246	176	46	4	528	1000	2191	4994	1066
				Paddy( <i>ra</i>	bi)				
nil (< 0.01)	-	-	-	-	-	-	-	-	-
00.01 - 00.20	-	-	-	-	1000	1000	0	4	1
00.21 - 00.50	150	230	-	-	620	1000	9	59	10
00.51 - 01.00	487	211	-	-	301	1000	20	82	12
01.01 - 02.00	82	-	-	-	918	1000	18	35	7
02.01 - 04.00	37	-	-	-	963	1000	8	11	3
04.01 - 10.00	-	-	-	-	-	-	-	-	-
10.01 & above	-	-	-	-	-	-	-	-	-
all	231	113	-	-	655	1000	56	191	33
				wheat					
nil (< 0.01)					1000	1000	1	2	2
00.01 - 00.20	379	33	-	-	1000 588	1000 1000	1 23	2 192	2 54
00.01 - 00.20	233	35 36	3	- 6	588 723	1000	25 184	646	
00.51 - 01.00	255	49	-	-	675	1000	491	849	206
			10						
01.01 - 02.00	251	123	12	7	607	1000	663	659	170
02.01 - 04.00	277	147	56 526	-	519	1000	521	287	69 12
04.01 - 10.00 10.01 & above	-	230	536	-	234	1000	127	35	13
10.01 & above	-	-	-	-	-	-	-	-	-

Table (5.1): Cropwise per 1000 distribution of area under five major crops\* by mode of use of tractor, separately for different size-classes of household ownership holding

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

\*Note

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

								Jammu	& Kashmir
								no. of hhs. re	
size-class of			of use of trac	estd.	cultivation of a crop				
ownership	by hired tractor		-	by other tractor		all	area	in the crop-group	
holding (ha)	entirely	partly	entirely	partly	used		(00 ha)	estd.(00)	sample
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
				other cere	eals				
nil (< 0.01)	-	-	-	-	1000	1000	1	2	2
00.01 - 00.20	194	-	-	-	806	1000	16	143	37
00.21 - 00.50	8	14	-	2	977	1000	139	611	162
00.51 - 01.00	125	21	-	-	855	1000	296	707	155
01.01 - 02.00	76	62	-	38	824	1000	301	494	112
02.01 - 04.00	144	78	-	-	779	1000	194	189	37
04.01 - 10.00	-	-	369	-	631	1000	38	21	6
10.01 & above	-	-	-	-	-	-	-	-	-
all	93	42	14	12	838	1000	985	2167	511
				nulaaa					
				pulses					
nil (< 0.01)	-	-	-	-	1000	1000	0	2	2
00.01 - 00.20	636	-	-	-	364	1000	1	44	9
00.21 - 00.50	86	13	-	177	724	1000	12	266	52
00.51 - 01.00	198	70	-	83	650	1000	45	458	85
01.01 - 02.00	169	141	7	44	639	1000	68	352	74
02.01 - 04.00	189	136	-	-	675	1000	57	174	33
04.01 - 10.00	-	277	720	-	4	1000	9	13	5
10.01 & above	-	-	-	-	-	-	-	-	-
all	171	120	37	46	626	1000	193	1309	260
				oil seed	s				
nil (< 0.01)	-	-	-	-	1000	1000	0	2	1
00.01 - 00.20	118	124	-	27	732	1000	26	223	45
00.21 - 00.50	166	158	-	-	676	1000	290	887	157
00.51 - 01.00	404	304	-	16	276	1000	171	764	131
01.01 - 02.00	303	228	-	9	460	1000	83	294	62
02.01 - 04.00	265	170	-	-	565	1000	62	144	26
04.01 - 10.00	-	141	436	-	424	1000	9	20	6
10.01 & above	-	-	-	-	-	-	-	-	-

Table (5.1): Cropwise per 1000 distribution of area under five major crops* by mode of use of tractor, separately for
different size-classes of household ownership holding

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

all 253	206	6	7	529	1000	642	2333	428
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\*Note

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

				1 0				Jammu a	& Kashmir	
								no. of hhs. re		
size-class of			of use of trac		estd.	cultivation of a crop				
ownership	by hired		by other t		not		area	in the crop-group		
holding (ha)	entirely	partly	entirely	partly	used		(00 ha)	estd.(00)	sample	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	
				mixed cı	op					
nil (< 0.01)	-	-	-	-	-	-	-	-	-	
00.01 - 00.20	90	-	-	-	910	1000	1	23	4	
00.21 - 00.50	-	-	-	-	1000	1000	4	39	9	
00.51 - 01.00	-	-	-	-	1000	1000	4	35	7	
01.01 - 02.00	756	137	-	-	106	1000	12	22	6	
02.01 - 04.00	-	1000	-	-	-	1000	3	7	3	
04.01 - 10.00	-	-	1000	-	-	1000	0	2	1	
10.01 & above	-	-	-	-	-	-	-	-	-	
all	378	183	10	-	429	1000	23	127	30	
				vegetabl	es					
nil (< 0.01)	-	-	-	-	1000	1000	1	11	3	
00.01 - 00.20	7	33	-	9	952	1000	39	721	145	
00.21 - 00.50	140	101	-	2	756	1000	91	1396	249	
00.51 - 01.00	60	79	-	-	861	1000	224	1094	182	
01.01 - 02.00	68	157	18	26	731	1000	43	399	86	
02.01 - 04.00	-	223	101	-	676	1000	17	102	22	
04.01 - 10.00	-	-	208	-	792	1000	9	24	7	
10.01 & above	-	-	-	-	-	-	-	-	-	
all	69	92	11	4	825	1000	424	3748	694	
				fodder						
nil (< 0.01)	-	-	-	-	-	-	-	-	-	
00.01 - 00.20	330	60	-	-	609	1000	12	151	35	
00.21 - 00.50	296	98	-	11	594	1000	64	730	171	
00.51 - 01.00	391	155	-	10	443	1000	104	700	140	
01.01 - 02.00	251	157	25	59	508	1000	87	451	117	
02.01 - 04.00	327	156	103	-	414	1000	54	157	47	
04.01 - 10.00	-	177	201	-	622	1000	20	34	12	
10.01 & above	-	-	-	-	-	-	-	-	-	

Table (5.1): Cropwise per 1000 distribution of area under five major crops* by mode of use of tractor, separately for
different size-classes of household ownership holding

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

\*Note

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

unit	rent size-clas	303 01 110 US		sinp notanig				Jammu a	& Kashmir
size-class of		mode	of use of trac	estd.	no. of hhs. re cultivation of				
ownership	by hired	tractor	by other	tractor	not	all	area	in the crop-	group
holding (ha)	entirely	partly	entirely	partly	used		(00 ha)	estd.(00)	sample
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
				fruits & r	uts				
nil (< 0.01)	-	-	-	-	-	-	-	-	-
00.01 - 00.20	-	-	-	-	1000	1000	12	84	20
00.21 - 00.50	21	2	-	11	966	1000	82	551	96
00.51 - 01.00	-	-	-	-	1000	1000	181	535	90
01.01 - 02.00	-	-	-	4	996	1000	150	234	50
02.01 - 04.00	-	-	-	-	1000	1000	55	45	10
04.01 - 10.00	-	-	-	-	1000	1000	20	16	4
10.01 & above	-	-	-	-	-	-	-	-	-
all	3	0	-	3	993	1000	500	1464	270
				others	1				
nil (< 0.01)	-	-	-	-	-	-	-	-	-
00.01 - 00.20	450	61	-	-	489	1000	6	51	14
00.21 - 00.50	476	119	-	8	396	1000	28	204	49
00.51 - 01.00	225	95	-	-	680	1000	39	130	30
01.01 - 02.00	257	157	7	-	579	1000	43	85	24
02.01 - 04.00	-	14	-	-	986	1000	18	20	6
04.01 - 10.00	-	-	-	-	-	-	-	-	-
10.01 & above	-	-	-	-	-	-	-	-	-
all	266	108	2	2	622	1000	135	491	123

Table (5.1): Cropwise per 1000 distribution of area under five major crops\* by mode of use of tractor, separately for different size-classes of household ownership holding

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

	Tent Size-eias			1 0					Karnataka
. 1 6			с с <i>і</i>				. 1	no. of hhs. rej	
size-class of				ctor for tillin			estd. area	cultivation of a crop	
ownership	by hired tractor		-	by other tractor		not all		in the crop-	
holding (ha)	entirely	partly	entirely	partly	used		(00 ha)	estd.(00)	sample
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
				Paddy(kha	urif)				
nil (< 0.01)	-	-	-	-	1000	1000	1	31	1
00.01 - 00.20	-	-	-	-	1000	1000	86	613	34
00.21 - 00.50	58	50	-	-	892	1000	431	1344	67
00.51 - 01.00	28	11	-	-	962	1000	1457	2666	110
01.01 - 02.00	62	57	25	5	852	1000	3039	3534	148
02.01 - 04.00	137	41	49	27	747	1000	2313	1756	79
04.01 - 10.00	209	64	32	49	646	1000	1403	684	34
10.01 & above	-	159	716	-	125	1000	550	116	6
all	93	52	68	16	772	1000	9279	10743	479
				Paddy(ra	bi)				
nil (< 0.01)	-	-	-	-	-	-	-	-	-
00.01 - 00.20	-	-	-	-	1000	1000	17	136	5
00.21 - 00.50	-	-	-	-	1000	1000	70	261	10
00.51 - 01.00	56	47	-	-	897	1000	185	378	17
01.01 - 02.00	158	245	-	-	597	1000	416	623	27
02.01 - 04.00	161	102	48	-	688	1000	470	352	18
04.01 - 10.00	229	267	71	-	432	1000	548	299	13
10.01 & above	-	-	-	-	-	-	-	-	-
all	163	179	36	-	622	1000	1707	2049	90
				wheat					
nil (< 0.01)	-	-	-	-	-	-	-	-	-
00.01 - 00.20	-	-	-	-	1000	1000	2	21	1
00.21 - 00.50	177	-	-	-	823	1000	52	151	7
00.51 - 01.00	396	-	-	-	604	1000	76	198	8
01.01 - 02.00	269	_	-	-	731	1000	217	326	14
02.01 - 04.00	209	- 64	151	- 79	501	1000	339	408	17
04.01 - 10.00	189	197	10	-	604	1000	433	408	19
10.01 & above	-	46	360	-	594	1000	254	160	6
10.01 & 40070	· ·	70	500	-	574	1000	207	100	

Table (5.1): Cropwise per 1000 distribution of area under five major crops\* by mode of use of tractor, separately for different size-classes of household ownership holding

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

all	182	86	107	19	606	1000	1374	1711	72
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\*Note

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

				1 0					Karnataka
								no. of hhs. re	
size-class of	mode of use of tractor for tilling						estd.	cultivation of a crop	
ownership	by hired tractor		by other tractor		not all		area	in the crop-group	
holding (ha)	entirely	partly	entirely	partly	used		(00 ha)	estd.(00)	sample
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
				other cere	eals				
nil (< 0.01)	-	-	-	-	1000	1000	40	28	3
00.01 - 00.20	-	-	-	-	1000	1000	162	1013	53
00.21 - 00.50	18	34	-	-	948	1000	1214	3784	183
00.51 - 01.00	91	64	6	1	838	1000	3261	5450	240
01.01 - 02.00	65	37	7	-	891	1000	6779	7340	315
02.01 - 04.00	51	130	52	1	766	1000	8531	5300	221
04.01 - 10.00	69	167	41	32	691	1000	9997	3343	143
10.01 & above	72	425	177	-	326	1000	4067	546	23
all	64	147	48	10	731	1000	34052	26804	1181
				pulses					
1(.001)									
nil (< 0.01) 00.01 - 00.20	-	-	-	-	- 1000	- 1000	- 35	- 164	- 10
00.01 - 00.20	4	-	-	-	996	1000	33	1286	62
00.51 - 01.00	4	4	3	- 1	990 989	1000	1090	2200	02 99
01.01 - 02.00	57	17	-	-	927	1000	2490	2863	123
02.01 - 04.00 04.01 - 10.00	29	12	15	6	939	1000	2670	2172	94 57
10.01 & above	14 43	56 386	24 236	28	878 335	1000 1000	3105 1407	1237 304	57 13
all	29	71	40	- 9	850	1000	11180	10226	458
an	2)	/1	-10	)	0.50	1000	11100	10220	-50
				oil seed	S				
nil (< 0.01)	-	-	-	-	1000	1000	39	24	1
00.01 - 00.20	-	-	-	-	1000	1000	37	242	11
00.21 - 00.50	-	6	-	-	994	1000	200	625	30
00.51 - 01.00	156	61	-	-	782	1000	865	1421	61
01.01 - 02.00	30	99	-	-	871	1000	2795	2526	103
02.01 - 04.00	110	220	16	-	654	1000	3009	2115	89
04.01 - 10.00	137	147	31	25	661	1000	4350	1948	81
10.01 & above	225					1000			16
		363	284		128		2295	403	

Table (5.1): Cropwise per 1000 distribution of area under five major crops\* by mode of use of tractor, separately for different size-classes of household ownership holding

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

all 122 181	61 8	627 1000	13590	9305 392
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\*Note

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.
|                                | Tent Size-clas                     |            |               | 1                |            |              |           |                               | Karnataka |
|--------------------------------|------------------------------------|------------|---------------|------------------|------------|--------------|-----------|-------------------------------|-----------|
| size-class of                  |                                    | modo       | of use of tra | tor for tillin   | ~          |              | estd.     | no. of hhs. re cultivation of |           |
|                                | mode of use of tractor for tilling |            |               |                  |            |              | area      |                               | -         |
| ownership                      | by hired tractor                   |            | -             | by other tractor |            | not all      |           | in the crop-group             |           |
| holding (ha)                   | entirely                           | partly     | entirely      | partly           | used       |              | (00 ha)   | estd.(00)                     | sample    |
| (1)                            | (2)                                | (3)        | (4)           | (5)              | (6)        | (7)          | (8)       | (9)                           | (10)      |
|                                |                                    |            |               | mixed cr         | ор         |              |           |                               |           |
| nil (< 0.01)                   | -                                  | -          | -             | -                | -          | -            | -         | -                             | -         |
| 00.01 - 00.20                  | 170                                | -          | -             | -                | 830        | 1000         | 29        | 189                           | 9         |
| 00.21 - 00.50                  | 39                                 | -          | -             | -                | 961        | 1000         | 189       | 582                           | 26        |
| 00.51 - 01.00                  | 50                                 | 28         | 51            | -                | 870        | 1000         | 709       | 1193                          | 54        |
| 01.01 - 02.00                  | 121                                | 21         | 10            | 19               | 830        | 1000         | 1390      | 1365                          | 56        |
| 02.01 - 04.00                  | 287                                | 34         | 23            | -                | 656        | 1000         | 864       | 590                           | 28        |
| 04.01 - 10.00                  | 264                                | 51         | -             | 44               | 641        | 1000         | 1832      | 602                           | 24        |
| 10.01 & above                  | 365                                | 45         | -             | -                | 590        | 1000         | 362       | 111                           | 5         |
| all                            | 201                                | 35         | 13            | 20               | 731        | 1000         | 5374      | 4633                          | 202       |
|                                |                                    |            |               |                  |            |              |           |                               |           |
|                                |                                    |            |               | sugar ca         | ne         |              |           |                               |           |
| nil (< 0.01)                   | -                                  | -          | -             | -                | -          | -            | -         | -                             | -         |
| 00.01 - 00.20                  | -                                  | -          | -             | -                | 1000       | 1000         | 11        | 72                            | 3         |
| 00.21 - 00.50                  | -                                  | -          | -             | -                | 1000       | 1000         | 41        | 162                           | 7         |
| 00.51 - 01.00                  | 137                                | -          | 18            | -                | 846        | 1000         | 157       | 448                           | 20        |
| 01.01 - 02.00                  | 164                                | -          | 47            | -                | 789        | 1000         | 738       | 1078                          | 45        |
| 02.01 - 04.00                  | 158                                | -          | 111           | -                | 730        | 1000         | 700       | 536                           | 24        |
| 04.01 - 10.00                  | 11                                 | -          | 312           | -                | 678        | 1000         | 338       | 301                           | 14        |
| 10.01 & above                  | 169                                | 168        | 663           | -                | -          | 1000         | 138       | 74                            | 3         |
| all                            | 132                                | 11         | 147           | -                | 710        | 1000         | 2123      | 2670                          | 116       |
|                                |                                    |            |               | vegetabl         | es         |              |           |                               |           |
| -1(<0.01)                      |                                    |            |               |                  |            |              |           | 20                            | 1         |
| nil (< $0.01$ )                | -                                  | -          | -             | -                | -          | -            | -         | 39                            | 1         |
| 00.01 - 00.20<br>00.21 - 00.50 | -                                  | -          | -             | -                | 1000       | 1000         | 17<br>67  | 168<br>350                    | 7<br>17   |
| 00.21 - 00.30                  | 83                                 | 195<br>146 | -             | -                | 805<br>771 | 1000<br>1000 | 67<br>360 | 727                           | 31        |
|                                |                                    |            | -             | -                |            |              |           |                               |           |
| 01.01 - 02.00                  | 234                                | 161        | 34            | -                | 571        | 1000         | 542       | 886                           | 38        |
| 02.01 - 04.00                  | 24                                 | -          | 135           | -                | 841        | 1000         | 384       | 437                           | 20        |
| 04.01 - 10.00                  | 325                                | 161        | -             | 232              | 281        | 1000         | 231       | 248                           | 12        |
| 10.01 & above                  | -                                  | 65         | -             | -                | 935        | 1000         | 65        | 48                            | 3         |

Table (5.1): Cropwise per 1000 distribution of area under five major crops\* by mode of use of tractor, separately for different size-classes of household ownership holding

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

\*Note

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

unit	Tent Size-eids	ses of nous	enoid owners	ship holding					Karnataka
size-class of		mode	of use of trac	estd.	no. of hhs. reporting cultivation of a crop				
ownership	by hired tractor		by other tractor		not	all	area	in the crop-group	
holding (ha)	entirely	partly	entirely	partly	used		(00 ha)	estd.(00)	sample
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
				fodder					
nil (< 0.01)	-	-	-	-	-	-	-	-	-
00.01 - 00.20	-	-	-	-	-	-	-	-	-
00.21 - 00.50	-	-	-	-	1000	1000	5	53	2
00.51 - 01.00	-	-	-	-	1000	1000	42	93	4
01.01 - 02.00	-	163	139	-	698	1000	163	305	12
02.01 - 04.00	-	-	-	-	1000	1000	77	241	9
04.01 - 10.00	502	-	-	-	498	1000	191	168	7
10.01 & above	-	-	-	-	1000	1000	94	23	1
all	167	47	40	-	746	1000	572	884	35
				fruits & n	nuts				
nil (< 0.01)	-	-	-	-	-	-	-	24	1
00.01 - 00.20	-	-	-	-	1000	1000	36	751	32
00.21 - 00.50	-	-	-	-	1000	1000	61	527	30
00.51 - 01.00	-	-	-	5	995	1000	322	1002	46
01.01 - 02.00	15	-	13	-	972	1000	370	863	38
02.01 - 04.00	20	93	69	-	819	1000	514	499	21
04.01 - 10.00	131	-	203	-	667	1000	253	154	8
10.01 & above	-	-	-	-	1000	1000	52	36	2
all	30	30	57	1	882	1000	1608	3856	178
			(	other cash o	crops				
nil (< 0.01)	-	-	-	-	1000	1000	19	24	1
00.01 - 00.20	-	-	-	-	1000	1000	16	121	5
00.21 - 00.50	54	-	-	-	946	1000	184	450	20
00.51 - 01.00	61	-	-	-	939	1000	518	1255	56
01.01 - 02.00	67	39	20	3	871	1000	1347	2025	88
02.01 - 04.00	164	30	86	19	701	1000	1866	1520	69
04.01 - 10.00	277	107	50	30	536	1000	2102	1028	45

Table (5.1): Cropwise per 1000 distribution of area under five major crops\* by mode of use of tractor, separately for different size-classes of household ownership holding

10.01 & above

99

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

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360

2. The set of 5 major crops is not a fixed set but varies from household to household; for any particular household it is understood as the 5 most important field crops cultivated, in terms of value of production, by the household in 1997-98, from among a list of crop-season combinations involving 12 crops and crop-groups spanning the entire range of crops cultivated in the country.

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1000

1046

541

10

228

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all	158	47	94	14	686	1000	7099	6652	294

#### Table (5.1): Cropwise per 1000 distribution of area under five major crops\* by mode of use of tractor, separately for different size-classes of household ownership holding

	ient size enus	505 01 110450		inp norung	,				Karnataka
size-class of		mode o	of use of trac	estd.	no. of hhs. reporting cultivation of a crop				
ownership	by hired	tractor	by other	tractor	not	all	area	in the crop-	group
holding (ha)	entirely	partly	entirely	partly	used		(00 ha)	estd.(00)	sample
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
				others	5				
nil (< 0.01)	-	-	-	-	-	-	-	-	-
00.01 - 00.20	-	-	-	-	1000	1000	16	142	6
00.21 - 00.50	-	-	-	-	1000	1000	10	71	5
00.51 - 01.00	-	-	-	-	1000	1000	91	377	17
01.01 - 02.00	-	-	-	-	1000	1000	283	661	24
02.01 - 04.00	134	-	44	-	822	1000	274	404	16
04.01 - 10.00	257	-	-	-	743	1000	178	163	6
10.01 & above	408	-	-	-	592	1000	67	50	2
all	120	-	13	-	867	1000	919	1869	76

\*Note

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

	rent size-eids			F8					Kerala
size-class of		mode	estd.	no. of hhs. reporting cultivation of a crop					
ownership	mode of use of tractor for ti by hired tractor by other tractor				not	all	area	in the crop-group	
holding (ha)	entirely	partly	entirely	partly	used		(00 ha)	estd.(00)	sample
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
				Paddy(kha	urif)				
nil (< 0.01)	-	-	-	-	-	-	-	-	-
00.01 - 00.20	264	136	171	49	380	1000	68	655	41
00.21 - 00.50	338	94	136	-	432	1000	238	1132	75
00.51 - 01.00	518	56	154	-	273	1000	368	1014	62
01.01 - 02.00	558	123	62	-	257	1000	202	491	31
02.01 - 04.00	659	-	-	-	341	1000	192	187	11
04.01 - 10.00	91	-	-	-	909	1000	129	86	5
10.01 & above	-	-	-	-	1000	1000	170	17	1
all	395	56	83	2	464	1000	1367	3582	226
				Paddy(ra	bi)				
nil (< 0.01)	-	-	-	-	-	-	-	-	
00.01 - 00.20	611	-	38	41	310	1000	23	249	16
00.21 - 00.50	549	-	54	7	389	1000	122	650	44
00.51 - 01.00	416	-	-	-	584	1000	159	499	30
01.01 - 02.00	309	85	97	-	509	1000	102	327	20
02.01 - 04.00	768	-	232	-		1000	87	103	(
04.01 - 10.00	398	-	602	-	-	1000	24	32	2
10.01 & above	-	-	-	-	-	-	-	-	
all	493	17	100	4	386	1000	517	1860	118
				other cere	eals				
nil (< 0.01)	-	-	-	_	-	-	_	-	
00.01 - 00.20	279	-	-	-	721	1000	33	583	33
00.21 - 00.50	770	-	-	-	230	1000	115	306	21
00.51 - 01.00	-	-	141	60	799	1000	36	240	13
01.01 - 02.00	_	_	-	-	1000	1000	9	78	2
02.01 - 04.00	-	_	_	-	1000	1000	23	17	-
04.01 - 10.00	-	-	-	-	- 1000	-	-	-	
10.01 & above	-	_	-	-	-	_	_	-	
10.01 & 0000	-	-	-	-	-	2	2	-	

Table (5.1): Cropwise per 1000 distribution of area under five major crops* by mode of use of tractor, separately for	
different size-classes of household ownership holding	

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

\*Note

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

	Tent Size-class			simp norung					Kerala
size-class of		mode	of use of trac	estd.	no. of hhs. reporting cultivation of a crop				
ownership	by hired			by other tractor		all	area	in the crop-	-
holding (ha)	entirely	partly	entirely	partly	not used		(00 ha)	estd.(00)	sample
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
				oil seed	s				
nil (< 0.01)	-	-	-	-	-	-	-	-	-
00.01 - 00.20	-	9	-	-	991	1000	72	2040	124
00.21 - 00.50	76	-	-	-	924	1000	105	839	53
00.51 - 01.00	103	-	-	-	897	1000	86	368	25
01.01 - 02.00	-	-	-	-	1000	1000	75	177	12
02.01 - 04.00	-	-	-	-	1000	1000	51	52	3
04.01 - 10.00	-	-	-	-	1000	1000	96	69	4
10.01 & above	-	-	-	-	1000	1000	3	17	1
all	35	1	-	-	964	1000	488	3562	222
nil (< 0.01)	_	-	-	mixed cr	• _	-	-	_	-
00.01 - 00.20	-	-	-	-	1000	1000	82	1256	- 87
00.21 - 00.50	_	_		28	972	1000	100	481	31
00.51 - 01.00	-	-	-	-	1000	1000	74	307	19
01.01 - 02.00	_	_	_	_	1000	1000	170	261	15
02.01 - 04.00	136	-	-	-	864	1000	53	89	5
04.01 - 10.00		-	-	-	1000	1000	1	19	1
10.01 & above	-	-	-	-	-	-	-	-	-
all	15	-	-	6	979	1000	480	2414	158
				vegetabl	es				
1 ( 0.01)									
nil (< 0.01)	-	-	-	-	-	-	-	-	-
00.01 - 00.20	-	-	-	-	1000	1000	81	3852	236
00.21 - 00.50	-	28	-	-	972	1000	57	1322	88
00.51 - 01.00	-	13	-	-	987	1000	59	809	48
01.01 - 02.00	-	95	-	-	905	1000	33	330	19
02.01 - 04.00	-	-	-	-	1000	1000	9	81	5
04.01 - 10.00	-	-	-	-	1000	1000	20	69	4
10.01 & above	-	-	-	-	1000	1000	3	17	1

# Table (5.1): Cropwise per 1000 distribution of area under five major crops\* by mode of use of tractor, separately for different size-classes of household ownership holding

\*Note

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

all - 21	979 1000 263 6481 401
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1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

								Kerala	
		<b>6 6</b>							
					cultivation of a crop				
-		-			all		-		
		-	1 7					sample	
(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	
			fruits & n	uts					
-	-	-	-	-	-	-	35	2	
-	-	-	-	1000	1000	461	12645	787	
5	1	16	-	979	1000	436	3166	206	
13	-	-	5	982	1000	326	1671	98	
-	-	17	49	934	1000	274	901	55	
-	-	-	-	1000	1000	67	225	13	
-	-	-	-	1000	1000	18	67	4	
-	-	-	-	1000	1000	3	17	1	
4	0	7	10	979	1000	1585	18728	1166	
			other cash c	rops					
_	_	_	_	1000	1000	1	40	2	
-	7	2	3			440		508	
8	-	4	-	988	1000	669	3233	208	
-	-	-	-	1000	1000	862	1940	111	
13	-	-	11	976	1000	1103	1168	67	
	-	-						17	
-	-	-	170	830	1000	501	99	6	
-	-	-	-	1000	1000	179	32	2	
6	1	1	25	967	1000	4241	15077	921	
			others						
-	-	-	-	-	-	-	2202	- 192	
-	-	-	-					192 61	
11	-	_	-					45	
-	-	-						28	
-	-	-						8	
-	-	-	-	1000	1000	0	1/	1	
	entirely (2) (2) - - 5 13 - - - - 4 - 4 - - - 8 - - 8 - - - 8 - - - -	by hired tractor entirely partly (2) (3) (2) (3) (3) (3) (3) (3) (3) (3) (3) (3) (3)	by hired tractor         by other           entirely         partly         entirely           (2)         (3)         (4)           (2)         (3)         (4)           (2)         (3)         (4)           (2)         (3)         (4)           (2)         (3)         (4)           (2)         (3)         (4)           (2)         (3)         (4)           (2)         (3)         (4)           (2)         (3)         (4)           (3)         -         -           5         1         16           13         -         -           -         -         -           13         -         -           14         -         -           6         1         1           -         -         -           -         -         -	by hired tractor         by other tractor           entirely         partly         entirely         partly           (2)         (3)         (4)         (5)           fruits & n         fruits & n           -         -         -           -         -         -         -           -         -         -         -           5         1         16         -           13         -         -         -           -         -         -         -           -         -         -         -           -         -         -         -         -           5         1         16         -         -           -         -         -         -         -           -         -         -         -         -           -         -         -         -         -           -         -         -         -         -           -         -         -         -         -           -         -         -         -         -           -         -         -         -         -<	entirely         partly         entirely         partly         used           (2)         (3)         (4)         (5)         (6)           (2)         (3)         (4)         (5)         (6)           (2)         (3)         (4)         (5)         (6)           (2)         (3)         (4)         (5)         (6)           (2)         (3)         (4)         (5)         (6)           (2)         (3)         (4)         (5)         (6)           (2)         (3)         (4)         (5)         (6)           (1000)         -         -         1000         (5)         982           -         -         177         49         934           -         -         1000         1000         1000           -         -         1000         979         979           4         0         7         10         979           4         0         7         10         979           -         -         1000         13         -         1000           -         -         1000         13         -         -         1000	by hired tractor         by other tractor         not         all           entirely         partly         entirely         partly         used           (2)         (3)         (4)         (5)         (6)         (7)           (2)         (3)         (4)         (5)         (6)         (7)           (2)         (3)         (4)         (5)         (6)         (7)           (2)         (3)         (4)         (5)         (6)         (7)           (2)         (3)         (4)         (5)         (6)         (7)           (2)         (3)         (4)         (5)         (6)         (7)           (2)         (3)         (4)         (5)         (6)         (7)           (3)         (4)         (5)         982         1000           (5)         11         16         979         1000           (5)         17         49         934         1000           (5)         (6)         17         49         934         1000           (5)         (7)         100         1000         1000         1000           (4)         (7)         10         979	by hired tractor         by other tractor         not         all         area (00 ha)           entirely         partly         entirely         partly         used         (00 ha)           (2)         (3)         (4)         (5)         (6)         (7)         (8)           (2)         (3)         (4)         (5)         (6)         (7)         (8)           (2)         (3)         (4)         (5)         (6)         (7)         (8)           (2)         (3)         (4)         (5)         (6)         (7)         (8)           (2)         (3)         (4)         (5)         (6)         (7)         (8)           (2)         (3)         (4)         (5)         (6)         (7)         (8)           (3)         (-         -         1000         1000         436           (3)         (-         5         982         1000         274           (-         -         1000         1000         18           (-         -         1000         1000         18           (-         -         1000         1000         100           (5)         2         3	by hired tractor         by other tractor         not         all         area         in the cropential (00)           (2)         (3)         (4)         (5)         (6)         (7)         (8)         (9)           fruits & nuts         fruits & nuts         fruits & nuts         (100)         (2)         (3)         (4)         (5)         (6)         (7)         (8)         (9)           fruits & nuts         fruits & nuts         fruits & nuts         (100)         (100)         (461)         (12645)           5         1         16         -         979         1000         436         3166           13         -         -         5         982         1000         274         901           -         -         17         49         934         1000         274         901           -         -         1000         1000         18         67           -         -         1000         1000         18         67           -         -         1000         1000         1         40           -         -         -         1000         1000         18         67           -	

# Table (5.1): Cropwise per 1000 distribution of area under five major crops\* by mode of use of tractor, separately for different size-classes of household ownership holding

\*Note

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

all 3	26	970	1000	393	5718	335
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\*Note

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

	rent size-eias			sinp norung				Madhy	a Pradesh
			<b>C C</b> ·				. 1	no. of hhs. re	
size-class of				ctor for tilling	g		estd.	cultivation of	-
ownership	by hired		by other		not	all	area	in the crop-	
holding (ha)	entirely	partly	entirely	partly	used		(00 ha)	estd.(00)	sample
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
				Paddy(kha	urif)				
nil (< 0.01)	-	26	352	-	622	1000	217	229	11
00.01 - 00.20	16	44	-	-	940	1000	248	1547	88
00.21 - 00.50	96	13	-	-	891	1000	2038	5951	330
00.51 - 01.00	47	35	1	-	917	1000	5344	8553	430
01.01 - 02.00	83	34	6	2	875	1000	12419	11748	585
02.01 - 04.00	61	39	12	1	886	1000	16634	9924	486
04.01 - 10.00	68	92	61	14	764	1000	11073	3393	175
10.01 & above	-	-	621	106	273	1000	2283	323	17
all	65	46	49	9	831	1000	50255	41668	2122
				Paddy(ra	bi)				
nil (< 0.01)	-	-	-	-	-	-	-	-	-
00.01 - 00.20	-	-	-	-	1000	1000	8	79	4
00.21 - 00.50	375	80	-	-	545	1000	83	297	15
00.51 - 01.00	160	164	-	-	676	1000	123	216	11
01.01 - 02.00	214	338	-	-	447	1000	310	375	20
02.01 - 04.00	317	218	-	-	465	1000	416	235	12
04.01 - 10.00	-	-	541	-	459	1000	303	93	4
10.01 & above	-	-	-	1000	-	1000	57	20	1
all	192	171	126	44	468	1000	1299	1315	67
				wheat					
nil (< 0.01)	65	_	657	_	278	1000	116	63	3
00.01 - 00.20	414	85	21	-	480	1000	98	631	35
00.21 - 00.50	313	33	-	-	480 654	1000	1263	3867	213
00.51 - 01.00	282	54	15	1	648	1000	4134	6639	349
01.01 - 02.00	238	83 102	18	2	659	1000	11262	11396	602
02.01 - 04.00 04.01 - 10.00	180	103	94 172	8	615	1000	16358	10632	544 200
	217	104	173	26 27	480	1000	17223	5630 824	300
10.01 & above	94	56	771	27	53	1000	5109	824	51

Table (5.1): Cropwise per 1000 distribution of area under five major crops* by mode of use of tractor, separately	for
different size-classes of household ownership holding	

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

\*Note

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

								Madhy	a Pradesh
								no. of hhs. re	
size-class of				ctor for tilling			estd.	cultivation of	
ownership	by hired		by other		not	all	area	in the crop-	
holding (ha)	entirely	partly	entirely	partly	used		(00 ha)	estd.(00)	sample
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
				other cere	eals				
nil (< 0.01)	-	-	-	-	1000	1000	63	135	7
00.01 - 00.20	428	-	-	-	572	1000	22	161	12
00.21 - 00.50	213	58	-	7	722	1000	322	1105	73
00.51 - 01.00	153	53	20	-	774	1000	1227	2676	150
01.01 - 02.00	86	42	3	-	869	1000	3737	5615	302
02.01 - 04.00	77	51	48	8	816	1000	7086	5992	307
04.01 - 10.00	86	103	70	47	694	1000	7133	3275	166
10.01 & above	117	13	580	55	236	1000	2254	492	29
all	92	63	100	24	722	1000	21844	19451	1046
				pulses					
				puises					
nil (< 0.01)	-	-	531	-	469	1000	126	106	6
00.01 - 00.20	337	-	-	-	663	1000	46	357	22
00.21 - 00.50	150	-	31	-	819	1000	277	1356	87
00.51 - 01.00	119	40	7	2	833	1000	1500	4495	234
01.01 - 02.00	150	78	9	1	762	1000	4213	8914	456
02.01 - 04.00	119	67	55	9	750	1000	6760	9460	470
04.01 - 10.00	174	106	118	20	582	1000	7801	4595	244
10.01 & above	111	80	660	22	127	1000	2310	515	32
all	143	80	128	12	637	1000	23033	29797	1551
				oil seed	e.				
				on seeu	5				
nil (< 0.01)	59	-	522	-	418	1000	128	71	4
00.01 - 00.20	584	5	40	-	370	1000	52	339	19
00.21 - 00.50	417	24	-	14	544	1000	583	1912	106
00.51 - 01.00	349	79	23	-	550	1000	2382	4795	233
01.01 - 02.00	273	54	20	-	652	1000	7058	8312	420
02.01 - 04.00	211	76	100	8	605	1000	12088	9398	475
04.01 - 10.00	282	113	190	2	412	1000	12945	4403	238
10.01 & above	114	32	764	73	17	1000	6088	682	41

Table (5.1): Cropwise per 1000 distribution of area under five major crops\* by mode of use of tractor, separately for different size-classes of household ownership holding

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

all	241	76	208	14	461	1000	41323	29911	1536
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\*Note

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

unite	Tent Size-clas	Ses of house		sinp norung				Madhy	a Pradesh
size-class of	mode of use of tractor for tilling					estd.	no. of hhs. reporting cultivation of a crop		
ownership	by hired	tractor	by other	tractor	not	all	area	in the crop-	group
holding (ha)	entirely	partly	entirely	partly	used		(00 ha)	estd.(00)	sample
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
				mixed cr	ор				
nil (< 0.01)	-	-	-	-	1000	1000	74	23	1
00.01 - 00.20	133	-	-	-	867	1000	24	129	8
00.21 - 00.50	223	44	-	-	733	1000	109	407	22
00.51 - 01.00	315	84	9	-	592	1000	626	1217	66
01.01 - 02.00	233	37	2	22	707	1000	1448	2203	119
02.01 - 04.00	85	74	25	-	815	1000	2955	2693	137
04.01 - 10.00	124	163	19	10	684	1000	2988	1183	65
10.01 & above	84	-	916	-	-	1000	305	66	5
all	142	96	49	7	706	1000	8529	7920	423
				sugar ca	ne				
nil (< 0.01)	-	-	-	-	1000	1000	7	23	1
00.01 - 00.20	-	-	-	-	-	-	-	-	-
00.21 - 00.50	-	-	-	-	1000	1000	2	7	1
00.51 - 01.00	-	1000	-	-	-	1000	5	14	1
01.01 - 02.00	159	252	-	-	588	1000	72	209	10
02.01 - 04.00	97	88	115	-	699	1000	163	257	13
04.01 - 10.00	64	377	120	-	438	1000	213	253	14
10.01 & above	-	-	1000	-	-	1000	66	33	2
all	78	223	209	-	491	1000	527	797	42
				vegetabl	es				
nil (< 0.01)	-	-	-	-	1000	1000	8	92	5
00.01 - 00.20	-	-	-	-	1000	1000	15	124	7
00.21 - 00.50	-	-	-	-	1000	1000	78	425	33
00.51 - 01.00	38	71	-	-	891	1000	118	876	39
01.01 - 02.00	56	-	25	15	904	1000	576	2093	88
02.01 - 04.00	36	-	5	-	958	1000	805	2188	93
04.01 - 10.00	158	-	57	99	686	1000	587	860	41
10.01 & above	-	-	777	-	223	1000	139	72	4

Table (5.1): Cropwise per 1000 distribution of area under five major crops* by mode of use of tractor, separately for
different size-classes of household ownership holding

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

all 68 4 69 29 830 1000 2327 6731 310
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\*Note

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

diffe	rent size-clas	ses of nouse	enoid owner	snip notding				Madhy	a Pradesh	
								no. of hhs. re	porting	
size-class of	mode of use of tractor for tilling						estd.	cultivation of a crop in the crop-group		
ownership	by hired	tractor	by other	tractor	not	all	area	in the crop-	group	
holding (ha)	entirely	partly	entirely	partly	used		(00 ha)	estd.(00)	sample	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	
				fodder						
nil (< 0.01)	-	-	-	-	1000	1000	9	9	1	
00.01 - 00.20	-	214	-	-	786	1000	3	90	4	
00.21 - 00.50	129	-	-	-	871	1000	14	92	4	
00.51 - 01.00	431	85	-	-	484	1000	31	147	9	
01.01 - 02.00	321	9	20	_	650	1000	125	602	30	
02.01 - 04.00	137	10	59	-	793	1000	453	979	49	
04.01 - 10.00	105	161	239	-	494	1000	422	576	33	
10.01 & above	234	60	625	81	-	1000	190	159	10	
all	165	71	200	12	552	1000	1247	2654	140	
				other cash c	crops					
nil (< 0.01)	-	-	-	-	-	-	-	-	-	
00.01 - 00.20	244	-	-	-	756	1000	8	35	3	
00.21 - 00.50	216	36	-	-	748	1000	85	348	22	
00.51 - 01.00	51	68	31	-	849	1000	263	649	37	
01.01 - 02.00	120	20	-	-	860	1000	1004	1525	78	
02.01 - 04.00	157	39	19	-	786	1000	1564	1563	75	
04.01 - 10.00	125	60	76	60	679	1000	2107	974	45	
10.01 & above	244	78	307	69	302	1000	964	224	12	
all	150	51	83	32	685	1000	5995	5316	272	
				others						
nil (< 0.01)	-	-	-	-	-	-	-	-	-	
00.01 - 00.20	1000	-	-	-	-	1000	3	31	1	
00.21 - 00.50	302	-	-	-	698	1000	22	84	4	
00.51 - 01.00	28	-	-	-	972	1000	208	357	17	
01.01 - 02.00	195	24	-	-	781	1000	319	485	22	
02.01 - 04.00	30	10	11	-	949	1000	912	605	30	
04.01 - 10.00	327	74	-	-	599	1000	312	169	8	
10.01 & above	-	-	-	-	1000	1000	66	29	2	
all	112	22	5	-	860	1000	1842	1760	84	

#### Table (5.1): Cropwise per 1000 distribution of area under five major crops\* by mode of use of tractor, separately for different size-classes of household ownership holding

\*Note

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

									aharashtra
			с с.				. 1	no. of hhs. re	
size-class of				ctor for tillin	-		estd.	cultivation of	
ownership	by hired		by other		not	all	area	in the crop-	
holding (ha)	entirely	partly	entirely	partly	used		(00 ha)	estd.(00)	sample
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
				Paddy(kha	arif)				
nil (< 0.01)	-	-	-	-	1000	1000	30	40	2
00.01 - 00.20	18	-	-	-	982	1000	274	2327	108
00.21 - 00.50	15	-	-	-	985	1000	1347	4445	207
00.51 - 01.00	4	4	4	-	988	1000	2142	3939	179
01.01 - 02.00	49	9	15	-	927	1000	3075	3599	165
02.01 - 04.00	21	4	26	-	949	1000	2917	2273	108
04.01 - 10.00	19	60	57	-	864	1000	1867	1157	55
10.01 & above	-	144	-	-	856	1000	235	212	9
all	24	16	20	-	940	1000	11884	17992	833
				Paddy( <i>ra</i>	bi)				
nil (< 0.01)	-	-	-	-	-	-	-	-	-
00.01 - 00.20	-	-	-	-	1000	1000	3	23	1
00.21 - 00.50	-	-	-	-	1000	1000	41	156	12
00.51 - 01.00	-	-	-	-	1000	1000	81	131	5
01.01 - 02.00	-	-	-	-	1000	1000	122	125	5
02.01 - 04.00	-	-	-	-	1000	1000	44	88	3
04.01 - 10.00	-	-	-	-	-	-	-	-	-
10.01 & above	-	-	-	-	-	-	-	-	-
all	-	-	-	-	1000	1000	292	522	26
				wheat					
nil (< 0.01)									
00.01 - 00.20	-	-	-	-	- 1000	- 1000	- 28	- 80	5
00.01 - 00.20	320	61	-	-	619	1000	113	549	30
00.51 - 01.00	104	23	-	18	855	1000	656	1658	80
01.01 - 02.00									
01.01 - 02.00 02.01 - 04.00	194 45	22	10 36	3	772 806	1000	1587 2107	3024 3064	146
02.01 - 04.00 04.01 - 10.00	45 155	19 33	36 33	4	896 778	1000 1000	2197 2555	3064 2147	147 101
10.01 & above	312	20	262	-	405	1000	838	426	101
10.01 & 00000	512	20	202	-	-105	1000	050	720	15

Table (5.1): Cropwise per 1000 distribution of area under five major crops* by mode of use of tractor, separately for
different size-classes of household ownership holding

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

\*Note

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

								Ma	aharashtra
								no. of hhs. re	
size-class of				ctor for tillin			estd.	cultivation of	-
ownership	by hired		by other		not	all	area	in the crop-	
holding (ha)	entirely	partly	entirely	partly	used		(00 ha)	estd.(00)	sample
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
				other cere	eals				
nil (< 0.01)	-	-	-	-	1000	1000	116	137	5
00.01 - 00.20	179	-	-	-	821	1000	131	839	43
00.21 - 00.50	125	21	-	-	854	1000	1018	3452	162
00.51 - 01.00	50	16	-	0	934	1000	3696	6407	302
01.01 - 02.00	101	9	12	1	876	1000	9374	10299	487
02.01 - 04.00	80	11	25	5	880	1000	12415	8322	388
04.01 - 10.00	110	49	27	-	814	1000	12155	5156	235
10.01 & above	37	11	116	131	705	1000	3861	762	35
all	88	22	28	13	849	1000	42767	35375	1657
				_					
				pulses					
nil (< 0.01)	-	-	-	-	1000	1000	9	22	2
00.01 - 00.20	276	-	-	-	724	1000	17	90	5
00.21 - 00.50	83	-	-	-	917	1000	157	744	36
00.51 - 01.00	60	-	29	-	911	1000	639	2152	99
01.01 - 02.00	82	12	4	-	901	1000	2152	4794	223
02.01 - 04.00	53	9	26	-	912	1000	3236	4401	206
04.01 - 10.00	55	19	12	-	913	1000	3732	3005	140
10.01 & above	82	-	213	-	705	1000	1061	451	21
all	63	12	35	-	890	1000	11002	15659	732
				., ,					
				oil seed	S				
nil (< 0.01)	-	-	-	-	-	-	-	-	-
00.01 - 00.20	417	-	-	-	583	1000	20	204	9
00.21 - 00.50	200	-	-	22	778	1000	97	414	19
00.51 - 01.00	154	-	-	23	824	1000	526	1399	61
01.01 - 02.00	133	4	-	29	834	1000	1271	2101	98
02.01 - 04.00	97	5	3	-	896	1000	1856	2026	92
04.01 - 10.00	157	20	65	-	758	1000	2550	1712	77
10.01 & above	88		350			1000	657	195	9

Table (5.1): Cropwise per 1000 distribution of area under five major crops* by mode of use of tractor, separate	ly for
different size-classes of household ownership holding	

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

\*Note

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

								Ma	aharashtra
								no. of hhs. re	
size-class of				ctor for tillin			estd.	cultivation of	
ownership	by hired		by other		not	all	area	in the crop-	
holding (ha)	entirely	partly	entirely	partly	used		(00 ha)	estd.(00)	sample
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
				mixed cr	op				
nil (< 0.01)	-	-	-	-	-	-	-	-	-
00.01 - 00.20	-	-	-	-	1000	1000	1	23	2
00.21 - 00.50	-	-	-	-	1000	1000	57	161	7
00.51 - 01.00	-	-	-	-	1000	1000	332	448	21
01.01 - 02.00	41	-	-	-	959	1000	696	722	35
02.01 - 04.00	-	38	-	-	962	1000	1019	743	38
04.01 - 10.00	68	17	-	-	915	1000	2417	723	34
10.01 & above	914	-	-	-	86	1000	63	16	2
all	55	17	-	-	928	1000	4585	2835	139
				sugar ca	ne				
nil (< 0.01) 00.01 - 00.20	-	- 9	-	-	- 465	- 1000	- 47	-	-
00.01 - 00.20	526 522	133	-	-	463 346	1000	134	425 588	24 25
00.51 - 01.00	474	72	-	-	454	1000	321	811	23 35
01.01 - 02.00	421	177	53	20	329	1000	757	1267	58 42
02.01 - 04.00 04.01 - 10.00	442	-	211	-	347	1000	768	868	42
10.01 & above	294 356	93	175 291	-	437 353	1000 1000	881 466	507 143	22 8
all	394	76	146	4	379	1000	3375	4609	214
an	574	70	140		517	1000	5515	4007	217
				vegetabl	es				
nil (< 0.01)	-	-	-	-	-	-	-	-	-
00.01 - 00.20	-	-	-	-	1000	1000	22	343	14
00.21 - 00.50	481	-	-	-	519	1000	22	173	9
00.51 - 01.00	251	-	-	-	749	1000	134	517	26
01.01 - 02.00	283	9	12	-	696	1000	471	1254	65
02.01 - 04.00	269	59	53	30	589	1000	529	1118	54
04.01 - 10.00	19	20	-	-	962	1000	432	562	27
10.01 & above			151				302		

Table (5.1): Cropwise per 1000 distribution of area under five major crops* by mode of use of tractor, separately for
different size-classes of household ownership holding

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

all	171	23	42	8	756	1000	1911	4156	203
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\*Note

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

unite	rent size-clas	ses of nous		ship holding				Ma	harashtra		
size-class of		mode	of use of trac	ctor for tilling	g		no. of hhs. reporting estd. cultivation of a crop				
ownership	by hired		by other		not	all	area	in the crop-			
holding (ha)	entirely	partly	entirely	partly	used		(00 ha)	estd.(00)	sample		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)		
				fodder							
nil (< 0.01)	-	-	-	-	-	-	-	-	-		
00.01 - 00.20	-	-	-	-	1000	1000	2	23	1		
00.21 - 00.50	23	-	-	-	977	1000	45	138	6		
00.51 - 01.00	12	-	-	-	988	1000	117	375	18		
01.01 - 02.00	216	-	-	-	784	1000	189	470	22		
02.01 - 04.00	3	-	11	-	986	1000	296	597	28		
04.01 - 10.00	21	-	5	-	974	1000	126	389	18		
10.01 & above	494	-	169	-	337	1000	134	72	3		
all	125	-	29	-	846	1000	909	2063	96		
				fruits & n	nuts						
nil (< 0.01)	-	-	-	-	-	-	-	-	-		
00.01 - 00.20	-	-	-	-	1000	1000	24	166	9		
00.21 - 00.50	20	-	-	-	980	1000	97	444	19		
00.51 - 01.00	90	-	-	-	910	1000	131	427	19		
01.01 - 02.00	231	-	81	-	688	1000	216	529	23		
02.01 - 04.00	158	-	22	-	821	1000	214	410	18		
04.01 - 10.00	133	164	278	-	424	1000	496	377	17		
10.01 & above	331	-	159	-	510	1000	602	201	8		
all	204	46	144	-	607	1000	1781	2555	113		
				other cash o	crops						
nil (< 0.01)	-	-	-	-	1000	1000	19	60	2		
00.01 - 00.20	-	-	-	-	1000	1000	254	170	8		
00.21 - 00.50	36	-	-	-	964	1000	153	541	28		
00.51 - 01.00	146	32	-	0	822	1000	1206	2253	106		
01.01 - 02.00	105	16	22	_	858	1000	4051	4668	217		
02.01 - 04.00	75	13	12	8	892	1000	4801	3781	164		
04.01 - 10.00	112	64	7	-	817	1000	6394	2699	118		
10.01 & above	55	-	32	-	913	1000	2855	437	19		

Table (5.1): Cropwise per 1000 distribution of area under five major crops\* by mode of use of tractor, separately for different size-classes of household ownership holding

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

Report no. 45.	1								
Appendix I									
Cultivation Pro	actices in India								
all	93	29	14	2	861	1000	19732	14609	662

# Table (5.1): Cropwise per 1000 distribution of area under five major crops\* by mode of use of tractor, separately for different size-classes of household ownership holding

	ione size eius	Sec of nous		inp notaing	,			Ma	harashtra			
size-class of		mode	of use of trac	tor for tillir	g		estd.		no. of hhs. reporting cultivation of a crop			
ownership	by hired	tractor	by other	tractor	not	all	area	in the crop-	group			
holding (ha)	entirely	partly	entirely	partly	used		(00 ha)	estd.(00)	sample			
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)			
				others	5							
nil (< 0.01)	-	-	-	-	-	-	-	-	-			
00.01 - 00.20	-	-	-	-	1000	1000	4	19	1			
00.21 - 00.50	533	-	-	-	467	1000	8	56	3			
00.51 - 01.00	281	-	-	-	719	1000	46	81	3			
01.01 - 02.00	-	-	-	-	1000	1000	116	226	9			
02.01 - 04.00	31	-	32	-	937	1000	234	336	15			
04.01 - 10.00	-	-	-	-	1000	1000	204	151	7			
10.01 & above	-	-	298	-	702	1000	80	52	2			
all	35	-	45	-	919	1000	693	921	40			

\*Note

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

								no. of hhs. re	
size-class of				tor for tilling	g		estd.	cultivation of	-
ownership	by hired	tractor	by other t	ractor	not	all	area	in the crop-	group
holding (ha)	entirely	partly	entirely	partly	used		(00 ha)	estd.(00)	sample
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
				Paddy(kha	urif)				
nil (< 0.01)	-	176	-	-	824	1000	75	115	46
00.01 - 00.20	211	186	-	-	602	1000	4	21	7
00.21 - 00.50	232	368	19	-	382	1000	97	321	116
00.51 - 01.00	210	208	-	7	575	1000	410	683	191
01.01 - 02.00	414	218	20	-	340	1000	304	289	100
02.01 - 04.00	683	230	-	-	87	1000	123	61	26
04.01 - 10.00	501	-	-	-	499	1000	24	10	6
10.01 & above	-	-	-	-	-	-	-	-	-
all	320	221	8	3	446	1000	1035	1500	492
				Paddy(r <i>a</i>	bi)				
nil (< 0.01)	754	-	-	-	246	1000	91	63	20
00.01 - 00.20	-	-	-	-	1000	1000	1	12	4
00.21 - 00.50	308	22	148	-	522	1000	32	112	45
00.51 - 01.00	85	100	33	1	781	1000	80	143	62
01.01 - 02.00	93	124	-	-	783	1000	55	53	36
02.01 - 04.00	130	-	-	-	870	1000	23	15	8
04.01 - 10.00	-	-	-	-	-	-	-	-	-
10.01 & above	-	-	-	-	-	-	-	-	-
all	330	55	26	0	588	1000	283	398	175
				other cere	eals				
nil (< 0.01)	-	-	_	-	1000	1000	5	44	17
00.01 - 00.20	875	-	-	-	125	1000	0	8	2
00.21 - 00.50	769	-	-	-	231	1000	1	20	e
00.51 - 01.00	891	-	-	-	109	1000	1	13	6
01.01 - 02.00	122	89	-	-	789	1000	6	23	8
02.01 - 04.00		-	-	-	1000	1000	0	3	1
04.01 - 10.00	-	-	-	-	-	_	-	-	-
10.01 & above	-	-	-	-	-	-	-	-	
all	223	39	_	_	738	1000	13	111	40

Table (5.1): Cropwise per 1000 distribution of area under five major crops* by mode of use of tractor, separately for
different size-classes of household ownership holding

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

									Manipur
. 1 6			с с <i>.</i>				. 1	no. of hhs. re	
size-class of ownership	hry him d			ctor for tilling	not	all	estd.	cultivation of in the crop-	-
holding (ha)	by hired entirely	partly	by other entirely		used		area (00 ha)	estd.(00)	sample
(1)	(2)		(4)	partly (5)			(00 11a)	(9)	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
				pulses					
nil (< 0.01)	-	-	-	-	1000	1000	5	74	28
00.01 - 00.20	490	-	-	-	510	1000	0	14	4
00.21 - 00.50	-	-	-	-	1000	1000	2	30	9
00.51 - 01.00	-	-	-	-	1000	1000	5	46	18
01.01 - 02.00	-	-	-	-	1000	1000	5	32	20
02.01 - 04.00	-	-	-	-	1000	1000	4	11	4
04.01 - 10.00	-	-	-	-	-	-	-	-	-
10.01 & above	-	-	-	-	-	-	-	-	-
all	3	-	-	-	997	1000	21	207	83
				oil seed	s				
nil (< 0.01)	-	-	-	-	1000	1000	5	41	16
00.01 - 00.20	-	-	-	-	-	-	-	-	-
00.21 - 00.50	463	-	-	-	537	1000	0	8	2
00.51 - 01.00	205	-	-	-	795	1000	1	5	2
01.01 - 02.00	-	-	-	-	-	-	-	-	-
02.01 - 04.00	-	-	-	-	-	-	-	-	-
04.01 - 10.00	-	-	-	-	-	-	-	-	-
10.01 & above	-	-	-	-	-	-	-	-	-
all	40	-	-	-	960	1000	6	55	20
				mixed cr	ор				
nil (< 0.01)	-	-	-	-	1000	1000	17	46	25
00.01 - 00.20	35	-	-	-	965	1000	1	59	17
00.21 - 00.50	418	-	9	126	446	1000	6	65	25
00.51 - 01.00	356	21	-	394	229	1000	9	181	 54
01.01 - 02.00	282	44	-	231	444	1000	7	108	40
02.01 - 04.00	916	-	-	-	84	1000	3	37	16
04.01 - 10.00	967	-	-	-	33	1000	2	6	4
10.01 & above	-	-	-	-	-	-	-	-	-
all	277	11	1	132	578	1000	45	502	181

Table (5.1): Cropwise per 1000 distribution of area under five major crops\* by mode of use of tractor, separately for different size-classes of household ownership holding

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

								no. of hhs. re	Manipur
size-class of		mode of	of use of trac	ctor for tilling	œ		estd.	cultivation of	
ownership	by hired		by other		not	all	area	in the crop-	-
holding (ha)	entirely	partly	entirely	partly	used		(00 ha)	estd.(00)	sample
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
				vegetabl	es				
nil (< 0.01)	-	_	-	-	1000	1000	20	147	61
00.01 - 00.20	12	-	-	-	988	1000	6	153	45
00.21 - 00.50	24	32	20	26	897	1000	15	256	85
00.51 - 01.00	6	45	-	22	926	1000	36	437	129
01.01 - 02.00	445	62	-	20	439	1000	24	197	80
02.01 - 04.00	270	11	-	256	463	1000	9	71	29
04.01 - 10.00	954	-	-	-	46	1000	2	6	2
10.01 & above	-	-	-	-	-	-	-	-	
all	139	33	3	35	783	1000	113	1267	433
				fruits & n					
nil (< 0.01)	-	-	-	-	1000	1000	1	7	10
00.01 - 00.20	90	-	76	-	834	1000	1	42	14
00.21 - 00.50	-	-	-	-	1000	1000	1	19	8
00.51 - 01.00	-	-	-	-	1000	1000	1	36	10
01.01 - 02.00	-	-	-	-	1000	1000	1	43	1′
02.01 - 04.00	-	-	-	-	1000	1000	0	13	5
04.01 - 10.00	-	-	-	-	-	-	-	-	
10.01 & above	-	-	-	-	-	-	-	-	
all	15	-	12	-	973	1000	5	161	73
				other cash c	crops				
nil (< 0.01)	-	-	-	-	1000	1000	3	9	2
00.01 - 00.20	-	-	-	-	-	-	-	-	
00.21 - 00.50	981	-	-	-	19	1000	1	7	-
00.51 - 01.00	-	-	-	-	1000	1000	1	3	-
01.01 - 02.00	-	-	-	-	1000	1000	0	3	1
02.01 - 04.00	-	-	-	-	1000	1000	0	0	
04.01 - 10.00	-	-	-	-	-	-	-	-	

# Table (5.1): Cropwise per 1000 distribution of area under five major crops\* by mode of use of tractor, separately for different size-classes of household ownership holding

\*Note

10.01 & above

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1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

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2. The set of 5 major crops is not a fixed set but varies from household to household; for any particular household it is understood as the 5 most important field crops cultivated, in terms of value of production, by the household in 1997-98, from among a list of crop-season combinations involving 12 crops and crop-groups spanning the entire range of crops cultivated in the country.

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	all	217	-	-	-	783	1000	5	24	20
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\*Note

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

				1 0					Manipur
size-class of ownership	by hired		of use of trac by other	ctor for tillin	gnot	all	estd.	no. of hhs. re cultivation of	a crop
holding (ha)	entirely	partly	entirely	partly	used	an	area (00 ha)	in the crop- estd.(00)	sample
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
				others	5				
nil (< 0.01)	-	-	-	-	1000	1000	2	18	12
00.01 - 00.20	-	-	-	-	1000	1000	2	49	13
00.21 - 00.50	-	-	-	-	1000	1000	4	59	11
00.51 - 01.00	-	-	-	-	1000	1000	14	153	38
01.01 - 02.00	-	-	-	-	1000	1000	2	30	10
02.01 - 04.00	-	-	-	-	1000	1000	2	7	4
04.01 - 10.00	-	-	-	-	1000	1000	0	2	2
10.01 & above	-	-	-	-	-	-	-	-	-
all	-	-	-	-	1000	1000	26	318	90

Table (5.1):	Cropwise per 1000 distribution of area under five major crops* by mode of use of tractor, separately for
	different size-classes of household ownership holding

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

unic	rent size-clas	ses of nous	chold owners	inp notaing				Μ	eghalaya
								no. of hhs. rep	porting
size-class of		mode	of use of trac	tor for tilling	g		estd.	cultivation of	-
ownership	by hired	tractor	by other t	ractor	not	all	area	in the crop-g	group
holding (ha)	entirely	partly	entirely	partly	used		(00 ha)	estd.(00)	sample
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
				Paddy(kha	ırif)				
nil (< 0.01)	-	-	-	-	1000	1000	1	9	3
00.01 - 00.20	-	-	-	-	1000	1000	34	132	42
00.21 - 00.50	-	-	-	-	1000	1000	92	431	114
00.51 - 01.00	-	-	-	-	1000	1000	255	536	147
01.01 - 02.00	-	12	-	-	988	1000	310	457	145
02.01 - 04.00	5	22	4	-	968	1000	382	312	97
04.01 - 10.00	-	56	-	-	944	1000	240	77	24
10.01 & above	-	-	-	-	-	-	-	-	-
all	2	19	1	-	978	1000	1313	1953	572
				Paddy(ra	bi)				
nil (< 0.01)	-	-	-	-	-	-	-	-	-
00.01 - 00.20	-	-	-	-	-	-	-	-	-
00.21 - 00.50	-	-	-	-	1000	1000	11	42	11
00.51 - 01.00	-	-	-	-	1000	1000	50	111	30
01.01 - 02.00	-	-	-	-	1000	1000	14	33	13
02.01 - 04.00	150	-	174	-	676	1000	14	29	9
04.01 - 10.00	-	-	-	-	1000	1000	5	5	2
10.01 & above	-	-	-	-	-	-	-	-	-
all	22	-	25	-	953	1000	94	221	65
				other cere	eals				
-1((001)									
nil (< 0.01)	-	-	-	-	-	-	-	- 45	- 13
00.01 - 00.20 00.21 - 00.50	-	-	-	-	1000	1000 1000	6 20	45 153	13 30
00.21 - 00.30	-	-	-	-	1000 1000	1000	20 26	133	30 33
	-	-	-						
01.01 - 02.00	-	-	-	-	1000	1000	48	133	46
02.01 - 04.00	-	-	-	39	961	1000	51	71	21
04.01 - 10.00	-	-	-	-	1000	1000	18	30	11
10.01 & above	-	-	-	-	-	-	-	-	-
all	-	-	-	12	988	1000	169	542	154

#### Table (5.1): Cropwise per 1000 distribution of area under five major crops\* by mode of use of tractor, separately for different size-classes of household ownership holding

\*Note

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

\*Note

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

								no. of hhs. re	
size-class of				ctor for tilling			estd.	cultivation of	
ownership	by hired		by other		not	all	area	in the crop-	
holding (ha)	entirely	partly	entirely	partly	used		(00 ha)	estd.(00)	sample
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
				pulses					
nil (< 0.01)	-	-	-	-	-	-	-	-	-
00.01 - 00.20	-	-	-	-	1000	1000	0	6	3
00.21 - 00.50	-	-	-	-	1000	1000	1	22	8
00.51 - 01.00	-	-	-	-	1000	1000	3	29	10
01.01 - 02.00	-	-	-	-	1000	1000	3	21	4
02.01 - 04.00	-	-	-	-			-		_
04.01 - 10.00	-	-	-	-	-	-	-	-	-
10.01 & above	-	-	-	-	-	-	-	-	
all	-	-	-	-	1000	1000	6	78	25
				mixed cr	ор				
nil (< 0.01)	-	-	-	-	1000	1000	0	4	1
00.01 - 00.20	-	-	-	-	1000	1000	24	149	35
00.21 - 00.50	-	-	-	-	1000	1000	48	272	36
00.51 - 01.00	-	-	-	-	1000	1000	63	229	50
01.01 - 02.00	-	-	-	-	1000	1000	56	142	48
02.01 - 04.00	-	-	-	-	1000	1000	26	42	14
04.01 - 10.00	-	-	-	-	1000	1000	5	6	2
10.01 & above	-	-	-	-	-	-	-	-	
all	-	-	-	-	1000	1000	222	845	186
				vegetabl	es				
nil (< 0.01)	_			_	1000	1000	1	6	2
00.01 - 00.20	-	-	-	-	1000	1000	30	245	78
00.01 - 00.20	-	-	-	-	1000	1000	110	573	161
00.51 - 01.00	-	_	-	_	1000	1000	192	613	186
01.01 - 02.00	-	-	-	-	1000	1000	217	476	155
02.01 - 04.00	-	-	-	-	1000	1000	273	360	117
04.01 - 10.00	-	70	-	-	930	1000	75	82	20
10.01 & above	-	-	-	-	-	-	-	-	

# Table (5.1): Cropwise per 1000 distribution of area under five major crops\* by mode of use of tractor, separately for different size-classes of household ownership holding

\*Note

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

all - 6	994 1000	898	2355	725
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<sup>1.</sup> Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

<sup>2.</sup> The set of 5 major crops is not a fixed set but varies from household to household; for any particular household it is understood as the 5 most important field crops cultivated, in terms of value of production, by the household in 1997-98, from among a list of crop-season combinations involving 12 crops and crop-groups spanning the entire range of crops cultivated in the country.

									leghalaya
size-class of		mode	of use of trac	ctor for tilling	g		estd.	no. of hhs. re cultivation of	
ownership	by hired		by other		not	all	area	in the crop-	
holding (ha)	entirely	partly	entirely	partly	used		(00 ha)	estd.(00)	sample
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
				fruits & n	uts				
nil (< 0.01)	-	-	-	-	-	-	-	-	
00.01 - 00.20	-	-	-	-	1000	1000	5	56	17
00.21 - 00.50	-	-	-	-	1000	1000	5	76	31
00.51 - 01.00	-	-	-	-	1000	1000	25	160	52
01.01 - 02.00	-	-	-	-	1000	1000	65	195	61
02.01 - 04.00	-	-	-	-	1000	1000	107	112	39
04.01 - 10.00	-	-	-	-	1000	1000	28	28	8
10.01 & above	-	-	-	-	-	-	-	-	
all	-	-	-	-	1000	1000	234	626	208
				other cash c	crops				
nil (< 0.01)	_	_	_	_	_	_	-	_	
00.01 - 00.20	-	-	-	-	1000	1000	3	40	11
00.21 - 00.50	-	-	-	-	1000	1000	2	17	2
00.51 - 01.00	-	-	-	-	1000	1000	7	45	ç
01.01 - 02.00	_	_	_	_	1000	1000	32	67	20
02.01 - 04.00	-	_	-	-	1000	1000	51	55	15
04.01 - 10.00	-	-	-	-	1000	1000	6	6	2
10.01 & above	-	-	-	-	-	-	-	-	
all	-	-	-	-	1000	1000	102	232	61
				others					
nil (< 0.01)	-	-	-	-	-	-	-	-	
00.01 - 00.20	-	-	-	-	1000	1000	1	9	4
00.21 - 00.50	-	-	-	-	1000	1000	12	72	29
00.51 - 01.00	-	-	-	-	1000	1000	34	157	54
01.01 - 02.00	-	-	-	-	1000	1000	29	113	41
02.01 - 04.00	-	-	-	-	1000	1000	32	88	34
04.01 - 10.00	-	-	-	-	1000	1000	14	24	8
10.01 & above	-	-	-	-	-	-	-	-	

# Table (5.1): Cropwise per 1000 distribution of area under five major crops\* by mode of use of tractor, separately for different size-classes of household ownership holding

\*Note

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

un 1000 1000 125 102 171	all	-	-	-	-	1000	1000	123	462	171
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<sup>1.</sup> Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

<sup>2.</sup> The set of 5 major crops is not a fixed set but varies from household to household; for any particular household it is understood as the 5 most important field crops cultivated, in terms of value of production, by the household in 1997-98, from among a list of crop-season combinations involving 12 crops and crop-groups spanning the entire range of crops cultivated in the country.
unit	rent size-eias	ses of nous		inp notaing					Mizoram
								no. of hhs. re	
size-class of		mode	of use of trac	tor for tilling	5		estd.	cultivation of	-
ownership	by hired	tractor	by other t	ractor	not	all	area	in the crop-	group
holding (ha)	entirely	partly	entirely	partly	used		(00 ha)	estd.(00)	sample
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
				Paddy(kha	urif)				
nil (< 0.01)	-	-	-	4	996	1000	26	64	45
00.01 - 00.20	-	-	-	-	1000	1000	115	196	160
00.21 - 00.50	-	-	-	3	997	1000	17	28	30
00.51 - 01.00	-	-	-	41	959	1000	14	34	26
01.01 - 02.00	-	-	-	-	1000	1000	29	40	33
02.01 - 04.00	-	-	-	-	1000	1000	12	12	14
04.01 - 10.00	-	-	-	-	1000	1000	6	3	3
10.01 & above	-	-	-	-	_	-	_	-	-
all	-	-	-	3	997	1000	219	377	311
				Paddy(ra	<i>b1</i> )				
nil (< 0.01)	-	-	-	-	1000	1000	2	8	5
00.01 - 00.20	-	-	-	-	1000	1000	23	37	26
00.21 - 00.50	-	-	-	-	1000	1000	0	1	3
00.51 - 01.00	-	-	-	-	1000	1000	2	6	11
01.01 - 02.00	-	-	-	-	1000	1000	1	1	3
02.01 - 04.00	-	-	-	-	1000	1000	0	0	1
04.01 - 10.00	-	-	-	-	-	-	-	-	-
10.01 & above	-	-	-	-	-	-	-	-	-
all	-	-	-	-	1000	1000	29	55	49
				other cere	eals				
nil (< 0.01)	-	_	_	_	_	_	_	_	_
00.01 - 00.20	-	-	-	-	1000	1000	6	41	34
0.21 - 00.50	-	-	-	-	1000	1000	1	9	11
00.51 - 01.00	-	_	-	181	819	1000	1	15	20
01.01 - 02.00				-	1000	1000	1	6	
)2.01 - 02.00 )2.01 - 04.00	-	-	-	-	1000	1000	1 0	3	2
02.01 - 04.00 04.01 - 10.00	-	-	-	-	- 1000	1000	-	-	-
01.01 - 10.00	-	-	-	-	-	-	-	-	-

\*Note

10.01 & above

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

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2. The set of 5 major crops is not a fixed set but varies from household to household; for any particular household it is understood as the 5 most important field crops cultivated, in terms of value of production, by the household in 1997-98, from among a list of crop-season combinations involving 12 crops and crop-groups spanning the entire range of crops cultivated in the country.

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all	-	-	-	19	981	1000	8	74	74
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<sup>1.</sup> Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

<sup>2.</sup> The set of 5 major crops is not a fixed set but varies from household to household; for any particular household it is understood as the 5 most important field crops cultivated, in terms of value of production, by the household in 1997-98, from among a list of crop-season combinations involving 12 crops and crop-groups spanning the entire range of crops cultivated in the country.

size-class of		mode	of use of trac	tor for tilling	Ŧ		estd.	no. of hhs. rep cultivation of	
	hry hims d					all			
ownership holding (ha)	by hired entirely	partly	by other t entirely	partly	not used		area (00 ha)	in the crop-g estd.(00)	sample
(1)	(2)	(3)	(4)	(5)	(6)		(8)	(9)	(10)
				pulses					
				puises					
nil (< 0.01)	-	-	-	-	1000	1000	3	32	23
00.01 - 00.20	-	-	-	-	1000	1000	8	75	58
00.21 - 00.50	-	-	-	-	1000	1000	1	10	9
00.51 - 01.00	-	-	-	-	1000	1000	2	16	18
01.01 - 02.00	-	-	-	-	1000	1000	1	11	9
02.01 - 04.00	-	-	-	-	1000	1000	2	3	2
04.01 - 10.00	-	-	-	-	-	-	-	-	-
10.01 & above	-	-	-	-	-	-	-	-	-
all	-	-	-	-	1000	1000	16	147	119
				mixed cr	ор				
nil (< 0.01)					1000	1000	25	70	47
00.01 - 00.20	-	-	-	-	1000	1000	23 56	138	47
00.01 - 00.20	-	-	-	-	1000	1000	5	138	12
00.51 - 01.00	-	-	-	-	1000	1000	16	35	26
01.01 - 02.00				_		1000	20	31	24
02.01 - 02.00	-	-	-	-	1000 1000	1000	20	5	4
02.01 - 04.00	-	-	-	-	-	1000	-	-	4
10.01 & above	-	-	-	-	-	-	-	-	
all	-	-	-	-	1000	1000	125	296	209
				vegetabl	es				
nil (< 0.01)	-	-	-	-	1000	1000	7	51	35
00.01 - 00.20	-	-	-	-	1000	1000	28	196	144
00.21 - 00.50	-	-	-	-	1000	1000	3	18	21
00.51 - 01.00	-	-	-	28	972	1000	5	24	26
01.01 - 02.00	-	-	-	-	1000	1000	3	15	13
02.01 - 04.00	-	-	-	-	1000	1000	0	1	1
04.01 - 10.00	-	-	-	-	-	-	-	-	
10.01 & above									

\*Note

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

all	3	997	1000	46	305	240
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<sup>1.</sup> Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

<sup>2.</sup> The set of 5 major crops is not a fixed set but varies from household to household; for any particular household it is understood as the 5 most important field crops cultivated, in terms of value of production, by the household in 1997-98, from among a list of crop-season combinations involving 12 crops and crop-groups spanning the entire range of crops cultivated in the country.

size-class of		mode	of use of trac	tor for tilling			estd.	no. of hhs. rep cultivation of	
ownership	by hired		by other t		not	all	area	in the crop-	
holding (ha)	entirely	partly	entirely	partly	used		(00 ha)	estd.(00)	sample
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
				fruits & n	uts				
nil (< 0.01)	-	-	-	-	-	-	-	-	-
00.01 - 00.20	-	-	-	-	1000	1000	1	6	5
00.21 - 00.50	-	-	-	-	1000	1000	2	8	11
00.51 - 01.00	-	-	-	105	895	1000	1	7	9
01.01 - 02.00	-	-	-	-	1000	1000	5	11	9
02.01 - 04.00	-	-	-	-	1000	1000	3	3	3
04.01 - 10.00	-	-	-	-	-	-	-	-	-
10.01 & above	-	-	-	-	-	-	-	-	-
all	-	-	-	12	988	1000	12	37	37
			C	other cash c	rops				
nil (< 0.01)	-	-	-	-	1000	1000	3	16	9
00.01 - 00.20	-	-	-	-	1000	1000	3	15	11
00.21 - 00.50	-	-	-	-	1000	1000	2	16	18
00.51 - 01.00	-	-	-	34	966	1000	4	20	20
01.01 - 02.00	-	-	-	-	1000	1000	11	31	27
02.01 - 04.00	-	-	-	-	1000	1000	4	9	7
04.01 - 10.00	-	-	-	-	1000	1000	1	3	3
10.01 & above	-	-	-	-	-	-	-	-	-
all	-	-	-	5	995	1000	28	110	95
				others					
nil (< 0.01)	-	_	_	_	1000	1000	7	45	31
00.01 - 00.20	-	-	-	-	1000	1000	, 9	96	70
00.21 - 00.50	-	-	-	-	1000	1000	0	2	1
00.51 - 01.00	-	-	-	-	1000	1000	2	7	5
01.01 - 02.00					1000	1000	0	3	2
01.01 - 02.00 02.01 - 04.00	-	-	-	-	1000	1000	U	3	2
02.01 - 04.00 04.01 - 10.00	-	-	-	-	-	-	-	-	-
10.01 & above	-	-	-	-	-	-	-	-	-
10.01 & 40010									

\*Note

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

	all	-	-	-	-	1000	1000	18	153	109
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<sup>1.</sup> Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

<sup>2.</sup> The set of 5 major crops is not a fixed set but varies from household to household; for any particular household it is understood as the 5 most important field crops cultivated, in terms of value of production, by the household in 1997-98, from among a list of crop-season combinations involving 12 crops and crop-groups spanning the entire range of crops cultivated in the country.

									Vagaland
size-class of		mode (	of use of trac	tor for tillin	σ		estd.	no. of hhs. rep cultivation of	
ownership	by hired		by other t		not	all	area	in the crop-	-
holding (ha)	entirely	partly	entirely	partly	used		(00 ha)	estd.(00)	sample
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
				Paddy(kha	ırif)				
nil (< 0.01)	-	-	-	-	1000	1000	12	10	9
00.01 - 00.20	-	-	-	-	1000	1000	1	5	5
00.21 - 00.50	-	-	-	-	1000	1000	4	19	22
00.51 - 01.00	-	-	-	-	1000	1000	24	50	50
01.01 - 02.00	-	-	-	-	1000	1000	128	139	142
02.01 - 04.00	-	-	-	-	1000	1000	348	239	272
04.01 - 10.00	-	-	-	-	1000	1000	419	116	129
10.01 & above	-	-	-	-	1000	1000	42	7	8
all	-	-	-	-	1000	1000	978	585	637
				Paddy(ra	bi)				
nil (< 0.01)	-	-	-	-	1000	1000	8	6	4
00.01 - 00.20	-	-	-	-	1000	1000	0	2	2
00.21 - 00.50	-	-	-	-	1000	1000	1	6	8
00.51 - 01.00	-	-	-	-	1000	1000	9	27	26
01.01 - 02.00	-	-	-	-	1000	1000	72	104	88
02.01 - 04.00	-	-	-	-	1000	1000	228	203	210
04.01 - 10.00	-	-	89	-	911	1000	45	23	26
10.01 & above	-	-	-	-	-	-	-	-	-
all	-	-	11	-	989	1000	363	371	364
				other cere	eals				
nil (< 0.01)	-	_	_	_	1000	1000	3	15	12
00.01 - 00.20	-	-	-	_	1000	1000	1	13	11
00.21 - 00.50	-	-	-	-	1000	1000	1	14	16
00.51 - 01.00	-	-	-	-	1000	1000	7	45	41
01.01 - 02.00									
01.01 - 02.00 02.01 - 04.00	-	- 22	-	-	1000	1000	28 82	143	132
02.01 - 04.00 04.01 - 10.00	-	33	-	-	967 1000	1000	82 33	273 47	290 5:
10.01 & above	-	-	-		1000	1000			
10.01 & above	-	-	-	-	1000	1000	5	3	

\*Note

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

all - 17	983 1000	160	557	560
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<sup>1.</sup> Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

<sup>2.</sup> The set of 5 major crops is not a fixed set but varies from household to household; for any particular household it is understood as the 5 most important field crops cultivated, in terms of value of production, by the household in 1997-98, from among a list of crop-season combinations involving 12 crops and crop-groups spanning the entire range of crops cultivated in the country.

								1	Nagaland
size-class of		mode	of use of trac	ctor for tilling	g		estd.	no. of hhs. re cultivation of	
ownership	by hired	tractor	by other	tractor	not	all	area	in the crop-	group
holding (ha)	entirely	partly	entirely	partly	used		(00 ha)	estd.(00)	sample
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
				pulses					
nil (< 0.01)	-	-	-	-	1000	1000	0	2	2
00.01 - 00.20	-	-	-	-	1000	1000	0	0	1
00.21 - 00.50	-	-	-	-	1000	1000	0	3	3
00.51 - 01.00	-	-	-	-	1000	1000	1	12	12
01.01 - 02.00	-	-	-	-	1000	1000	4	31	33
02.01 - 04.00	-	_	-	-	1000	1000	11	64	65
04.01 - 10.00	-	-	-	-	1000	1000	28	33	35
10.01 & above	-	-	-	-	1000	1000	1	1	1
all	-	-	-	-	1000	1000	46	147	152
				oil seed	S				
nil (< 0.01)	-	-	-	-	1000	1000	1	7	3
00.01 - 00.20	-	-	-	-	1000	1000	0	3	1
00.21 - 00.50	-	-	-	-	1000	1000	0	3	2
00.51 - 01.00	-	-	-	-	1000	1000	1	8	4
01.01 - 02.00	220	-	-	-	780	1000	6	13	7
02.01 - 04.00	-	-	-	-	1000	1000	3	10	5
04.01 - 10.00	-	-	-	-	-	-	-	-	-
10.01 & above	-	-	-	-	-	-	-	-	-
all	113	-	-	-	887	1000	12	44	22
				mixed cr	op				
nil (< 0.01)					1000	1000	0	2	2
00.01 - 00.20	-	-	-	-	1000	1000	0	2	3
00.01 - 00.20	-	-	-	-	1000	1000	0	- 4	- 5
00.51 - 01.00	-	-	-	-	1000	1000	2	4	6
	-	-	-						
01.01 - 02.00	-	-	-	-	1000	1000	11	53	51
02.01 - 04.00	-	-	-	-	1000	1000	25	110	120
04.01 - 10.00	-	-	-	-	1000	1000	94	89	93
10.01 & above	-	-	-	-	1000	1000	9	5	6

\*Note

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

	all	-	-	-	-	1000	1000	141	272	284
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<sup>1.</sup> Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

<sup>2.</sup> The set of 5 major crops is not a fixed set but varies from household to household; for any particular household it is understood as the 5 most important field crops cultivated, in terms of value of production, by the household in 1997-98, from among a list of crop-season combinations involving 12 crops and crop-groups spanning the entire range of crops cultivated in the country.

									Vagaland
size-class of		mode	of use of trac	ctor for tillin	σ		estd.	no. of hhs. rep cultivation of	
ownership	by hired		by other		not	all	area	in the crop-	
holding (ha)	entirely	partly	entirely	partly	used		(00 ha)	estd.(00)	sample
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
				vegetabl	es				
nil (< 0.01)	-	-	-	-	1000	1000	1	14	11
00.01 - 00.20	-	-	-	-	1000	1000	1	24	20
00.21 - 00.50	-	-	-	-	1000	1000	3	35	43
00.51 - 01.00	-	-	-	-	1000	1000	12	72	67
01.01 - 02.00	-	-	-	-	1000	1000	38	170	161
02.01 - 04.00	-	-	-	-	1000	1000	87	297	327
04.01 - 10.00	-	-	-	-	1000	1000	101	121	131
10.01 & above	-	-	-	-	1000	1000	11	7	8
all	-	-	-	-	1000	1000	254	739	768
				fodder					
nil (< 0.01)	-	-	-	-	1000	1000	0	2	2
00.01 - 00.20	-	-	-	-	-	-	-	-	
00.21 - 00.50	-	-	-	-	1000	1000	0	0	1
00.51 - 01.00	-	-	-	-	1000	1000	0	2	4
01.01 - 02.00	-	-	-	-	1000	1000	0	6	4
02.01 - 04.00	-	-	-	-	1000	1000	6	32	26
04.01 - 10.00	-	-	-	-	1000	1000	1	9	4
10.01 & above all	-	-	-	-	1000	- 1000	- 8	- 51	41
				£					
				fruits & r	iuts				
nil (< 0.01)	-	-	-	-	1000	1000	0	0	1
00.01 - 00.20	-	-	-	-	-	-	-	-	
00.21 - 00.50	-	-	-	-	1000	1000	0	0	
00.51 - 01.00	-	-	-	-	1000	1000	0	1	,
01.01 - 02.00	-	-	-	-	1000	1000	0	11	1
02.01 - 04.00	-	-	-	-	1000	1000	1	14	2
04.01 - 10.00	-	-	-	-	-	-	-	-	
10.01 & above	-	-	-	_	_	-	-	-	

\*Note

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

all	-	-	-	-	1000	1000	2	27	37

<sup>1.</sup> Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

<sup>2.</sup> The set of 5 major crops is not a fixed set but varies from household to household; for any particular household it is understood as the 5 most important field crops cultivated, in terms of value of production, by the household in 1997-98, from among a list of crop-season combinations involving 12 crops and crop-groups spanning the entire range of crops cultivated in the country.

				1 0				1	Nagaland
size-class of		mode	of use of trac	tor for tilling	в Б		estd.	no. of hhs. reporting cultivation of a crop	
ownership	by hired tractor		by other tractor		not all		area	in the crop-group	
holding (ha)	entirely	partly	entirely	partly	used		(00 ha)	estd.(00)	sample
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
			(	other cash o	crops				
nil (< 0.01)	-	-	-	-	1000	1000	0	1	1
00.01 - 00.20	-	-	-	-	-	-	-	-	-
00.21 - 00.50	-	-	-	-	1000	1000	0	4	4
00.51 - 01.00	-	-	-	-	1000	1000	1	6	5
01.01 - 02.00	-	-	-	-	1000	1000	4	14	8
02.01 - 04.00	-	-	-	-	1000	1000	7	10	7
04.01 - 10.00	-	-	-	-	1000	1000	83	62	60
10.01 & above	-	-	-	-	1000	1000	5	4	5
all	-	-	-	-	1000	1000	101	101	90
				others	1				
nil (< 0.01)	-	-	-	-	1000	1000	0	1	3
00.01 - 00.20	-	-	-	-	1000	1000	0	0	1
00.21 - 00.50	-	-	-	-	-	-	-	-	-
00.51 - 01.00	-	-	-	-	1000	1000	2	7	9
01.01 - 02.00	-	-	-	-	1000	1000	9	18	22
02.01 - 04.00	-	-	-	-	1000	1000	14	25	34
04.01 - 10.00	-	-	-	-	1000	1000	73	68	69
10.01 & above	-	-	-	-	1000	1000	10	6	7
all	-	-	-	-	1000	1000	107	125	145

\*Note

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

size-class of		mode	of use of trac	tor for tilling	5		estd.	no. of hhs. re cultivation of	
ownership	by hired		by other tractor		not all		area	in the crop-	
holding (ha)	entirely	partly	entirely	partly	used		(00 ha)	estd.(00)	sample
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
				Paddy(kha	urif)				
nil (< 0.01)	-	48	-	-	952	1000	48	160	17
00.01 - 00.20	11	72	-	3	914	1000	932	5300	291
00.21 - 00.50	12	53	3	8	924	1000	4043	11460	620
00.51 - 01.00	14	58	5	7	914	1000	7229	10623	543
01.01 - 02.00	26	83	6	14	871	1000	8254	7170	371
02.01 - 04.00	18	82	-	42	858	1000	6315	2864	143
04.01 - 10.00	32	108	-	56	804	1000	2854	609	32
10.01 & above	-	-	-	-	1000	1000	1104	122	3
all	19	72	3	20	885	1000	30778	38308	2020
				Paddy(ra	bi)				
nil (< 0.01)	842	-	-	-	158	1000	1	34	2
00.01 - 00.20	351	170	-	-	479	1000	50	316	19
00.21 - 00.50	200	66	19	-	715	1000	187	695	41
00.51 - 01.00	87	132	39	-	743	1000	272	688	38
01.01 - 02.00	265	52	97	-	586	1000	345	620	35
02.01 - 04.00	299	239	-	90	372	1000	272	269	16
04.01 - 10.00	-	461	-	539	-	1000	162	73	3
10.01 & above	-	-	-	-	-	-	-	-	-
all	195	166	37	87	514	1000	1290	2695	154
				other cere	eals				
nil (< 0.01)	-	-	-	-	1000	1000	3	52	7
00.01 - 00.20	-	-	-	-	1000	1000	36	314	, 17
00.21 - 00.50	-	-	-	-	1000	1000	151	1045	55
00.51 - 01.00	-	-	-	-	1000	1000	260	1243	67
01.01 - 02.00	_	11	_	_	989	1000	460	1301	67
02.01 - 04.00	-	-	-	-	1000	1000	400 165	357	19
04.01 - 10.00	-	-	-	565	435	1000	103	81	3
10.01 & above	-	-	-	-	-	-	-	-	-
*Note									

Table (5.1): Cropwise per 1000 distribution of area under five major crops* by mode of use of tractor, separately	/ for
different size-classes of household ownership holding	

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

all - 4 -	49	946	1000	1177	4394	235
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<sup>1.</sup> Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

<sup>2.</sup> The set of 5 major crops is not a fixed set but varies from household to household; for any particular household it is understood as the 5 most important field crops cultivated, in terms of value of production, by the household in 1997-98, from among a list of crop-season combinations involving 12 crops and crop-groups spanning the entire range of crops cultivated in the country.

	rent size-cias			mp noroing					Orissa
size-class of		mode	of use of trac	tor for tilling	2		estd.	no. of hhs. rej cultivation of	
ownership	by hired		by other t		not	all	area	in the crop-	
holding (ha)	entirely	partly	entirely	partly	used		(00 ha)	estd.(00)	sample
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
				pulses					
nil (< 0.01)	-	-	-	-	1000	1000	3	34	6
00.01 - 00.20	76	92	-	-	832	1000	31	410	27
00.21 - 00.50	-	64	-	-	936	1000	368	1640	85
00.51 - 01.00	11	35	4	9	941	1000	694	2255	118
01.01 - 02.00	38	14	-	34	913	1000	855	2109	114
02.01 - 04.00	-	10	-	99	891	1000	862	922	50
04.01 - 10.00	157	-	-	139	704	1000	418	206	10
10.01 & above	-	-	-	-	1000	1000	135	43	2
all	32	21	1	53	893	1000	3367	7619	412
				oil seed	8				
nil (< 0.01)	-	-	-	-	1000	1000	7	18	1
00.01 - 00.20	-	-	-	-	1000	1000	24	331	21
00.21 - 00.50	-	-	-	-	1000	1000	42	537	29
00.51 - 01.00	-	-	-	-	1000	1000	112	697	35
01.01 - 02.00	-	43	-	-	957	1000	183	830	46
02.01 - 04.00	-	-	-	-	1000	1000	33	125	7
04.01 - 10.00	-	-	-	-	1000	1000	38	56	3
10.01 & above	-	-	-	-	-	-	-	-	-
all	-	18	-	-	982	1000	439	2593	142
				vegetabl	es				
nil (< 0.01)	_	_		_	1000	1000	2	102	10
00.01 - 00.20	- 9	- 98	-	_	893	1000	42	883	49
00.21 - 00.50	-	-	-	-	1000	1000	115	1302	4) 68
00.51 - 01.00	26	64	10	36	864	1000	164	1587	76
	20		10						
01.01 - 02.00	-	97	-	36 52	867	1000	219	1590	78
02.01 - 04.00 04.01 - 10.00	-	-	-	52	948 1000	1000	79 8	415	23
10.01 & above	-	-	-	-	1000 1000	1000 1000	8 18	125 18	6
10.01 & above	-	-	-	-	1000	1000	18	10	1

\*Note

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

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\*Note

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

				1 0					Orissa
size-class of		mode	of use of trac	tor for tilling	9		estd.	no. of hhs. re cultivation of	
ownership	by hired	tractor	by other tractor		not all		area	in the crop-group	
holding (ha)	entirely	partly	entirely	partly	used		(00 ha)	estd.(00)	sample
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
				fruits & n	uts				
nil (< 0.01)	-	-	-	-	-	-	-	18	1
00.01 - 00.20	-	-	-	-	1000	1000	3	153	10
00.21 - 00.50	-	-	-	-	1000	1000	7	62	3
00.51 - 01.00	-	-	426	-	574	1000	13	63	3
01.01 - 02.00	-	-	-	-	1000	1000	44	88	7
02.01 - 04.00	-	-	-	-	-	-	-	-	-
04.01 - 10.00	-	-	-	-	-	-	-	-	-
10.01 & above	-	-	-	-	-	-	-	-	-
all	-	-	81	-	919	1000	66	384	24
			O	other cash	crops				
nil (< 0.01)	-	-	-	-	-	-	-	-	-
00.01 - 00.20	-	-	-	-	1000	1000	5	47	2
00.21 - 00.50	-	-	-	-	1000	1000	4	47	2
00.51 - 01.00	-	-	-	-	1000	1000	74	203	10
01.01 - 02.00	_	_	-	-	1000	1000	58	121	6
02.01 - 04.00	-	-	-	559	441	1000	27	65	3
04.01 - 10.00	-	-	-	-	-	-	-	-	-
10.01 & above	-		-		1000	1000	149	25	1
all	-	-	-	47	953	1000	317	509	24

\*Note

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

size-class of		mode	of use of trac	tor for tilling	r		estd.	no. of hhs. rep cultivation of	
ownership	by hired		f use of tractor for tilling by other tractor		not	all	area	in the crop-group	
holding (ha)	entirely	partly	entirely	partly	used	an	(00  ha)	estd.(00)	sample
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
				Paddy(kha	rif)				
nil (< 0.01)	1000	-	-	-	-	1000	47	16	2
00.01 - 00.20	448	546	-	-	6	1000	47	81	9
00.21 - 00.50	780	70	65	-	85	1000	192	661	55
00.51 - 01.00	633	78	215	30	44	1000	767	958	79
01.01 - 02.00	609	72	275	-	44	1000	2404	2021	175
02.01 - 04.00	313	59	577	30	21	1000	3751	1661	143
04.01 - 10.00	187	10	770	5	28	1000	4624	1000	85
10.01 & above	-	-	1000	-	-	1000	2263	261	23
all	299	38	626	11	26	1000	14095	6660	571
nil (< 0.01)	_	_	_	Paddy(ral	<i></i>	_	_	_	_
00.01 - 00.20	1000	_	_	-	_	1000	4	25	2
00.21 - 00.50	1000	-	-	-	-	1000	2	9	1
00.51 - 01.00	1000	-	-	-	-	1000	19	21	2
01.01 - 02.00	443	-	557	-	-	1000	115	106	9
02.01 - 04.00	572	-	306	-	122	1000	92	44	4
04.01 - 10.00	245	-	647	-	108	1000	208	84	7
10.01 & above	-	-	1000	-	-	1000	130	25	2
all	315	-	626	-	59	1000	571	314	27
				wheat					
nil (< 0.01)	457		543			1000	101	29	2
00.01 - 00.20	437 478	- 287	545	-	235	1000	90	29	22
00.01 - 00.20	478 724	287 95	60	-	121	1000	268	938	81
00.51 - 01.00	542	158	236	20	44	1000	1173	1395	116
01.01 - 02.00 02.01 - 04.00	575	76 58	290	- 20	59 32	1000	3422 5125	2713	236
02.01 - 04.00 04.01 - 10.00	312 181	58 13	567 780	30	32 26	1000 1000	5135 7171	2157 1495	185 127
10.01 & above	31	15	780 969	-	- 20	1000	4343	377	33
*N	51		707			1000	1545	511	50

\*Note

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

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all 273 41 6	48 8 30	1000 21703	9328 802
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\*Note

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

	Tent Size-clas								Punjab
size-class of		moda	of use of tree	tor for tilling			estd.	no. of hhs. rep	
ownership	by hired			f use of tractor for tilling by other tractor		all	area	cultivation of a crop in the crop-group	
holding (ha)	entirely	partly	entirely	partly	not used	all	(00  ha)	estd.(00)	sample
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
				other cere	als				
nil (< 0.01)	-	-	-	-	-	-	-	-	-
00.01 - 00.20	139	-	-	-	861	1000	17	88	9
00.21 - 00.50	745	-	-	-	255	1000	43	189	17
00.51 - 01.00	180	475	248	-	96	1000	153	103	9
01.01 - 02.00	370	-	121	-	509	1000	119	209	18
02.01 - 04.00	235	115	259	-	390	1000	165	168	17
04.01 - 10.00	263	-	298	53	386	1000	213	136	16
10.01 & above	-	-	1000	-	-	1000	20	26	2
all	275	126	244	15	339	1000	730	917	88
				oil seeds	5				
nil (< 0.01)	-	-	-	-	-	-	-	-	-
00.01 - 00.20	-	-	-	-	-	-	-	-	-
00.21 - 00.50 00.51 - 01.00	590	-	410 1000	-	-	1000 1000	9 15	28 36	3
		-		-	-				
01.01 - 02.00	367	-	633	-	-	1000	39	96	7
02.01 - 04.00	403	429	168	-	-	1000	75	128	13
04.01 - 10.00	140	-	860 1000	-	-	1000	58 2	88 10	10
10.01 & above all	292	- 163	1000 545	-	-	1000 1000	199	386	1 37
an		105	5-15			1000	177	500	51
				sugar ca	ne				
nil (< 0.01)	-	-	-	-	-	-	-	-	-
00.01 - 00.20	-	-	-	-	-	-	-	-	-
00.21 - 00.50	-	-	-	-	-	-	-	-	-
00.51 - 01.00	216	784	-	-	-	1000	6	24	2
01.01 - 02.00	575	-	425	-	-	1000	60	117	10
02.01 - 04.00	-	-	1000	-	-	1000	44	93	9
04.01 - 10.00	-	-	1000	-	-	1000	66	103	10
10.01 & above	-	-	1000	-	-	1000	13	21	2

\*Note

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

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all	188	24	788	-	- 1000	189	358	33
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\*Note

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

	mode	of use of trac	tor for tilling	Ţ		estd	no. of hhs. rep cultivation of	
by hired					911		-	
					an			sample
(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
			vegetable	es				
-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-
258	-	153	-	589	1000	12	44	3
481	-	519	-	-	1000	9	22	2
448	262	278	-	13	1000	66	66	6
17	-	983	-	-	1000	28	62	6
249	-	751	-	-	1000	139	83	8
-	-	1000	-	-	1000	70	12	1
222	53	700	-	24	1000	324	288	26
			fodder					
609	-	391	-	-	1000	40	50	5
583	167	31	-	218	1000	59	350	35
816	49	19	-	116	1000	226	913	81
655	99	163	10	74	1000	516	1355	113
619	63	229	6	82	1000	1116	2797	245
311	56	559	25	49	1000	1199	2160	186
187	29	758	3	22	1000	1324	1562	130
55	-	945	-	-	1000	435	365	32
390	50	498	9	52	1000	4913	9551	827
		(	other cash c	rops				
10	_	990	-	-	1000	70	15	2
	-	-	-	-				2
	403	-	-	-				9
403		236	-	32		193	244	19
								49
								49 54
			-	-				54 42
70	0	930		-	1000	1907	174	15
	entirely (2) (2) (2) (2) (2) (2) (2) (2)	by hired tractor       entirely     partly       (2)     (3)       (2)     (3)       (2)     (3)       (2)     (3)       (2)     (3)       (3)     (3)       (3)     (3)       (3)     (3)       (3)     (3)       (3)     (3)       (3)     (3)       (4)     (2)       (4)     (2)       (4)     (2)       (4)     (2)       (4)     (4)       (4)     (2)       (4)     (4)       (4)     (4)       (4)     (4)       (4)     (4)       (5)     (4)       (5)     (4)       (5)     (4)       (5)     (4)       (1)     (4)       (5)     (3)       (4)     (3)       (4)     (3)       (5)     (4)       (4)     (3)       (4)	by hired tractor     by other tractor       entirely     partly     entirely       (2)     (3)     (4)       (2)     (3)     (4)       (2)     (3)     (4)       (2)     (3)     (4)       (2)     (3)     (4)       (2)     (3)     (4)       (2)     (3)     (4)       (2)     (3)     (4)       (2)     (3)     (4)       (2)     (3)     (4)       (3)     (4)     (5)       (4)     519     (5)       (4)     262     278       (17)     -     983       (22)     53     700       (22)     53     700       (22)     53     700       (3)     167     31       (4)     19     6       (5)     99     163       (4)     19     6       (5)     99     163       (5)     9     758 <td>by hired tractor     by other tractor       entirely     partly     entirely     partly       (2)     (3)     (4)     (5)       vegetable     regetable       -     -     -       -     -     -       -     -     -       -     -     -       -     -     -       258     -     153       481     -     519       448     262     278       17     -     983       249     -     751       -     -     1000       222     53     700       222     53     700       -     10000     -       583     167     31       816     49     19       655     99     163     10       619     63     229     6       311     56     559     25       187     29     758     3 <td>entirely     partly     entirely     partly     used       (2)     (3)     (4)     (5)     (6)       vegetables     vegetables     vegetables       -     -     -     -     -       258     -     153     -     589       481     -     519     -     -       448     262     278     -     13       17     -     983     -     -       249     -     751     -     -       222     53     700     -     24       609     -     391     -     -       222     53     700     -     24       fodder       609     -     391     -     -       583     167     31     -     218       816     49     19     -     116       655     99     163     100     74       619     63     229</td><td>by hired tractor     by other tractor     not     all       entirely     partly     entirely     partly     used       (2)     (3)     (4)     (5)     (6)     (7)       (2)     (3)     (4)     (5)     (6)     (7)       (2)     (3)     (4)     (5)     (6)     (7)       (2)     (3)     (4)     (5)     (6)     (7)       (2)     (3)     (4)     (5)     (6)     (7)       (2)     (3)     (4)     (5)     (5)     (7)       (3)     (4)     (5)     (5)     (100)     (100)     (100)       481     (5)     278     (13)     1000     (100)     (100)       249     (75)     (7)     (100)     (100)     (100)     (100)       (222)     53     700     (24)     1000       (222)     53     700     (21)     1000       (583     167     31     (100)     74     1000</td><td>by hired tractor     by other tractor     not     all     area (00 ha)       (2)     (3)     (4)     (5)     (6)     (7)     (8)       (2)     (3)     (4)     (5)     (6)     (7)     (8)       (2)     (3)     (4)     (5)     (6)     (7)     (8)       vegetables     vegetables     vegetables     vegetables     (1)     (1)     (1)       -     -     -     -     -     -     -     -       258     -     153     -     589     1000     12       481     -     519     -     1000     9       448     262     278     -     13     1000     28       249     -     751     -     1000     139     -     1000     324       5     -     1000     -     -     1000     324       609     -     391     -     -     1000     324       616</td><td>mode of use of tractor for tilling     estd.     cultivation of in the crop- (00 ha)       by hired tractor     by other tractor     not     all     area     in the crop- (00 ha)       (2)     (3)     (4)     (5)     (6)     (7)     (8)     (9)       (2)     (3)     (4)     (5)     (6)     (7)     (8)     (9)       vegetables       vegetables       colspan="4"&gt;colspan="4"colspan="4"&gt;colspan="4"colspan="4"&gt;colspan="4"colspan="4"  <tr< td=""></tr<></td></td>	by hired tractor     by other tractor       entirely     partly     entirely     partly       (2)     (3)     (4)     (5)       vegetable     regetable       -     -     -       -     -     -       -     -     -       -     -     -       -     -     -       258     -     153       481     -     519       448     262     278       17     -     983       249     -     751       -     -     1000       222     53     700       222     53     700       -     10000     -       583     167     31       816     49     19       655     99     163     10       619     63     229     6       311     56     559     25       187     29     758     3 <td>entirely     partly     entirely     partly     used       (2)     (3)     (4)     (5)     (6)       vegetables     vegetables     vegetables       -     -     -     -     -       258     -     153     -     589       481     -     519     -     -       448     262     278     -     13       17     -     983     -     -       249     -     751     -     -       222     53     700     -     24       609     -     391     -     -       222     53     700     -     24       fodder       609     -     391     -     -       583     167     31     -     218       816     49     19     -     116       655     99     163     100     74       619     63     229</td> <td>by hired tractor     by other tractor     not     all       entirely     partly     entirely     partly     used       (2)     (3)     (4)     (5)     (6)     (7)       (2)     (3)     (4)     (5)     (6)     (7)       (2)     (3)     (4)     (5)     (6)     (7)       (2)     (3)     (4)     (5)     (6)     (7)       (2)     (3)     (4)     (5)     (6)     (7)       (2)     (3)     (4)     (5)     (5)     (7)       (3)     (4)     (5)     (5)     (100)     (100)     (100)       481     (5)     278     (13)     1000     (100)     (100)       249     (75)     (7)     (100)     (100)     (100)     (100)       (222)     53     700     (24)     1000       (222)     53     700     (21)     1000       (583     167     31     (100)     74     1000</td> <td>by hired tractor     by other tractor     not     all     area (00 ha)       (2)     (3)     (4)     (5)     (6)     (7)     (8)       (2)     (3)     (4)     (5)     (6)     (7)     (8)       (2)     (3)     (4)     (5)     (6)     (7)     (8)       vegetables     vegetables     vegetables     vegetables     (1)     (1)     (1)       -     -     -     -     -     -     -     -       258     -     153     -     589     1000     12       481     -     519     -     1000     9       448     262     278     -     13     1000     28       249     -     751     -     1000     139     -     1000     324       5     -     1000     -     -     1000     324       609     -     391     -     -     1000     324       616</td> <td>mode of use of tractor for tilling     estd.     cultivation of in the crop- (00 ha)       by hired tractor     by other tractor     not     all     area     in the crop- (00 ha)       (2)     (3)     (4)     (5)     (6)     (7)     (8)     (9)       (2)     (3)     (4)     (5)     (6)     (7)     (8)     (9)       vegetables       vegetables       colspan="4"&gt;colspan="4"colspan="4"&gt;colspan="4"colspan="4"&gt;colspan="4"colspan="4"  <tr< td=""></tr<></td>	entirely     partly     entirely     partly     used       (2)     (3)     (4)     (5)     (6)       vegetables     vegetables     vegetables       -     -     -     -     -       258     -     153     -     589       481     -     519     -     -       448     262     278     -     13       17     -     983     -     -       249     -     751     -     -       222     53     700     -     24       609     -     391     -     -       222     53     700     -     24       fodder       609     -     391     -     -       583     167     31     -     218       816     49     19     -     116       655     99     163     100     74       619     63     229	by hired tractor     by other tractor     not     all       entirely     partly     entirely     partly     used       (2)     (3)     (4)     (5)     (6)     (7)       (2)     (3)     (4)     (5)     (6)     (7)       (2)     (3)     (4)     (5)     (6)     (7)       (2)     (3)     (4)     (5)     (6)     (7)       (2)     (3)     (4)     (5)     (6)     (7)       (2)     (3)     (4)     (5)     (5)     (7)       (3)     (4)     (5)     (5)     (100)     (100)     (100)       481     (5)     278     (13)     1000     (100)     (100)       249     (75)     (7)     (100)     (100)     (100)     (100)       (222)     53     700     (24)     1000       (222)     53     700     (21)     1000       (583     167     31     (100)     74     1000	by hired tractor     by other tractor     not     all     area (00 ha)       (2)     (3)     (4)     (5)     (6)     (7)     (8)       (2)     (3)     (4)     (5)     (6)     (7)     (8)       (2)     (3)     (4)     (5)     (6)     (7)     (8)       vegetables     vegetables     vegetables     vegetables     (1)     (1)     (1)       -     -     -     -     -     -     -     -       258     -     153     -     589     1000     12       481     -     519     -     1000     9       448     262     278     -     13     1000     28       249     -     751     -     1000     139     -     1000     324       5     -     1000     -     -     1000     324       609     -     391     -     -     1000     324       616	mode of use of tractor for tilling     estd.     cultivation of in the crop- (00 ha)       by hired tractor     by other tractor     not     all     area     in the crop- (00 ha)       (2)     (3)     (4)     (5)     (6)     (7)     (8)     (9)       (2)     (3)     (4)     (5)     (6)     (7)     (8)     (9)       vegetables       vegetables       colspan="4">colspan="4"colspan="4">colspan="4"colspan="4">colspan="4"colspan="4" <tr< td=""></tr<>

\*Note

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

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\*Note

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

size-class of		mode	of use of trac	tor for tilling	g		estd.	no. of hhs. rej cultivation of	
ownership	by hired		by other t		not	all	area	in the crop-	
holding (ha)	entirely	partly	entirely	partly	used	an	(00  ha)	estd.(00)	sample
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
				Paddy(kha	arif)				
nil (< 0.01)	-	-	-	-	-	-	-	-	-
00.01 - 00.20	-	-	-	-	1000	1000	2	24	2
00.21 - 00.50	104	-	-	-	896	1000	123	783	40
00.51 - 01.00	101	-	-	-	899	1000	271	921	42
01.01 - 02.00	390	160	-	-	450	1000	321	347	15
02.01 - 04.00	741	116	34	-	109	1000	298	206	9
04.01 - 10.00	-	405	457	-	139	1000	244	105	4
10.01 & above	-	-	-	-	-	-	-	-	-
all	306	147	96	-	450	1000	1259	2385	112
				wheat					
nil (< 0.01)	955	45	-	-	-	1000	177	242	15
00.01 - 00.20	598	231	56	-	115	1000	370	951	54
00.21 - 00.50	661	34	16	3	285	1000	1897	5141	269
00.51 - 01.00	590	65	27	-	318	1000	2471	5522	285
01.01 - 02.00	677	83	69	9	162	1000	5265	7241	388
02.01 - 04.00	730	96	84	-	90	1000	8000	6400	356
04.01 - 10.00	567	83	287	26	36	1000	10215	3943	222
10.01 & above	252	47	701	-	-	1000	4558	777	49
all	590	78	221	10	101	1000	32952	30217	1638
				other cere	eals				
nil (< 0.01)	973	13		_	13	1000	292	259	16
00.01 - 00.20	445	13	- 9	_	539	1000	252	1546	83
00.21 - 00.50	616	43	32	3	306	1000	2266	6149	329
00.51 - 01.00	541	69	32 49	6	335	1000	3381	6402	339
01.01 - 02.00	676	58 72	61 80	4	201	1000	7814	8561	463
02.01 - 04.00 04.01 - 10.00	711	73 67	89 150	11	116	1000	12304	7581 5826	424
	669	67 22	159	35	69 47	1000	18102	5826	337
10.01 & above	574	32	319	28	47	1000	10406	1571	97

\*Note

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

Report no. 451 Appendix I Cultivation Practices in India

\*Note

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

			<b>C C .</b>	· · · · · · · · · · · · · · · · · · ·			. 1	no. of hhs. rep	
size-class of			of use of trac				estd.	cultivation of	-
ownership	by hired		by other t		not	all	area	in the crop-g	<i>.</i>
holding (ha)	entirely	partly	entirely	partly	used	(7)	(00 ha)	estd.(00)	sample
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
				pulses					
nil (< 0.01)	504	496	-	-	-	1000	190	80	5
00.01 - 00.20	552	-	324	-	124	1000	146	332	19
00.21 - 00.50	235	90	33	13	629	1000	269	1664	92
00.51 - 01.00	467	56	39	4	434	1000	715	2051	109
01.01 - 02.00	607	80	42	30	241	1000	1690	2799	155
02.01 - 04.00	657	77	101	12	154	1000	3862	3475	197
04.01 - 10.00	583	135	125	55	103	1000	7422	3266	188
10.01 & above	588	130	243	31	8	1000	5375	1185	72
all	591	116	141	34	117	1000	19670	14853	837
				oil seeds	5				
nil (< 0.01)	949	51	-	-	_	1000	232	224	14
00.01 - 00.20	590	390	-	-	20	1000	273	333	16
00.21 - 00.50	861	34	23	-	82	1000	345	1351	72
00.51 - 01.00	684	73	49	7	187	1000	1053	2762	146
01.01 - 02.00	649	101	79	8	163	1000	2981	4252	222
02.01 - 04.00	730	40	158	-	72	1000	4709	4010	229
04.01 - 10.00	557	53	304	28	58	1000	6076	2957	173
10.01 & above	373	63	548	-	16	1000	3442	792	51
all	599	65	250	11	76	1000	19110	16681	923
				mixed cr	ор				
1(.001)									
nil (< $0.01$ )	-	-	-	-	-	-	-	-	-
00.01 - 00.20	422	-	-	-	578 745	1000	30	173	8
00.21 - 00.50	183	49	-	23	745 622	1000	236	917 1514	47
00.51 - 01.00	350	28	-	-	622	1000	709	1514	73
01.01 - 02.00	733	14	18	-	235	1000	1691	1894	96
02.01 - 04.00	832	69	28	-	71	1000	2881	1680	89
04.01 - 10.00	925	28	47	-	-	1000	4978	1737	98
10.01 & above	743	-	152	-	105	1000	3129	446	25

\*Note

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

Report no. 451 Appendix I Cultivation Practices in India

all 796 29 60	0	115 1000	13654	8360	436
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\*Note

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

size-class of		mode	of use of trac	tor for tilling	g		estd.	no. of hhs. rep cultivation of	
ownership	by hired		by other t		not	all	area	in the crop-	
holding (ha)	entirely	partly	entirely	partly	used		(00 ha)	estd.(00)	sample
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
				sugar ca	ne				
nil (< 0.01)	-	-	-	-	-	-	-	-	-
00.01 - 00.20	-	-	-	-	-	-	-	-	-
00.21 - 00.50	-	-	-	-	1000	1000	6	41	2
00.51 - 01.00	800	51	-	-	148	1000	33	156	8
01.01 - 02.00	858	37	-	-	105	1000	90	243	13
02.01 - 04.00	925	43	-	-	32	1000	249	315	16
04.01 - 10.00	413	-	579	-	8	1000	204	116	6
10.01 & above	-	-	-	-	-	-	-	-	-
all	718	27	203	-	51	1000	582	873	45
				vegetabl	es				
nil (< 0.01)	-	-	-	-	-	-	-	-	-
00.01 - 00.20	188	-	-	-	812	1000	5	41	2
00.21 - 00.50	409	53	-	13	524	1000	27	175	12
00.51 - 01.00	452	-	-	-	548	1000	76	218	12
01.01 - 02.00	922	-	54	-	24	1000	68	207	12
02.01 - 04.00	401	-	342	-	257	1000	42	115	8
04.01 - 10.00	482	-	395	-	123	1000	165	172	11
10.01 & above	-	-	-	-	1000	1000	20	10	1
all	509	4	207	1	280	1000	403	938	58
				fodder					
1 ( 0.01)	1000					1000	2.4		
nil (< 0.01)	1000	-	-	-	-	1000	24	46	3
00.01 - 00.20	502 705	471	28	-	-	1000	50	131	6
00.21 - 00.50 00.51 - 01.00	705	97 163	9	-	189 174	1000	112	562	30
	663	163	-	-	174	1000	323	1155	65
01.01 - 02.00	567	125	87	-	220	1000	783	2079	118
02.01 - 04.00	645	69	110	1	174	1000	999	1857	106
04.01 - 10.00	499	85	334	11	72	1000	2155	1961	115
10.01 & above	709	30	261	-	-	1000	1224	536	35

\*Note

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

Report no. 451 Appendix I Cultivation Practices in India

all	595	84	215	4	102	1000	5670	8326	478
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\*Note

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

									<b>X</b> ajasulai
size-class of		mode	of use of trad	ctor for tilling	ŗ		estd.	no. of hhs. re cultivation of	
ownership	by hired		by other		not	all	area	in the crop-	-
holding (ha)	entirely	partly	entirely	partly	used		(00 ha)	estd.(00)	sample
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
				other cash c	rops				
nil (< 0.01)	1000	-	-	-	-	1000	23	31	2
00.01 - 00.20	669	253	79	-	-	1000	265	139	e
00.21 - 00.50	630	-	-	-	370	1000	58	234	14
00.51 - 01.00	604	104	20	29	242	1000	236	526	2
01.01 - 02.00	643	95	101	-	161	1000	985	1401	72
02.01 - 04.00	828	52	47	-	73	1000	2436	1837	105
04.01 - 10.00	591	63	311	10	26	1000	4880	1849	107
10.01 & above	460	19	444	71	6	1000	3382	536	35
all	609	55	266	24	46	1000	12265	6552	368
				others					
nil (< 0.01)	745	84	-	-	171	1000	47	64	2
00.01 - 00.20	86	-	716	-	198	1000	66	124	(
00.21 - 00.50	501	164	-	-	334	1000	115	429	2
00.51 - 01.00	668	121	28	-	184	1000	192	609	32
01.01 - 02.00	717	32	117	24	109	1000	434	768	43
02.01 - 04.00	699	90	130	-	80	1000	859	754	43
04.01 - 10.00	733	3	220	19	24	1000	2353	1107	6
10.01 & above	876	-	68	-	55	1000	572	211	12
all	726	31	167	12	64	1000	4638	4067	222

Rajasthan

\*Note

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

								no. of hhs. re	
size-class of				ctor for tillin	-		estd.	cultivation of	-
ownership	by hired		by other		not	all	area	in the crop-	
holding (ha)	entirely	partly	entirely	partly	used		(00 ha)	estd.(00)	sample
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
				Paddy(kh	arif)				
nil (< 0.01)	-	-	-	-	1000	1000	5	10	13
00.01 - 00.20	-	-	-	-	1000	1000	3	13	14
00.21 - 00.50	-	51	-	-	949	1000	8	45	52
00.51 - 01.00	-	-	-	-	1000	1000	14	46	52
01.01 - 02.00	-	-	-	-	1000	1000	18	37	42
02.01 - 04.00	-	-	-	-	1000	1000	13	15	18
04.01 - 10.00	-	-	-	-	1000	1000	1	2	2
10.01 & above	-	-	-	-	1000	1000	2	1	1
all	-	6	-	-	994	1000	63	168	194
				wheat	t				
nil (< 0.01)	-	-	-	-	1000	1000	0	2	2
00.01 - 00.20	-	-	-	-	1000	1000	0	4	4
00.21 - 00.50	-	77	-	-	923	1000	2	14	15
00.51 - 01.00	-	-	-	-	1000	1000	2	10	11
01.01 - 02.00	-	-	-	-	1000	1000	2	8	9
02.01 - 04.00	-	-	-	-	1000	1000	1	4	5
04.01 - 10.00	-	-	-	-	1000	1000	0	1	1
10.01 & above	-	-	-	-	-	-	-	-	-
all	-	19	-	-	981	1000	8	42	47
				other cer	eals				
nil (< 0.01)	-	-	-	-	1000	1000	15	56	62
00.01 - 00.20	-	-	-	-	1000	1000	11	85	98
00.21 - 00.50	-	-	-	-	1000	1000	35	169	205
00.51 - 01.00	-	-	-	-	1000	1000	41	119	131
01.01 - 02.00	-	-	-	-	1000	1000	46	77	85
01.01 - 02.00					1000	1000			00

\*Note

02.01 - 04.00

04.01 - 10.00

10.01 & above

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1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

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2. The set of 5 major crops is not a fixed set but varies from household to household; for any particular household it is understood as the 5 most important field crops cultivated, in terms of value of production, by the household in 1997-98, from among a list of crop-season combinations involving 12 crops and crop-groups spanning the entire range of crops cultivated in the country.

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-

\_

1000

1000

1000

1000

1000

1000

30

8

2

34

4

1

30

3

1

	all	-	-	-	-	1000	1000	189	540	620
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<sup>1.</sup> Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

<sup>2.</sup> The set of 5 major crops is not a fixed set but varies from household to household; for any particular household it is understood as the 5 most important field crops cultivated, in terms of value of production, by the household in 1997-98, from among a list of crop-season combinations involving 12 crops and crop-groups spanning the entire range of crops cultivated in the country.

			chold owners	inp notaing					Sikkim
size-class of		mode o	of use of trac	tor for tilling	7		estd.	no. of hhs. rep cultivation of	
ownership	by hired		by other t		not	all	area	in the crop-s	
holding (ha)	entirely	partly	entirely	partly	used	uii	(00 ha)	estd.(00)	sample
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
				pulses					
nil (< 0.01)	-	-	-	-	1000	1000	1	7	9
00.01 - 00.20	-	-	-	-	1000	1000	0	1	2
00.21 - 00.50	-	-	-	-	1000	1000	1	14	18
00.51 - 01.00	-	-	-	-	1000	1000	3	20	22
01.01 - 02.00	-	-	-	-	1000	1000	3	19	20
02.01 - 04.00	-	-	-	-	1000	1000	1	3	3
04.01 - 10.00	-	-	-	-	-	-	-	-	-
10.01 & above	-	-	-	-	-	-	-	-	-
all	-	-	-	-	1000	1000	10	65	74
nil (< 0.01)	_	_	_	vegetabl	es 1000	1000	5	53	67
00.01 - 00.20	-	-	-	-	1000	1000	5	87	102
0.21 - 00.50	_	_		-	1000	1000	12	160	102
00.51 - 01.00	-	-	-	-	1000	1000	11	115	126
01.01 - 02.00	-	-	-	-	1000	1000	20	78	83
02.01 - 04.00	-	-	-	-	1000	1000	11	31	34
04.01 - 10.00	-	-	-	-	1000	1000	2	3	4
10.01 & above	-	-	-	-	1000	1000	0	1	1
all	-	-	-	-	1000	1000	66	528	610
				fodder					
nil (< 0.01)					1000	1000	0	4	6
00.01 - 00.20	-	-	-	-	1000	1000	0	4	5
00.01 - 00.20	-	-	-	-	1000	1000	2	23	29
00.21 - 00.50	-	-	-	-	1000	1000	3	23 29	32
	-	-	-						
01.01 - 02.00	-	-	-	-	1000	1000	3	23	25
02.01 - 04.00 04.01 - 10.00	-	-	-	-	1000	1000	3	10	10
	-	-	-	-	1000	1000	0	1	1
10.01 & above	-	-	-	-	-	-	-	-	-

\*Note

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

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<sup>1.</sup> Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

<sup>2.</sup> The set of 5 major crops is not a fixed set but varies from household to household; for any particular household it is understood as the 5 most important field crops cultivated, in terms of value of production, by the household in 1997-98, from among a list of crop-season combinations involving 12 crops and crop-groups spanning the entire range of crops cultivated in the country.

size-class of	mode of use of tractor for tilling						estd.	no. of hhs. reporting cultivation of a crop	
ownership	by hired tractor		by other tractor		not	all	area	in the crop-group	
holding (ha)	entirely	partly	entirely	partly	used		(00 ha)	estd.(00)	sample
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
				fruits & r	uts				
nil (< 0.01)	-	-	-	-	1000	1000	0	4	5
00.01 - 00.20	-	-	-	-	1000	1000	0	5	7
00.21 - 00.50	-	-	-	-	1000	1000	0	4	5
00.51 - 01.00	-	-	-	-	1000	1000	1	6	7
01.01 - 02.00	-	-	-	-	1000	1000	1	6	7
02.01 - 04.00	-	-	-	-	1000	1000	2	3	3
04.01 - 10.00	-	-	-	-	-	-	-	-	-
10.01 & above	-	-	-	-	-	-	-	-	-
all	-	-	-	-	1000	1000	5	30	34
				other cash c	crops				
nil (< 0.01)	-	-	-	_	1000	1000	4	26	29
00.01 - 00.20	-	-	-	-	1000	1000	2	18	21
00.21 - 00.50	-	29	-	-	971	1000	9	75	84
00.51 - 01.00	-	-	-	-	1000	1000	15	73	77
01.01 - 02.00	-	-	-	-	1000	1000	19	54	59
02.01 - 04.00	-	-	-	-	1000	1000	27	30	31
04.01 - 10.00	-	-	-	-	1000	1000	2	3	4
10.01 & above	-	-	-	-	1000	1000	1	1	1
all	-	3	-	-	997	1000	78	280	306

Sikkim

\*Note

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.
| size-class of |                  | mode   | of use of trac   | estd.     | no. of hhs. reporting cultivation of a crop |      |         |                   |        |
|---------------|------------------|--------|------------------|-----------|---|------|---------|-------------------|--------|
| ownership     | by hired tractor |        | by other tractor |           | not   | all  | area    | in the crop-group |        |
| holding (ha)  | entirely         | partly | entirely         | partly    | used  |      | (00 ha) | estd.(00)         | sample |
| (1)           | (2)              | (3)    | (4)              | (5)       | (6)   | (7)  | (8)     | (9)               | (10)   |
|               |                  |        |                  | Paddy(kha | rif)  |      |         |                   |        |
| nil (< 0.01)  | 387              | 131    | 82               | -         | 400   | 1000 | 155     | 329               | 20     |
| 00.01 - 00.20 | 423              | 52     | 61               | 17        | 448   | 1000 | 285     | 1587              | 88     |
| 00.21 - 00.50 | 377              | 135    | 45               | 12        | 428   | 1000 | 1457    | 4518              | 264    |
| 00.51 - 01.00 | 443              | 107    | 30               | 12        | 408   | 1000 | 2143    | 3534              | 201    |
| 01.01 - 02.00 | 494              | 114    | 79               | 27        | 286   | 1000 | 2579    | 2596              | 144    |
| 02.01 - 04.00 | 613              | 24     | 200              | 17        | 147   | 1000 | 1704    | 1221              | 66     |
| 04.01 - 10.00 | 396              | 50     | 396              | 44        | 114   | 1000 | 1267    | 408               | 18     |
| 10.01 & above | -                | -      | 1000             | -         | -   | 1000 | 120     | 25                | 2      |
|               |                  |        |                  | Paddy(rai | bi)   |      |         |                   |        |

Tamil Nadu

all	463	88	137	21	291	1000	9711	14219	803
nil (< 0.01)	-	-	-	-	-	-	-	-	-
00.01 - 00.20	323	21	-	-	656	1000	144	829	52
00.21 - 00.50	316	47	20	-	617	1000	886	2845	165
00.51 - 01.00	257	81	-	6	656	1000	1692	2867	150
01.01 - 02.00	348	109	53	25	465	1000	1457	1555	82
02.01 - 04.00	281	84	93	6	536	1000	939	676	34
04.01 - 10.00	422	-	578	-	-	1000	743	276	10
10.01 & above	-	-	-	-	-	-	-	-	-
all	315	72	104	9	500	1000	5861	9048	493

#### other cereals

nil (< 0.01)	1000	-	-	-	-	1000	3	15	1
00.01 - 00.20	239	27	-	-	734	1000	42	308	19
00.21 - 00.50	388	37	29	1	545	1000	589	1830	107
00.51 - 01.00	395	77	4	14	509	1000	1018	1903	102
01.01 - 02.00	388	149	20	-	442	1000	1489	1822	97
02.01 - 04.00	725	6	-	5	265	1000	1208	842	40
04.01 - 10.00	633	-	367	-	-	1000	967	310	17
10.01 & above	-	-	-	-	-	-	-	-	-

<sup>\*</sup>Note

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

all	510	62	76	4	348	1000	5316	7029	383
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\*Note

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

unic	Tent Size-class	ses of nouse		inp notaing				Tar	nil Nadu
size-class of		mode of	of use of trac	tor for tilling	g		estd.	no. of hhs. rep cultivation of	
ownership	by hired		by other t		not	all	area	in the crop-g	
holding (ha)	entirely	partly	entirely	partly	used		(00 ha)	estd.(00)	sample
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
				pulses					
nil (< 0.01)	49	-	-	-	951	1000	36	74	4
00.01 - 00.20	317	-	-	-	683	1000	43	244	14
00.21 - 00.50	247	119	13	11	611	1000	241	748	46
00.51 - 01.00	208	44	-	-	748	1000	360	600	36
01.01 - 02.00	218	156	39	23	564	1000	529	558	32
02.01 - 04.00	382	25	-	-	593	1000	291	273	16
04.01 - 10.00	220	-	82	-	698	1000	400	204	8
10.01 & above	-	-	1000	-	-	1000	20	2	1
all	242	70	40	8	640	1000	1920	2704	157
nil (< 0.01)	338	256		oil seeds	<b>s</b> 406	1000	38	88	5
00.01 - 00.20	558 256	236	-	-	406 711	1000	58 61	88 354	
00.21 - 00.50	230	50	-	-	733	1000	221	784	48
00.51 - 01.00	356	244	42	-	358	1000	484	853	
01.01 - 02.00	341	144	11	-	504	1000	506	813	51
02.01 - 04.00	511	57	104	41	287	1000	676	589	28
04.01 - 10.00	577	193	109	-	122	1000	301	201	7
10.01 & above	-	-	413	587	-	1000	127	25	2
all	390	129	75	42	364	1000	2413	3706	212
				mixed cr	ор				
nil (< 0.01)	-	-	-	-	-	-	-	-	-
00.01 - 00.20	-	-	-	-	1000	1000	3	193	11
00.21 - 00.50	320	141	-	-	539	1000	34	145	8
00.51 - 01.00	759	115	-	-	126	1000	43	138	7
01.01 - 02.00	799	56	10	-	134	1000	344	308	17
02.01 - 04.00	181	-	-	-	819	1000	106	62	5
04.01 - 10.00	-	-	-	-	1000	1000	65	16	1
10.01 & above	-	-	-	-	-	-	-	-	-

\*Note

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

\*Note

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

				ship holding				Tai	nil Nadu
								no. of hhs. re	
size-class of				tor for tilling			estd.	cultivation of	-
ownership	by hired		by other t		not	all	area	in the crop-	
holding (ha)	entirely	partly	entirely	partly	used		(00 ha)	estd.(00)	sample
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
				sugar ca	ne				
nil (< 0.01)	-	-	-	-	-	-	-	-	-
00.01 - 00.20	-	-	-	-	1000	1000	15	62	3
00.21 - 00.50	186	28	49	4	732	1000	154	495	23
00.51 - 01.00	431	146	28	-	394	1000	266	528	29
01.01 - 02.00	257	81	21	-	642	1000	385	496	23
02.01 - 04.00	333	30	195	25	418	1000	493	456	20
04.01 - 10.00	94	-	821	85	-	1000	406	153	4
10.01 & above	-	-	-	-	-	-	-	-	-
all	259	52	263	27	399	1000	1720	2190	102
				vegetabl	es				
nil (< 0.01)	-	-	1000	-	-	1000	8	41	2
00.01 - 00.20	-	72	-	-	928	1000	13	205	12
00.21 - 00.50	338	45	-	-	618	1000	124	520	30
00.51 - 01.00	426	85	-	-	488	1000	192	580	29
01.01 - 02.00	317	106	35	-	541	1000	298	561	29
02.01 - 04.00	340	-	-	-	660	1000	220	303	15
04.01 - 10.00	326	-	674	-	-	1000	24	38	2
10.01 & above	724	-	-	-	276	1000	67	47	2
all	369	58	37	-	536	1000	947	2296	121
				fodder					
nil (< 0.01)	-	-	_	-	-	-	_	-	-
00.01 - 00.20	614	-	-	-	386	1000	8	56	4
00.21 - 00.50	102	70	-	-	829	1000	55	324	18
00.51 - 01.00	464	109	-	-	427	1000	97	389	21
01.01 - 02.00	660	68	58	-	215	1000	210	423	22
02.01 - 04.00	499	140	-	-	361	1000	42	118	8
04.01 - 10.00	1000	-	-	-	-	1000	0	1	1
10.01 & above	1000	-			-	1000	48	24	1

#### Table (5.1): Cropwise per 1000 distribution of area under five major crops\* by mode of use of tractor, separately for different size-classes of household ownership holding

\*Note

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

all	572	75	26	-	327	1000	462	1335	75
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\*Note

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

size-class of		mode o	of use of trac	tor for tilling	g		estd.	no. of hhs. re cultivation of		
ownership	by hired		by other t		not	all	area	in the crop-group		
holding (ha)	entirely	partly	entirely	partly	used		(00 ha)	estd.(00)	sample	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	
				fruits & n	uts					
nil (< 0.01)	-	-	-	-	1000	1000	15	243	14	
00.01 - 00.20	-	-	-	-	1000	1000	17	693	42	
00.21 - 00.50	170	-	-	-	830	1000	240	881	57	
00.51 - 01.00	209	15	-	-	776	1000	447	938	52	
01.01 - 02.00	150	58	-	-	792	1000	367	561	29	
02.01 - 04.00	247	-	72	-	681	1000	254	229	12	
04.01 - 10.00	137	-	-	-	863	1000	264	72	4	
10.01 & above	1000	-	-	-	-	1000	193	24	1	
all	268	16	10	-	707	1000	1796	3642	211	
			C	other cash c	rops					
nil (< 0.01)	-	-	944	-	56	1000	13	40	2	
00.01 - 00.20	166	64	136	-	635	1000	42	309	18	
00.21 - 00.50	350	25	116	30	478	1000	343	1102	64	
00.51 - 01.00	342	60	147	-	451	1000	734	1470	82	
01.01 - 02.00	318	107	153	59	364	1000	954	1166	67	
02.01 - 04.00	301	14	123	20	543	1000	755	629	33	
04.01 - 10.00	346	486	49	-	120	1000	337	255	10	
10.01 & above	-	-	-	-	-	-	-	-	-	
all	323	104	132	26	415	1000	3178	4970	276	
				others						
nil (< 0.01)	_	475	263	_	261	1000	31	73	4	
00.01 - 00.20	119		- 205	_	881	1000	13	296	19	
00.21 - 00.50	119	24	23	-	795	1000	93	290	19	
00.51 - 01.00	253	-	-	-	747	1000	222	461	22	
01.01 - 02.00		22								
02.01 - 02.00	332	22	- 205	-	646 365	1000	165 262	239	13	
02.01 - 04.00 04.01 - 10.00	327 687	-	285	23	365 313	1000 1000	262 42	161 56	9 3	
10.01 & above	- 007	-	1000	-	515	1000	42 27	2	1	
	-	-	1000	-	-	1000	21	2	1	

\*Note

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

all	282	24	131	7	555	1000	855	1563	87
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\*Note

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

								no. of hhs. rej	Tripura porting
size-class of		mode	of use of trac	tor for tilling	7		estd.	cultivation of	a crop
ownership	by hired	tractor	by other tractor		not	all	area	in the crop-g	group
holding (ha)	entirely	partly	entirely	partly	used		(00 ha)	estd.(00)	sample
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
				Paddy(kha	urif)				
nil (< 0.01)	-	-	-	284	716	1000	14	28	5
00.01 - 00.20	355	23	23	25	574	1000	30	249	51
00.21 - 00.50	338	49	25	-	587	1000	141	545	114
00.51 - 01.00	305	25	94	-	575	1000	276	515	107
01.01 - 02.00	276	105	-	-	619	1000	198	197	36
02.01 - 04.00	205	-	329	-	466	1000	80	61	14
04.01 - 10.00	-	-	-	-	1000	1000	26	8	2
10.01 & above	-	-	-	-	-	-	-	-	-
all	280	46	74	6	594	1000	766	1602	329
				Paddy(ra	bi)				
nil (< 0.01)	-	-	-	-	1000	1000	0	15	3
00.01 - 00.20	113	-	13	-	873	1000	12	62	14
00.21 - 00.50	242	69	30	54	606	1000	134	423	86
00.51 - 01.00	181	71	23	80	645	1000	143	291	61
01.01 - 02.00	208	135	-	13	644	1000	69	91	20
02.01 - 04.00	51	-	510	-	439	1000	43	62	14
04.01 - 10.00	-	-	-	-	1000	1000	3	3	1
10.01 & above	-	-	-	-	-	-	-	-	-
all	188	71	73	48	619	1000	404	948	199
				vegetabl	es				
nil (< 0.01)	-	-	-	1000	-	1000	1	5	1
00.01 - 00.20	15	-	-	-	985	1000	20	231	59
00.21 - 00.50	143	-	-	5	852	1000	35	268	60
00.51 - 01.00	228	11	68	-	694	1000	58	263	5
01.01 - 02.00	283	57	_	-	660	1000	29	87	18
01.01 - 02.00	62	75	692	-	171	1000	29	37	10
04.01 - 10.00	-	-		-	- 1/1	-	<u>-</u>	-	•
10.01 & above									

\*Note

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

\*Note

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

								no. of hhs. rej	
size-class of		mode	of use of trac	estd.		ation of a crop			
ownership	by hired tractor		by other t	ractor	not	all	area	in the crop-	group
holding (ha)	entirely	partly	entirely	partly	used		(00 ha)	estd.(00)	sample
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
				Paddy(kha	erif)				
nil (< 0.01)	502	30	-	-	468	1000	150	275	11
00.01 - 00.20	512	83	20	1	384	1000	2674	20971	974
00.21 - 00.50	575	96	9	2	317	1000	8912	36921	1463
00.51 - 01.00	515	140	38	3	303	1000	13499	28650	1176
01.01 - 02.00	531	129	59	4	278	1000	15365	20063	806
02.01 - 04.00	468	156	200	1	176	1000	11778	8681	380
04.01 - 10.00	272	92	482	26	128	1000	6754	2778	123
10.01 & above	409	-	591	-	-	1000	1008	240	11
all	490	123	129	5	253	1000	60141	118579	4944
				Paddy(ra)	bi)				
nil (< 0.01)	-	-	-	-	-	-	-	-	-
00.01 - 00.20	682	24	-	-	294	1000	45	503	28
00.21 - 00.50	555	19	-	-	426	1000	184	792	34
00.51 - 01.00	398	325	-	-	277	1000	231	525	24
01.01 - 02.00	683	2	27	-	288	1000	319	436	16
02.01 - 04.00	491	184	144	-	181	1000	297	198	8
04.01 - 10.00	-	-	1000	-	-	1000	329	73	3
10.01 & above	-	-	-	-	-	-	-	-	-
all	419	96	271	-	214	1000	1405	2527	113
				wheat					
nil (< 0.01)	673	57	-	-	270	1000	354	498	22
00.01 - 00.20	544	94	12	1	349	1000	3407	26262	1233
00.21 - 00.50	617	78	13	2	290	1000	12226	47255	1927
00.51 - 01.00	578	106	34	2	280	1000	19350	38459	1584
01.01 - 02.00	568	111	65	3	252	1000	23413	28076	1145
02.01 - 04.00	542	111	175	2	162	1000	20404	13553	584
04.01 - 10.00	315	102	452	25	102	1000	13696	4867	219
10.01 & above	240	- 102	4 <i>32</i> 760	-	-	1000	1761	349	1
10.01 & 00000	240	-	700	_	-	1000	1701	577	1.

\*Note

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

\*Note

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

			choid owners	mp norung				Uttar	Pradesh
size-class of		mode of	of use of trac	estd.	no. of hhs. reporting cultivation of a crop				
ownership	by hired tractor			by other tractor		all	area	in the crop-	-
holding (ha)	entirely	partly	entirely	partly	used		(00 ha)	estd.(00)	sample
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
				other cere	eals				
nil (< 0.01)	1000	-	-	-	-	1000	123	213	10
00.01 - 00.20	565	25	-	1	409	1000	738	7472	340
00.21 - 00.50	568	33	23	1	375	1000	3213	18714	606
00.51 - 01.00	605	50	14	0	330	1000	4988	14818	567
01.01 - 02.00	607	55	48	5	285	1000	6599	11736	442
02.01 - 04.00	606	63	127	5	199	1000	6240	5883	245
04.01 - 10.00	309	51	496	-	143	1000	4374	2130	97
10.01 & above	559	-	441	-	-	1000	573	285	13
all	553	51	137	3	257	1000	26849	61251	2320
				pulses					
nil (< 0.01)	931	-	-	-	69	1000	143	101	6
00.01 - 00.20	345	29	0	0	626	1000	460	4694	205
00.21 - 00.50	419	36	10	2	533	1000	1597	17189	547
00.51 - 01.00	476	70	33	1	421	1000	2954	16035	630
01.01 - 02.00	490	79	58	2	370	1000	4154	12397	492
02.01 - 04.00	377	93	200	13	317	1000	3980	6295	271
04.01 - 10.00	232	142	368	36	221	1000	4569	3086	141
10.01 & above	199	-	801	-	-	1000	885	287	14
all	381	87	189	12	331	1000	18741	60084	2306
				oil seeds	5				
nil (< 0.01)	765	-	-	-	235	1000	66	156	7
00.01 - 00.20	383	56	-	-	561	1000	76	1531	44
00.21 - 00.50	406	34	18	-	543	1000	567	9192	167
00.51 - 01.00	483	60	36	3	418	1000	1120	6978	228
01.01 - 02.00	544	59	63	-	335	1000	2285	6492	223
02.01 - 04.00	577	76	163	5	179	1000	2131	3480	151
04.01 - 10.00	313	49	531	8	99	1000	1612	1552	70
10.01 & above	20	_	980	_		1000	318	129	7

\*Note

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

\*Note

<sup>1.</sup> Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

<sup>2.</sup> The set of 5 major crops is not a fixed set but varies from household to household; for any particular household it is understood as the 5 most important field crops cultivated, in terms of value of production, by the household in 1997-98, from among a list of crop-season combinations involving 12 crops and crop-groups spanning the entire range of crops cultivated in the country.

	tent size-class			1 8				Uttar	Pradesh	
size-class of		mode o	no. of hhs. reporting cultivation of a crop							
ownership	by hired		by other t		not	all	estd. area	in the crop-g	-	
holding (ha)	entirely	partly	entirely	partly	used	uii	(00 ha)	estd.(00)	sample	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	
				mixed cr	ор					
nil (< 0.01)	827	-	-	-	173	1000	36	101	5	
00.01 - 00.20	590	37	-	-	373	1000	122	1571	70	
00.21 - 00.50	472	75	-	2	451	1000	403	2478	113	
00.51 - 01.00	670	68	5	8	249	1000	951	3179	131	
01.01 - 02.00	525	44	14	4	413	1000	1328	2807	124	
02.01 - 04.00	403	122	93	46	338	1000	1214	1609	73	
04.01 - 10.00	199	261	301	35	204	1000	932	619	29	
10.01 & above	-	-	1000	-	-	1000	94	53	3	
all	453	108	100	20	319	1000	5079	12416	548	
nil (< 0.01)	486	514	_	sugar ca		1000	20	55	2	
00.01 - 00.20	480 437	133	-	-	430	1000	20 64	723	38	
00.01 - 00.20	485	102	15	2	430 396	1000	758	5669	263	
00.51 - 01.00	532	102	62	10	286	1000	1975	8789	377	
01.01 - 02.00	515	126	143	9	206	1000	3812	8413	361	
02.01 - 04.00	411	142	254	13	180	1000	4418	5041	218	
04.01 - 10.00	147	111	648	55	39	1000	3369	2006	86	
10.01 & above	746	-	181	-	73	1000	391	113	6	
all	407	121	274	20	178	1000	14807	30809	1351	
				vegetable	es					
nil (< 0.01)	887	_	-	64	49	1000	39	87	5	
00.01 - 00.20	431	34	10	2	523	1000	280	3771	185	
0.21 - 00.50	594	41	1	1	363	1000	718	6594	319	
00.51 - 01.00	532	47	18	7	396	1000	1156	7233	335	
01.01 - 02.00	485	33	61	1	419	1000	1362	5106	231	
02.01 - 04.00	542	30	244	5	178	1000	1251	2492	116	
04.01 - 10.00	123	13	718	-	146	1000	743	796	37	
10.01 & above	-	-	1000			1000	27	37	2	

\*Note

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

\*Note

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

unite	ient size eius	ses of nous	enola owners	inp notaing				Uttar	Pradesh
size-class of		mode	of use of tract	estd.	no. of hhs. reporting cultivation of a crop				
ownership	by hired			by other tractor		all	area	in the crop-group	
holding (ha)	entirely	partly	entirely	partly	not used		(00 ha)	estd.(00)	sample
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
				fodder					
nil (< 0.01)	863	-	-	-	137	1000	8	74	5
00.01 - 00.20	707	20	-	1	272	1000	169	2311	113
00.21 - 00.50	713	27	33	11	217	1000	887	7690	349
00.51 - 01.00	644	49	52	1	254	1000	1801	11558	472
01.01 - 02.00	582	67	85	1	266	1000	2715	10463	426
02.01 - 04.00	549	51	244	5	152	1000	2639	6231	257
04.01 - 10.00	268	55	561	34	81	1000	1227	2021	89
10.01 & above	579	-	421	-	-	1000	288	165	8
all	559	51	185	7	197	1000	9734	40513	1719
				fruits & n	uts				
nil (< 0.01)	-	-	-	-	-	-	-	-	-
00.01 - 00.20	370	115	-	-	515	1000	36	254	10
00.21 - 00.50	387	143	-	-	470	1000	91	496	23
00.51 - 01.00	244	172	54	4	525	1000	179	688	31
01.01 - 02.00	462	-	16	26	496	1000	191	597	24
02.01 - 04.00	147	-	345	-	508	1000	162	331	15
04.01 - 10.00	391	-	174	-	435	1000	195	137	6
10.01 & above	254	-	-	-	746	1000	35	62	2
all	325	54	115	7	499	1000	890	2565	111
			other ca	sh crops					
nil (< 0.01)	1000	-	-	-	-	1000	1	18	1
00.01 - 00.20	532	16	330	-	123	1000	118	521	25
00.21 - 00.50	761	50	8	-	181	1000	229	1152	46
00.51 - 01.00	566	114	26	6	288	1000	479	1630	69
01.01 - 02.00	403	256	73	-	268	1000	696	1572	59
02.01 - 04.00	412	269	224	-	95	1000	489	684	27
04.01 - 10.00	292	117	129	-	462	1000	410	306	14
10.01 & above	582	-	418	-	-	1000	207	69	3
all	468	162	135	1	234	1000	2629	5952	244

\*Note

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

	fent size eius	Ses of nous		sinp noruing				Utta	ar Pradesh
size-class of		mode	of use of trac	estd.	no. of hhs. reporting cultivation of a crop				
ownership	by hired	tractor	by other	tractor	not	all	area	in the crop-	group
holding (ha)	entirely	partly	entirely	partly	used		(00 ha)	estd.(00)	sample
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
				others					
nil (< 0.01)	73	-	-	927	-	1000	3	37	2
00.01 - 00.20	694	75	5	-	226	1000	36	567	28
00.21 - 00.50	672	11	67	-	250	1000	197	962	41
00.51 - 01.00	514	90	86	3	308	1000	383	1490	65
01.01 - 02.00	372	152	182	-	294	1000	456	1363	59
02.01 - 04.00	338	131	358	-	173	1000	465	885	37
04.01 - 10.00	11	-	989	-	-	1000	183	219	9
10.01 & above	-	-	-	-	-	-	-	-	-
all	397	98	277	2	226	1000	1721	5523	241

Table (5.1): Cropwise per 1000 distribution of area under five major crops* by mode of use of tractor, separately for	or
different size-classes of household ownership holding	

\*Note

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

size-class of		mode (	of use of trac	estd.	no. of hhs. reporting cultivation of a crop				
ownership	by hired		by other t		not	all	area	in the crop-	-
holding (ha)	entirely	partly	entirely	partly	used	an	(00  ha)	estd.(00)	sample
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
				Paddy(kha	erif)				
nil (< 0.01)	547	53	78	-	323	1000	1262	1686	72
00.01 - 00.20	382	54	3	4	557	1000	1525	11922	596
00.21 - 00.50	318	93	1	3	585	1000	5165	17534	868
00.51 - 01.00	259	114	11	13	604	1000	8326	13641	605
01.01 - 02.00	209	185	19	17	570	1000	7167	6338	286
02.01 - 04.00	293	208	36	22	440	1000	4440	2031	200 91
04.01 - 10.00	77	825	-	-	98	1000	466	142	7
10.01 & above	-	1000	-	-	-	1000	10	24	1
all	279	149	17	12	543	1000	28359	53318	2526
				Paddy(ra)	bi)				
nil (< 0.01)	698	-	-	-	302	1000	66	310	14
00.01 - 00.20	516	104	4	0	376	1000	525	4101	195
00.21 - 00.50	422	144	0	16	418	1000	1682	7016	326
00.51 - 01.00	343	157	32	15	453	1000	2408	5010	211
01.01 - 02.00	253	285	51	2	409	1000	1637	2126	94
02.01 - 04.00	267	291	136	73	233	1000	992	791	33
04.01 - 10.00	136	53	327	-	484	1000	189	111	5
10.01 & above	-	-	- 48	- 18	401	- 1000	- 7499	- 19464	- 070
all	341	192	48	18	401	1000	/499	19404	878
				wheat					
nil (< 0.01)	72	545	-	-	383	1000	40	212	11
00.01 - 00.20	209	67	-	-	723	1000	176	1265	64
00.21 - 00.50	207	168	-	8	616	1000	545	2878	136
00.51 - 01.00	113	189	2	15	682	1000	859	3031	130
01.01 - 02.00	96	275	11	43	576	1000	839	2041	89
02.01 - 04.00	373	195	39	17	375	1000	538	682	29
04.01 - 10.00	549	-	-	-	451	1000	65	40	2
10.01 & above		1000			-	1000	5	24	1

\*Note

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

\*Note

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

	- مام معر	fues of the -	tor for 411	~		actid	no. of hhs. rep	porting
h 1								
								group sample
			1 2		(7)			(10)
(=/	(=)			(*)				(20)
			other cer	eals				
-	-	-	-	-	-	-	-	-
234	-	-	-	766	1000	24	446	21
	-	-	-					16
74	41	-	-	885	1000	77	284	12
-	-	-	-	1000	1000	33	100	4
-	828	-	-	172	1000	72	105	4
-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-
127	243	-	-	630	1000	257	1227	57
			pulses					
740	-	-	-	260	1000	9	69	3
409	80	-	-	511	1000	40	485	23
317	18	-	7	658	1000	126	914	49
218	59	-	36	687	1000	189	956	38
66	124	-	65	746	1000	167	622	25
69	85	30	77			79		10
-	1000	-	-	-	1000	70	21	1
-	-	-	-	-	-	-	-	-
177	168	4	36	615	1000	680	3297	149
			oil seed	S				
	1000				1000	2	22	
-		-	-	-				1
		-						44 95
		- 2						95 112
			50					61
	267	4	-					23
95	-	-	-	905	1000	94	62	3
	entirely (2) (2) (2) (2) (2) (2) (2) (2) (2) (2)	by hired tractor           entirely         partly           (2)         (3)           (2)         (3)           (2)         (3)           (2)         (3)           (2)         (3)           (2)         (3)           (2)         (3)           (3)         (3)           (4)         -           (1)         -           (2)         (3)           (4)         -           (3)         -           (3)         -           (4)         -           -         -           127         243           740         -           -         -           127         243           740         -           409         80           317         18           218         59           66         124           69         85           -         1000           -         -           177         168           -         1000           -         -           177         168	by hired tractor         by other t           entirely         partly         entirely           (2)         (3)         (4)           (2)         (3)         (4)           (2)         (3)         (4)           (2)         (3)         (4)           (2)         (3)         (4)           (2)         (3)         (4)           (2)         (3)         (4)           (2)         (3)         (4)           (2)         (3)         (4)           (2)         (3)         (4)           (3)         (4)         -           (1)         -         -           (1)         -         -           (2)         (2)         (3)         (4)           (1)         -         -           (2)         (2)         (3)         -           (2)         (2)         (3)         -           (2)         (2)         (2)         -           (2)         (2)         (3)         -           (2)         (3)         -         -           (3)         (2)         (3)         -           (2) </td <td>by hired tractor         by other tractor           entirely         partly         entirely         partly           (2)         (3)         (4)         (5)           other cero           -         -         -           234         -         -           419         -         -           74         41         -           -         828         -           -         828         -           -         -         -           127         243         -           pulses           740         -         -           127         243         -           pulses         -           740         -         -           127         243         -           pulses         -           740         -         -           317         18         -         7           218         59         -         36           66         124         -         65           69         85         30         77           1000         -         -         -</td> <td>entirely         partly         entirely         partly         used           (2)         (3)         (4)         (5)         (6)           (2)         (3)         (4)         (5)         (6)           (2)         (3)         (4)         (5)         (6)           (2)         (3)         (4)         (5)         (6)           (2)         (3)         (4)         (5)         (6)           (2)         (3)         (4)         (5)         (6)           (2)         (3)         (4)         (5)         (6)           (2)         (3)         (4)         (5)         (6)           (2)         (3)         (4)         (5)         (6)           (100)         -         -         581           (1)         (1)         (1)         (1)         (1)           (1)         (1)         (1)         (1)         (1)           (1)         (1)         (1)         (1)         (1)           (2)         (2)         (3)         (7)         (3)           (2)         (3)         (1)         (1)         (1)         (1)           (2)         (2)</td> <td>by hired tractor         by other tractor         not         all           entirely         partly         entirely         partly         used           (2)         (3)         (4)         (5)         (6)         (7)           other cereals           -         -         -         -         -           234         -         -         766         1000           419         -         -         581         1000           74         41         -         885         1000           -         -         -         1000         1000           -         -         -         -         -         -           127         243         -         -         630         1000           127         243         -         -         630         1000           127         243         -         -         511         1000           127         243         -         -         630         1000           128         59         -         36         687         1000           218         59         -         36         687         1000&lt;</td> <td>by hired tractor         by other tractor         not         all         area (00 ha)           (2)         (3)         (4)         (5)         (6)         (7)         (8)           (2)         (3)         (4)         (5)         (6)         (7)         (8)           (2)         (3)         (4)         (5)         (6)         (7)         (8)           (2)         (3)         (4)         (5)         (6)         (7)         (8)           (2)         (3)         (4)         (5)         (6)         (7)         (8)           (2)         (3)         (4)         (5)         (6)         (7)         (8)           (2)         (3)         (4)         (5)         (6)         (70)         24           (4)         -         -         581         1000         51           74         41         -         -         885         1000         77           -         -         -         1000         1000         33         33           -         -         -         1000         257           -         -         -         -         -         -         -</td> <td>mode of use of tractor for tilling         estd.         cultivation of in the crop-3 (00 ha)           by hired tractor         by other tractor         not         all         area         in the crop-3 (00 ha)           (2)         (3)         (4)         (5)         (6)         (7)         (8)         (9)           (2)         (3)         (4)         (5)         (6)         (7)         (8)         (9)           (2)         (3)         (4)         (5)         (6)         (7)         (8)         (9)           (2)         (3)         (4)         (5)         (6)         (7)         (8)         (9)           (2)         (3)         (4)         (5)         (6)         (7)         (8)         (9)           (2)         (3)         (4)         (-         (-         766         1000         24         446           (4)         (-         (-         1000         1000         33         100           (2)         (2)         (2)         (2)         (2)         (2)         (2)         (2)           (4)         (-         (-         (100)         (100)         (2)         (2)         (2)           (4)</td>	by hired tractor         by other tractor           entirely         partly         entirely         partly           (2)         (3)         (4)         (5)           other cero           -         -         -           234         -         -           419         -         -           74         41         -           -         828         -           -         828         -           -         -         -           127         243         -           pulses           740         -         -           127         243         -           pulses         -           740         -         -           127         243         -           pulses         -           740         -         -           317         18         -         7           218         59         -         36           66         124         -         65           69         85         30         77           1000         -         -         -	entirely         partly         entirely         partly         used           (2)         (3)         (4)         (5)         (6)           (2)         (3)         (4)         (5)         (6)           (2)         (3)         (4)         (5)         (6)           (2)         (3)         (4)         (5)         (6)           (2)         (3)         (4)         (5)         (6)           (2)         (3)         (4)         (5)         (6)           (2)         (3)         (4)         (5)         (6)           (2)         (3)         (4)         (5)         (6)           (2)         (3)         (4)         (5)         (6)           (100)         -         -         581           (1)         (1)         (1)         (1)         (1)           (1)         (1)         (1)         (1)         (1)           (1)         (1)         (1)         (1)         (1)           (2)         (2)         (3)         (7)         (3)           (2)         (3)         (1)         (1)         (1)         (1)           (2)         (2)	by hired tractor         by other tractor         not         all           entirely         partly         entirely         partly         used           (2)         (3)         (4)         (5)         (6)         (7)           other cereals           -         -         -         -         -           234         -         -         766         1000           419         -         -         581         1000           74         41         -         885         1000           -         -         -         1000         1000           -         -         -         -         -         -           127         243         -         -         630         1000           127         243         -         -         630         1000           127         243         -         -         511         1000           127         243         -         -         630         1000           128         59         -         36         687         1000           218         59         -         36         687         1000<	by hired tractor         by other tractor         not         all         area (00 ha)           (2)         (3)         (4)         (5)         (6)         (7)         (8)           (2)         (3)         (4)         (5)         (6)         (7)         (8)           (2)         (3)         (4)         (5)         (6)         (7)         (8)           (2)         (3)         (4)         (5)         (6)         (7)         (8)           (2)         (3)         (4)         (5)         (6)         (7)         (8)           (2)         (3)         (4)         (5)         (6)         (7)         (8)           (2)         (3)         (4)         (5)         (6)         (70)         24           (4)         -         -         581         1000         51           74         41         -         -         885         1000         77           -         -         -         1000         1000         33         33           -         -         -         1000         257           -         -         -         -         -         -         -	mode of use of tractor for tilling         estd.         cultivation of in the crop-3 (00 ha)           by hired tractor         by other tractor         not         all         area         in the crop-3 (00 ha)           (2)         (3)         (4)         (5)         (6)         (7)         (8)         (9)           (2)         (3)         (4)         (5)         (6)         (7)         (8)         (9)           (2)         (3)         (4)         (5)         (6)         (7)         (8)         (9)           (2)         (3)         (4)         (5)         (6)         (7)         (8)         (9)           (2)         (3)         (4)         (5)         (6)         (7)         (8)         (9)           (2)         (3)         (4)         (-         (-         766         1000         24         446           (4)         (-         (-         1000         1000         33         100           (2)         (2)         (2)         (2)         (2)         (2)         (2)         (2)           (4)         (-         (-         (100)         (100)         (2)         (2)         (2)           (4)

\*Note

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

all	270	123	5	21	581	1000	1811	7297	339
all	270	123	5	<u> </u>	501	1000	1011	1291	559

\*Note

<sup>1.</sup> Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

<sup>2.</sup> The set of 5 major crops is not a fixed set but varies from household to household; for any particular household it is understood as the 5 most important field crops cultivated, in terms of value of production, by the household in 1997-98, from among a list of crop-season combinations involving 12 crops and crop-groups spanning the entire range of crops cultivated in the country.

				sinp notating				Wes	t Bengal
size-class of		mode of	of use of trac	tor for tilling	5		estd.	no. of hhs. rep cultivation of	
ownership	by hired		by other t		not	all	area	in the crop-g	
holding (ha)	entirely	partly	entirely	partly	used		(00 ha)	estd.(00)	sample
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
				mixed cr	op				
nil (< 0.01)	-	-	-	-	-	-	-	-	-
00.01 - 00.20	-	-	-	-	1000	1000	3	97	5
00.21 - 00.50	-	-	-	-	1000	1000	23	161	10
00.51 - 01.00	-	-	-	-	1000	1000	59	269	10
01.01 - 02.00	-	176	-	-	824	1000	63	154	6
02.01 - 04.00	-	-	-	-	-	-	-	-	-
04.01 - 10.00	-	-	-	-	1000	1000	48	24	1
10.01 & above	-	-	-	-	-	-	-	-	-
all	-	56	-	-	944	1000	195	704	32
nil (< 0.01)	1000			sugar ca		1000	2	25	1
00.01 - 00.20	1000	-	-	-	- 1000	1000 1000	3 2	25 23	1
00.01 - 00.20	182	-	-	-	818	1000	16	23 160	1 7
00.51 - 01.00	- 162	-	-	-	1000	1000	10 56	253	11
		026							
01.01 - 02.00 02.01 - 04.00	-	236	-	-	764	1000	17 30	83 63	4
02.01 - 04.00	-	-	-	-	1000	1000	- 50		4
10.01 & above	-	-	-	-	-	-	-	-	-
all	51	32	_	_	917	1000	124	607	28
				vegetabl	es				
nil (< 0.01)	515	90	271	-	124	1000	362	738	28
00.01 - 00.20	313	63	15	9	599	1000	308	3464	162
00.21 - 00.50	387	63	-	-	550	1000	601	4296	211
00.51 - 01.00	335	106	0	6	552	1000	1189	5011	221
01.01 - 02.00	253	155	20	39	533	1000	848	2603	113
02.01 - 04.00	151	54	16	161	617	1000	414	1085	46
04.01 - 10.00	-	889		-	111	1000	142	36	2
10.01 & above	-	1000	_	_	-	1000	64	24	1

\*Note

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

\*Note

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

size-class of		moda	of use of tract	tor for tillin	~		estd.	no. of hhs. rep cultivation of	0
ownership	by hired		by other t		not	all		in the crop-g	
holding (ha)	entirely	partly	entirely	partly	used	all	area (00 ha)	estd.(00)	sample
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
				fruits & n	uts				
nil (< 0.01)	834	-	-	-	166	1000	48	104	3
00.01 - 00.20	436	-	58	-	505	1000	33	413	20
00.21 - 00.50	939	-	-	-	61	1000	44	216	11
00.51 - 01.00	710	-	-	-	290	1000	16	171	6
01.01 - 02.00	519	196	-	-	284	1000	51	252	10
02.01 - 04.00	183	667	-	-	149	1000	60	97	4
04.01 - 10.00	-	-	-	-	-	-	-	-	-
10.01 & above	-	-	-	-	-	-	-	-	-
all	573	199	8	-	221	1000	252	1254	54
1(.001)			0	ther cash c	-	1000	2	21	
nil (< 0.01)	-	-	-	-	1000	1000	2	21	1
00.01 - 00.20	269	92	-	-	639	1000	138	1402	71
00.21 - 00.50 00.51 - 01.00	124 127	176 145	- 4	4 12	697 712	1000 1000	592 1375	3449 4130	170 174
01.01 - 02.00	83	185	15	-	717	1000	963	1924	81
02.01 - 04.00	158	204	-	17	621	1000	533	557	23
04.01 - 10.00 10.01 & above	133	520 1000	-	-	348	1000	194 5	130 24	6
all	125	1000 186	- 5	- 7	- 676	1000 1000	3802	11638	1 527
d11	125	180	5	7	070	1000	3802	11058	J21
				others					
nil (< 0.01)	-	-	-	-	-	-	-	-	-
00.01 - 00.20	520	-	-	-	480	1000	52	555	26
00.21 - 00.50	255	91	-	-	654	1000	154	769	39
00.51 - 01.00	273	-	-	69	658	1000	257	576	22
01.01 - 02.00	106	378	-	-	515	1000	260	406	17
02.01 - 04.00	330	-	-	-	670	1000	22	72	4
04.01 - 10.00	-	-	-	1000	-	1000	25	25	1
10.01 & above	-	-	-	-	-	-	-	-	

\*Note

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

\*Note

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

unie	ient size-cias	ses of nouse	chold owners	inp notaing				A. & N	. Islands
size-class of		mode	of use of trac	tor for tilling	5		estd.	no. of hhs. rep cultivation of	
ownership	by hired	tractor	by other t	ractor	not	all	area	in the crop-g	group
holding (ha)	entirely	partly	entirely	partly	used		(00 ha)	estd.(00)	sample
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
				Paddy(kha	ırif)				
nil (< 0.01)	-	-	-	-	1000	1000	28	18	15
00.01 - 00.20	-	-	-	-	1000	1000	0	1	1
00.21 - 00.50	-	-	-	-	1000	1000	1	4	4
00.51 - 01.00	152	50	-	-	798	1000	7	12	11
01.01 - 02.00	208	125	-	-	667	1000	17	15	15
02.01 - 04.00	125	272	-	35	568	1000	40	20	20
04.01 - 10.00	299	-	-	_	701	1000	15	6	5
10.01 & above	-	-	-	-	-	-	-	-	-
all	130	124	-	13	734	1000	109	76	71
nil (< 0.01)				pulses					
00.01 - 00.20	-	-	-	-	-	-	-	-	-
00.01 - 00.20	-	-	-	-	- 1000	- 1000	- 1	3	- 2
00.21 - 00.30	-	-	-	-	1000	1000	1	8	3
01.01 - 02.00	-	-	-	-	1000	1000	2	6	7
02.01 - 04.00 04.01 - 10.00	-	-	-	-	1000	1000	7	12	11
10.01 & above	-	-	-	-	1000	1000	2	3	2
all	-	-	-	-	1000	1000	12	32	29
				vegetabl	es				
mil(< 0.01)					1000	1000	10	21	14
nil (< 0.01) 00.01 - 00.20	-	-	-	-	1000 1000	1000 1000	10 0	21 8	14 7
00.01 - 00.20	-	-	-	-	1000	1000	0	8	3
00.21 - 00.30	-	-	-	-	1000	1000	1	2 6	3 7
	-	-	-						_
01.01 - 02.00	-	-	-	-	1000	1000	3	9	7
02.01 - 04.00	-	-	-	41	959	1000	2	5	4
04.01 - 10.00	-	-	-	-	1000	1000	1	3	3
10.01 & above	-	-	-	-	-	-	-	-	-

\*Note

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

all	4	996 1000	17	54	45
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\*Note

<sup>1.</sup> Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

<sup>2.</sup> The set of 5 major crops is not a fixed set but varies from household to household; for any particular household it is understood as the 5 most important field crops cultivated, in terms of value of production, by the household in 1997-98, from among a list of crop-season combinations involving 12 crops and crop-groups spanning the entire range of crops cultivated in the country.

								no. of hhs. re	India porting
size-class of		mode	of use of trac	ctor for tilling	Ţ		estd.	cultivation of	
ownership	by hired		by other				area	in the crop-	-
holding (ha)	entirely	partly	entirely	partly	used	uii	(00 ha)	estd.(00)	sample
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
				Paddy(kha	erif)				
nil (< 0.01)	299	68	52	4	577	1000	4764	7446	542
00.01 - 00.20	296	94	19	10	580	1000	9408	66554	3780
00.21 - 00.50	286	95	20	4	595	1000	36752	123865	7021
00.51 - 01.00	240	103	22	9	625	1000	64934	113655	6397
01.01 - 02.00	235	105	39	11	610	1000	89015	90706	5282
02.01 - 04.00	216	116	106	16	547	1000	79079	46559	2930
04.01 - 10.00	166	109	281	21	423	1000	50053	16667	1107
10.01 & above	84	30	622	37	227	1000	14066	2092	133
all	223	103	107	14	553	1000	348071	467544	27192
				Paddy(ral	bi)				
nil (< 0.01)	593	_	25	-	383	1000	452	839	88
00.01 - 00.20	476	99	12	1	411	1000	1137	8094	465
00.21 - 00.50	384	100	11	9	496	1000	4565	16699	1000
00.51 - 01.00	285	119	23	15	559	1000	8223	15559	943
01.01 - 02.00	323	130	44	12	492	1000	8965	10515	700
02.01 - 04.00	294	159	85	32	430	1000	7758	5468	515
04.01 - 10.00	185	160	414	59	181	1000	4897	2057	121
10.01 & above	65	-	679	197	59	1000	288	117	7
all	303	130	97	24	445	1000	36284	59349	3839
				wheat					
nil (< 0.01)	423	105	122	-	350	1000	1522	2735	156
00.01 - 00.20	458	124	19 20	11	388	1000	6437	44720	2483
00.21 - 00.50	492	101	20 25	4	383	1000	23488	85062	4513
00.51 - 01.00	452	118	35	5	390	1000	39873	78670	4112
01.01 - 02.00	445	126	67	6	357	1000	62563	73999	3905
02.01 - 04.00	389	125	168	12	306	1000	69354	47764	2568
04.01 - 10.00	295	95	353	22	234	1000	64309	23752	1287
10.01 & above	141	26	766	11	56	1000	21795	3504	213

Table (5.1): Cropwise per 1000 distribution of area under five major crops* by mode of use of tractor, separately for	or
different size-classes of household ownership holding	

\*Note

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

all 380 108 198	11 302	1000 289342	360207 19237
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\*Note

<sup>1.</sup> Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

<sup>2.</sup> The set of 5 major crops is not a fixed set but varies from household to household; for any particular household it is understood as the 5 most important field crops cultivated, in terms of value of production, by the household in 1997-98, from among a list of crop-season combinations involving 12 crops and crop-groups spanning the entire range of crops cultivated in the country.

size-class of		mode o	of use of trac	tor for tilling	g		estd.	no. of hhs. re cultivation of	
ownership	by hired		by other t		not	all	area	in the crop-	-
holding (ha)	entirely	partly	entirely	partly	used	uii	(00 ha)	estd.(00)	sample
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
				other cere	eals				
nil (< 0.01)	357	56	18	-	569	1000	1563	2753	243
00.01 - 00.20	341	91	5	1	562	1000	2274	19642	1377
00.21 - 00.50	367	64	20	4	545	1000	12754	53201	3173
00.51 - 01.00	298	74	15	4	609	1000	24388	56247	3281
01.01 - 02.00	304	62	31	4	599	1000	46312	63774	3573
02.01 - 04.00	314	78	69	8	530	1000	58100	45200	2673
04.01 - 10.00	310	91	132	23	444	1000	60621	25511	1407
10.01 & above	313	90	308	42	248	1000	23833	4610	255
all	313	78	93	14	502	1000	229847	270936	15982
				pulses					
nil (< 0.01)	344	131	92	-	433	1000	722	1339	137
00.01 - 00.20	305	23	53	0	619	1000	1144	9974	577
00.21 - 00.50 00.51 - 01.00	236 240	43 53	43 21	5 6	673 680	1000 1000	5112 11456	35334 44279	1663 2224
01.01 - 02.00	243	71	24	8	655	1000	22181	49252	2542
02.01 - 04.00	246	72	73	11	598	1000	27889	35452	1885
04.01 - 10.00	254 309	106 113	145	31	464	1000	32576	19339	1040
10.01 & above all	255	83	382 112	30 17	165 534	1000	12611 113692	3283 198251	181 10249
all	233	83	112	17	554	1000	113092	198231	10249
				oil seed	5				
nil (< 0.01)	474	37	102	-	387	1000	656	782	67
00.01 - 00.20	406	136	2	1	455	1000	889	7572	424
00.21 - 00.50	307	58	16	3	616	1000	3996	23235	1082
00.51 - 01.00	365	90	19	5	521	1000	9775	29166	1488
01.01 - 02.00	322	79	31	5	563	1000	23051	36266	1829
02.01 - 04.00	321	96	86	7	490	1000	32551	29203	1505
04.01 - 10.00	306	92	175	10	416	1000	38901	17724	914
10.01 & above	183	73	537	62	145	1000	17743	3129	176

 Table (5.1): Cropwise per 1000 distribution of area under five major crops\* by mode of use of tractor, separately for different size-classes of household ownership holding

\*Note

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

\*Note

<sup>1.</sup> Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

<sup>2.</sup> The set of 5 major crops is not a fixed set but varies from household to household; for any particular household it is understood as the 5 most important field crops cultivated, in terms of value of production, by the household in 1997-98, from among a list of crop-season combinations involving 12 crops and crop-groups spanning the entire range of crops cultivated in the country.

	mode o	of use of trac	estd.	India no. of hhs. reporting cultivation of a crop in the crop-group				
by hired	tractor	-				area		
entirely	partly	entirely	partly	used		(00 ha)	estd.(00)	sample
(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
			mixed cr	op				
123	-	-	-	877	1000	242	647	108
226	25	-	4	745	1000	426	4590	400
188	102	0	18	692	1000	1741	7738	487
297	52	11	7	633	1000	4540	11095	678
333	42	18	16	591	1000	9010	12719	820
322	78	51	6	544	1000	11551	9332	660
382	73	107	13	424	1000	16697	6589	498
538	41	268	-	152	1000	5100	937	57
358	63	80	10	488	1000	49306	53648	3708
			sugar ca	ne				
625	190	-	-	185	1000	54	176	17
391	89	-	-	521	1000	177	1669	98
439	110	17	2	431	1000	1449	8460	407
457	127	50	6	359	1000	3425	12719	580
417	125	114	9	335	1000	6918	13668	633
383	94	244	15	264	1000	8429	9194	446
155	77	577	34	158	1000	7271	4394	211
360	17	478	-	145	1000	1338	431	27
345	98	271	16	270	1000	29062	50712	2419
			vegetable	es				
206	50	135	6	504	1000	842	3260	419
								1802
								2292
								2399
								2062
								1326 443
142 86	37 46	280 475	49	4/3	1000	5770	4/92	443
	entirely (2) (2) (2) (2) (2) (3) (2) (2) (3) (2) (3) (3) (3) (2) (3) (3) (3) (3) (3) (3) (3) (3) (3) (3	by hired tractorentirelypartly(2)(3)(2)(3)(2)(3)123-22625188102297523334232278382735384135863625190391894391104571274171253839415577360173459829659180362785024069221722272814257	by hired tractorby otherentirelypartlyentirely(2)(3)(4)(2)(3)(4)(2)(3)(4)12322625-188102029752113334218322785138273107538412683586380625190-39189-43911017457127504171251143839424415577577360174783459827129659135180369278506240692122172432272893	by hired tractor         by other tractor           entirely         partly         entirely         partly           (2)         (3)         (4)         (5)           mixed cr           123         -         -           226         25         -         4           188         102         0         18           297         52         11         7           333         42         18         16           322         78         51         6           382         73         107         13           538         63         80         10           sugar can           625         190         -           391         89         -         -           391         89         -         -           391         89         -         -           391         89         -         -           391         89         -         -           391         89         -         -           393         94         244         15           155         77         577         34 <td>entirely         partly         entirely         partly         used           (2)         (3)         (4)         (5)         (6)           mixed crop         mixed crop           123         -         -         877           226         25         -         4         745           188         102         0         18         692           297         52         11         7         633           333         42         18         16         591           322         78         51         6         544           382         73         107         13         424           538         63         80         10         488           625         190         -         -         185           391         89         -         521         431           457         127         50         6         359           417         125         114         9         335           383         94         244         15         264           155         77         577         34         158           360</td> <td>by hired tractor         by other tractor         not         all           entirely         partly         entirely         partly         used           (2)         (3)         (4)         (5)         (6)         (7)           (2)         (3)         (4)         (5)         (6)         (7)           mixed crop           123         -         -         877         1000           226         25         -         4         745         1000           188         102         0         18         692         1000           297         52         11         7         633         1000           313         42         18         16         591         1000           322         78         51         6         544         1000           382         73         107         13         424         1000           382         73         107         13         424         1000           391         89         -         -         521         1000           439         110         17         2         431         1000</td> <td>by hired tractor         by other tractor         not         all         area (00 ha)           entirely         partly         entirely         partly         used         (00 ha)           (2)         (3)         (4)         (5)         (6)         (7)         (8)           (2)         (3)         (4)         (5)         (6)         (7)         (8)           mixed crop           123         -         -         877         1000         242           226         25         -         4         745         1000         426           188         102         0         18         692         1000         1741           297         52         11         7         633         1000         4540           333         42         18         16         591         1000         11551           382         73         107         13         424         1000         16697           538         41         268         -         152         1000         544           391         89         -         -         521         1000         177           439</td> <td>mode of use of tractor for tilling         estd.         cultivation of in the crop- entirely           partly         entirely         partly         not         all used         area (00 ha)         in the crop- estd.(00)           (2)         (3)         (4)         (5)         (6)         (7)         (8)         (9)           (2)         (3)         (4)         (5)         (6)         (7)         (8)         (9)           (2)         (3)         (4)         (5)         (6)         (7)         (8)         (9)           (2)         (3)         (4)         (5)         (6)         (7)         (8)         (9)           (2)         (3)         (4)         (5)         (6)         (7)         (8)         (9)           (2)         (3)         (4)         (5)         (6)         (7)         (8)         (9)           (18)         (102)         (11)         (13)         (14)         (10)         (110)         (12)           (33)         42         18         16         544         (100)         1155         (9)         (17)           (33)         41         268         -         152         (100)         141</td>	entirely         partly         entirely         partly         used           (2)         (3)         (4)         (5)         (6)           mixed crop         mixed crop           123         -         -         877           226         25         -         4         745           188         102         0         18         692           297         52         11         7         633           333         42         18         16         591           322         78         51         6         544           382         73         107         13         424           538         63         80         10         488           625         190         -         -         185           391         89         -         521         431           457         127         50         6         359           417         125         114         9         335           383         94         244         15         264           155         77         577         34         158           360	by hired tractor         by other tractor         not         all           entirely         partly         entirely         partly         used           (2)         (3)         (4)         (5)         (6)         (7)           (2)         (3)         (4)         (5)         (6)         (7)           mixed crop           123         -         -         877         1000           226         25         -         4         745         1000           188         102         0         18         692         1000           297         52         11         7         633         1000           313         42         18         16         591         1000           322         78         51         6         544         1000           382         73         107         13         424         1000           382         73         107         13         424         1000           391         89         -         -         521         1000           439         110         17         2         431         1000	by hired tractor         by other tractor         not         all         area (00 ha)           entirely         partly         entirely         partly         used         (00 ha)           (2)         (3)         (4)         (5)         (6)         (7)         (8)           (2)         (3)         (4)         (5)         (6)         (7)         (8)           mixed crop           123         -         -         877         1000         242           226         25         -         4         745         1000         426           188         102         0         18         692         1000         1741           297         52         11         7         633         1000         4540           333         42         18         16         591         1000         11551           382         73         107         13         424         1000         16697           538         41         268         -         152         1000         544           391         89         -         -         521         1000         177           439	mode of use of tractor for tilling         estd.         cultivation of in the crop- entirely           partly         entirely         partly         not         all used         area (00 ha)         in the crop- estd.(00)           (2)         (3)         (4)         (5)         (6)         (7)         (8)         (9)           (2)         (3)         (4)         (5)         (6)         (7)         (8)         (9)           (2)         (3)         (4)         (5)         (6)         (7)         (8)         (9)           (2)         (3)         (4)         (5)         (6)         (7)         (8)         (9)           (2)         (3)         (4)         (5)         (6)         (7)         (8)         (9)           (2)         (3)         (4)         (5)         (6)         (7)         (8)         (9)           (18)         (102)         (11)         (13)         (14)         (10)         (110)         (12)           (33)         42         18         16         544         (100)         1155         (9)         (17)           (33)         41         268         -         152         (100)         141

Table (5.1): Cropwise per 1000 distribution of area under five major crops\* by mode of use of tractor, separately for different size-classes of household ownership holding

\*Note

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

\*Note

<sup>1.</sup> Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

<sup>2.</sup> The set of 5 major crops is not a fixed set but varies from household to household; for any particular household it is understood as the 5 most important field crops cultivated, in terms of value of production, by the household in 1997-98, from among a list of crop-season combinations involving 12 crops and crop-groups spanning the entire range of crops cultivated in the country.

				1 0					India
							estd.	no. of hhs. re	0
size-class of		mode of use of tractor for tilling						cultivation of a crop	
ownership	by hired tractor		by other tractor		not all		area	in the crop-group	
holding (ha)	entirely	partly	entirely	partly	used		(00 ha)	estd.(00)	sample
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
				fodder					
nil (< 0.01)	624	73	91	-	212	1000	170	406	32
00.01 - 00.20	625	111	9	0	254	1000	448	3842	261
00.21 - 00.50	608	38	41	8	305	1000	1885	13309	873
00.51 - 01.00	597	67	48	2	286	1000	3754	18862	1070
01.01 - 02.00	534	73	97	2	294	1000	6916	22033	1259
02.01 - 04.00	436	66	227	18	254	1000	7888	16466	946
04.01 - 10.00	328	60	423	18	171	1000	7925	9893	579
10.01 & above	452	20	458	5	65	1000	3147	1876	122
all	464	60	234	11	230	1000	32133	86687	5142
				fruits & n	uts				
nil (< 0.01)	426	-	-	-	574	1000	93	491	46
00.01 - 00.20	49	6	3	-	942	1000	660	15550	1011
00.21 - 00.50	102	15	14	1	868	1000	1263	7284	579
00.51 - 01.00	81	37	10	2	870	1000	2047	6824	539
01.01 - 02.00	131	30	44	16	779	1000	2395	5315	440
02.01 - 04.00	107	108	87	6	692	1000	2247	2613	223
04.01 - 10.00	119	36	240	94	510	1000	2263	1252	71
10.01 & above	366	-	197	0	437	1000	1181	394	19
all	134	41	92	22	711	1000	12150	39723	2928
				other cash c	rops				
nil (< 0.01)	275	96	413	-	217	1000	260	452	69
00.01 - 00.20	390	80	36	1	493	1000	1917	12100	754
00.21 - 00.50	242	71	32	17	639	1000	3538	14125	893
00.51 - 01.00	208	101	30	8	654	1000	7801	18614	1063
01.01 - 02.00	245	78	55	9	612	1000	15948	21696	1206
02.01 - 04.00	289	84	84	9	534	1000	20863	16710	905
04.01 - 10.00	300	90	201	11	397	1000	29021	11851	668
10.01 & above	215	36	405	22	321	1000	13610	2399	142

Table (5.1): Cropwise per 1000 distribution of area under five major crops* by mode of use of tractor, separately f	or
different size-classes of household ownership holding	

\*Note

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

Report no. 42 Appendix I Cultivation P	51 ractices in India								
all	268	79	156	12	486	1000	92959	97948	5700

				1 0					India
size-class of		mode	of use of trac	estd.	no. of hhs. reporting cultivation of a crop				
ownership	by hired	by hired tractor		by other tractor		all	area	in the crop-group	
holding (ha)	entirely	partly	entirely	partly	used		(00 ha)	estd.(00)	sample
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
				others	5				
nil (< 0.01)	338	119	52	16	476	1000	159	473	80
00.01 - 00.20	245	9	169	-	576	1000	330	5842	424
00.21 - 00.50	322	110	16	0	552	1000	956	5160	381
00.51 - 01.00	290	33	25	8	644	1000	2306	6972	525
01.01 - 02.00	253	110	125	11	501	1000	3369	6676	480
02.01 - 04.00	250	78	111	5	555	1000	4449	4981	355
04.01 - 10.00	456	48	221	15	260	1000	4725	2833	226
10.01 & above	373	4	345	-	278	1000	1420	563	35
all	325	65	146	9	455	1000	17715	33501	2506

\*Note

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.
| size-class of |        |      |       |         | sown (ha  |        |        |        |       | no. of fie<br>cultivat | or hhs. |
|---------------|--------|------|-------|---------|-----------|--------|--------|--------|-------|------------------------|---------|
| ownership     | pade   | -    | wheat | other   | pulses    | oil-   | fodder | others | all   | estd.                  | sample  |
| holding (ha)  | kharif | rabi |       | cereals |           | seeds  |        |        |       | (00)                   |         |
| (1)           | (2)    | (3)  | (4)   | (5)     | (6)       | (7)    | (8)    | (9)    | (10)  | (11)                   | (12)    |
|               |        |      |       | А       | ndhra Pra | adesh  |        |        |       |                        |         |
| nil (< 0.01)  | 0.45   | 0.20 | -     | 0.30    | 0.10      | 0.16   | 0.01   | 0.14   | 1.36  | 816                    | 35      |
| 00.01 - 00.20 | 0.12   | 0.05 | 0.00  | 0.03    | 0.01      | 0.02   | -      | 0.03   | 0.25  | 4366                   | 203     |
| 00.21 - 00.50 | 0.21   | 0.05 | -     | 0.04    | 0.05      | 0.05   | 0.00   | 0.08   | 0.49  | 12989                  | 627     |
| 00.51 - 01.00 | 0.34   | 0.10 | 0.00  | 0.09    | 0.07      | 0.09   | 0.00   | 0.16   | 0.87  | 12848                  | 596     |
| 01.01 - 02.00 | 0.56   | 0.18 | 0.01  | 0.19    | 0.14      | 0.21   | 0.02   | 0.32   | 1.63  | 10837                  | 499     |
| 02.01 - 04.00 | 0.76   | 0.27 | 0.01  | 0.29    | 0.22      | 0.41   | 0.03   | 0.73   | 2.72  | 7035                   | 347     |
| 04.01 - 10.00 | 1.30   | 0.54 | 0.03  | 0.56    | 0.55      | 0.91   | 0.06   | 1.53   | 5.53  | 3455                   | 164     |
| 10.01 & above | 2.63   | 0.20 | -     | 1.18    | 0.70      | 5.43   | -      | 3.40   | 13.54 | 495                    | 25      |
| all           | 0.48   | 0.15 | 0.01  | 0.16    | 0.13      | 0.25   | 0.01   | 0.36   | 1.56  | 52840                  | 2490    |
|               |        |      |       | Aru     | ınachal P | radesh |        |        |       |                        |         |
| nil (< 0.01)  | 0.13   | 0.39 | -     | 0.00    | 0.01      | 0.00   | -      | 0.15   | 0.70  | 203                    | 70      |
| 00.01 - 00.20 | 0.02   | 0.03 | -     | 0.01    | 0.00      | -      | -      | 0.06   | 0.12  | 79                     | 34      |
| 00.21 - 00.50 | 0.15   | 0.00 | 0.00  | 0.02    | 0.00      | 0.00   | 0.00   | 0.09   | 0.32  | 190                    | 8       |
| 00.51 - 01.00 | 0.24   | 0.01 | 0.03  | 0.08    | 0.01      | 0.00   | -      | 0.15   | 0.53  | 221                    | 10      |
| 01.01 - 02.00 | 0.57   | 0.06 | 0.02  | 0.08    | 0.01      | 0.01   | 0.00   | 0.25   | 0.98  | 292                    | 12:     |
| 02.01 - 04.00 | 0.95   | 0.15 | 0.13  | 0.17    | 0.06      | 0.02   | -      | 0.37   | 1.86  | 165                    | 9       |
| 04.01 - 10.00 | 0.92   | -    | 0.02  | 0.25    | 0.05      | 0.01   | -      | 0.50   | 1.75  | 161                    | 80      |
| 10.01 & above | 3.98   | -    | -     | 0.60    | 0.15      | 0.02   | -      | 0.86   | 5.60  | 11                     |         |
| all           | 0.47   | 0.10 | 0.03  | 0.09    | 0.02      | 0.01   | 0.00   | 0.23   | 0.96  | 1321                   | 602     |
|               |        |      |       |         | Assam     | l      |        |        |       |                        |         |
| nil (< 0.01)  | 0.16   | 0.07 | 0.01  | 0.00    | -         | 0.00   | -      | 0.13   | 0.37  | 552                    | 6       |
| 00.01 - 00.20 | 0.04   | 0.01 | 0.01  | 0.00    | 0.00      | 0.00   | -      | 0.07   | 0.13  | 3132                   | 30      |
| 00.21 - 00.50 | 0.20   | 0.05 | 0.02  | 0.00    | 0.01      | 0.01   | 0.00   | 0.11   | 0.41  | 4041                   | 432     |
| 00.51 - 01.00 | 0.51   | 0.13 | 0.03  | 0.01    | 0.03      | 0.03   | 0.00   | 0.16   | 0.90  | 6940                   | 60.     |
| 01.01 - 02.00 | 1.04   | 0.20 | 0.03  | 0.02    | 0.05      | 0.03   | 0.00   | 0.24   | 1.59  | 6968                   | 582     |
| 02.01 - 04.00 | 1.86   | 0.46 | 0.11  | 0.04    | 0.15      | 0.05   | 0.01   | 0.42   | 3.10  | 2536                   | 20      |
| 04.01 - 10.00 | 3.69   | 0.43 | 0.52  | 0.08    | 0.33      | 0.07   | -      | 0.95   | 6.09  | 520                    | 4       |
| 10.01 & above | -      | -    | -     | _       | _         |        |        |        |       |                        |         |

Table (6): Cropwise break-up of average area under five major crops\* sown by a field-crop cultivator household, by size-class of household ownership holding

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

Table (6): Cropwise break-up of average area	under five major crops* sown by a field-crop cultivator household, by size-class of
household ownership holding	

size-class of			av	verage area	sown (ha	) by crop	s			no. of field-crop cultivator hhs.	
ownership	pade	dy	wheat	other	pulses	oil-	fodder	others	all	estd.	sample
holding (ha)	kharif	rabi		cereals		seeds				(00)	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
					Bihar						
nil (< 0.01)	0.56	-	0.14	0.17	0.03	0.00	-	0.10	1.00	3743	197
00.01 - 00.20	0.10	0.00	0.07	0.02	0.01	0.00	0.00	0.01	0.22	19828	1015
00.21 - 00.50	0.30	0.01	0.19	0.04	0.03	0.01	0.00	0.04	0.61	23571	1234
00.51 - 01.00	0.60	0.02	0.35	0.08	0.08	0.01	0.00	0.07	1.21	20184	976
01.01 - 02.00	1.04	0.02	0.61	0.14	0.17	0.03	0.00	0.10	2.13	15932	781
02.01 - 04.00	2.01	0.05	1.22	0.24	0.29	0.08	0.01	0.23	4.13	6811	331
04.01 - 10.00	3.51	0.06	2.24	0.37	0.61	0.22	0.02	0.46	7.49	2313	111
10.01 & above	12.68	-	9.74	1.33	3.19	1.34	0.06	0.97	29.32	278	14
all	0.70	0.01	0.43	0.09	0.10	0.03	0.00	0.08	1.45	92660	4659
					Gujara	at					
nil (< 0.01)	0.21	-	-	0.07	-	-	0.12	0.36	0.75	151	5
00.01 - 00.20	0.05	0.00	0.03	0.08	0.00	0.00	0.00	0.21	0.38	1224	68
00.21 - 00.50	0.09	0.01	0.11	0.19	0.03	0.04	0.02	0.10	0.58	7372	382
00.51 - 01.00	0.18	0.02	0.19	0.34	0.07	0.08	0.04	0.16	1.09	5864	287
01.01 - 02.00	0.16	0.02	0.32	0.53	0.12	0.26	0.06	0.40	1.87	6566	338
02.01 - 04.00	0.27	0.04	0.44	0.77	0.27	0.62	0.15	0.94	3.47	5532	282
04.01 - 10.00	0.35	-	0.62	0.91	0.21	1.58	0.29	2.43	6.40	3742	200
10.01 & above	-	-	0.59	2.56	0.16	3.01	0.92	6.05	13.29	529	30
all	0.18	0.02	0.30	0.51	0.12	0.43	0.10	0.71	2.38	30981	1592
					Haryaı	na					
nil (< 0.01)	0.74	-	1.33	-	-	-	0.17	0.22	2.45	109	5
00.01 - 00.20	0.40	-	1.01	0.12	0.03	0.09	0.23	0.51	2.38	573	27
00.21 - 00.50	0.17	-	0.40	0.12	0.03	0.06	0.13	0.13	1.05	1851	90
00.51 - 01.00	0.23	-	0.61	0.19	0.05	0.09	0.21	0.21	1.58	1839	85
*Note											

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

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all	0.70	0.02	1.39	0.32	0.17	0.25	0.34	0.46	3.64	11548	551
10.01 & above	5.88	-	8.13	1.26	0.41	0.67	1.00	2.82	20.17	229	13
04.01 - 10.00	1.54	-	2.92	0.61	0.41	0.70	0.68	1.01	7.87	1613	77
02.01 - 04.00	0.81	0.04	1.74	0.42	0.27	0.27	0.41	0.50	4.46	2362	116
01.01 - 02.00	0.43	0.02	0.96	0.27	0.15	0.21	0.27	0.29	2.61	2973	138

\*Note

<sup>1.</sup> Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

<sup>2.</sup> The set of 5 major crops is not a fixed set but varies from household to household; for any particular household it is understood as the 5 most important field crops cultivated, in terms of value of production, by the household in 1997-98, from among a list of crop-season combinations involving 12 crops and crop-groups spanning the entire range of crops cultivated in the country.

size-class of			av	verage area	sown (ha)	) by crop	s			no. of fie cultivat	-
ownership	pado	ły	wheat	other	pulses	oil-	fodder	others	all	estd.	sample
holding (ha)	kharif	rabi		cereals		seeds				(00)	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
				Hi	machal P	radesh					
nil (< 0.01)	0.00	-	0.34	0.34	-	0.01	-	0.07	0.75	45	8
00.01 - 00.20	0.03	0.00	0.09	0.08	0.00	0.00	0.00	0.01	0.21	1691	322
00.21 - 00.50	0.06	0.00	0.23	0.19	0.01	0.01	0.01	0.05	0.55	2939	550
00.51 - 01.00	0.07	0.00	0.44	0.34	0.02	0.01	0.01	0.12	1.01	2208	404
01.01 - 02.00	0.14	0.00	0.72	0.55	0.04	0.02	0.03	0.27	1.76	1277	24
02.01 - 04.00	0.15	-	1.21	0.94	0.03	0.02	0.03	0.44	2.83	522	9
04.01 - 10.00	0.17	-	1.95	1.87	0.17	0.08	0.12	0.64	4.99	108	2
10.01 & above	0.21	-	1.17	1.23	0.01	0.19	-	0.33	3.14	35	
all	0.07	0.00	0.41	0.33	0.02	0.01	0.01	0.12	0.97	8825	1653
					nmu & K						
nil (< 0.01)	0.12	-	0.11	0.05	0.04	0.01	-	0.12	0.45	11	4
00.01 - 00.20	0.07	0.00	0.02	0.02	0.00	0.02	0.01	0.07	0.22	1039	21
00.21 - 00.50	0.20	0.00	0.07	0.05	0.00	0.10	0.02	0.07	0.52	2807	57
00.51 - 01.00	0.28	0.01	0.25	0.15	0.02	0.09	0.05	0.23	1.09	1978	39
01.01 - 02.00	0.54	0.02	0.66	0.30	0.07	0.08	0.09	0.26	2.03	997	24
02.01 - 04.00	0.96	0.02	1.48	0.55	0.16	0.18	0.15	0.28	3.79	353	8
04.01 - 10.00	2.31	-	2.51	0.75	0.18	0.18	0.40	0.59	6.92	51	1
10.01 & above all	0.30	- 0.01	0.28	0.14	0.03	- 0.09	0.05	0.16	- 1.04	7236	153
d11	0.30	0.01	0.28	0.14	0.03	0.09	0.05	0.10	1.04	7230	155.
					Karnata	ka					
nil (< 0.01)	0.00	-	-	0.27	-	0.27	-	0.13	0.67	146	
00.01 - 00.20	0.03	0.01	0.00	0.06	0.01	0.01	-	0.04	0.16	2826	13
00.21 - 00.50	0.06	0.01	0.01	0.18	0.06	0.03	0.00	0.08	0.43	6735	32
00.51 - 01.00	0.14	0.02	0.01	0.32	0.11	0.08	0.00	0.21	0.89	10269	44
01.01 - 02.00	0.25	0.03	0.02	0.55	0.20	0.23	0.01	0.38	1.67	12321	52
02.01 - 04.00	0.32	0.07	0.05	1.19	0.37	0.42	0.01	0.64	3.08	7165	30
04.01 - 10.00	0.33	0.13	0.10	2.35	0.73	1.02	0.04	1.16	5.87	4250	18

Table (6): Cropwise break-up of average area under five major crops\* sown by a field-crop cultivator household, by size-class of household ownership holding

\*Note

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

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10.01 & above	0.84	-	0.39	6.20	2.15	3.50	0.14	2.64	15.85	656	28
all	0.21	0.04	0.03	0.77	0.25	0.31	0.01	0.42	2.04	44369	1953

\*Note

<sup>1.</sup> Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

<sup>2.</sup> The set of 5 major crops is not a fixed set but varies from household to household; for any particular household it is understood as the 5 most important field crops cultivated, in terms of value of production, by the household in 1997-98, from among a list of crop-season combinations involving 12 crops and crop-groups spanning the entire range of crops cultivated in the country.

size-class of			av	erage area	sown (ha	) by crop	S		<u> </u>	no. of fie cultivat	-
ownership	pad	-	wheat	other	pulses	oil-	fodder	others	all	estd.	sample
holding (ha)	kharif	rabi		cereals		seeds				(00)	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12
					Keral	a					
nil (< 0.01)	-	-	-	-	-	-	-	0.02	0.02	75	2
00.01 - 00.20	0.00	0.00	-	0.00	0.00	0.00	0.00	0.05	0.06	22100	140
00.21 - 00.50	0.04	0.02	0.00	0.02	-	0.02	-	0.21	0.30	6402	419
00.51 - 01.00	0.11	0.05	-	0.01	-	0.03	0.00	0.43	0.62	3374	20
01.01 - 02.00	0.10	0.05	-	0.00	0.01	0.04	0.00	0.85	1.05	1976	110
02.01 - 04.00	0.40	0.18	-	0.05	0.01	0.10	-	1.34	2.08	485	29
04.01 - 10.00	0.76	0.14	-	-	-	0.56	-	3.17	4.63	170	10
10.01 & above	5.37	-	-	-	-	0.11	-	5.88	11.36	32	
all	0.04	0.01	0.00	0.01	0.00	0.01	0.00	0.20	0.28	34615	2182
				М	adhya Pr	adesh					
nil (< 0.01)	0.51	-	0.28	0.15	0.30	0.30	0.02	0.25	1.82	421	2
00.01 - 00.20	0.10	0.00	0.04	0.01	0.02	0.02	0.00	0.02	0.21	2467	13
00.21 - 00.50	0.21	0.01	0.13	0.03	0.03	0.06	0.00	0.03	0.51	9680	53
00.51 - 01.00	0.36	0.01	0.27	0.08	0.10	0.16	0.00	0.08	1.06	15036	77
01.01 - 02.00	0.58	0.01	0.52	0.17	0.20	0.33	0.01	0.16	1.98	21560	1108
02.01 - 04.00	0.88	0.02	0.87	0.38	0.36	0.64	0.02	0.34	3.52	18818	954
04.01 - 10.00	1.36	0.04	2.11	0.87	0.96	1.59	0.05	0.77	7.75	8158	434
10.01 & above	2.22	0.06	4.97	2.19	2.25	5.92	0.18	1.50	19.29	1028	6
all	0.65	0.02	0.72	0.28	0.30	0.54	0.02	0.25	2.77	77168	403
				]	Maharas	htra					
nil (< 0.01)	0.17	-	-	0.66	0.05	-	-	0.11	0.98	178	
00.01 - 00.20	0.07	0.00	0.01	0.03	0.00	0.01	0.00	0.09	0.21	3913	18
00.21 - 00.50	0.16	0.00	0.01	0.12	0.02	0.01	0.01	0.06	0.40	8349	39
00.51 - 01.00	0.18	0.01	0.05	0.31	0.05	0.04	0.01	0.18	0.83	12111	55
01.01 - 02.00	0.19	0.01	0.10	0.59	0.14	0.08	0.01	0.40	1.53	15774	73
02.01 - 04.00	0.26	0.00	0.19	1.10	0.29	0.16	0.03	0.67	2.71	11295	52
04.01 - 10.00	0.30	-	0.41	1.95	0.60	0.41	0.02	1.74	5.42	6238	28
10.01 & above * <i>Note</i>	0.27	-	0.95	4.37	1.20	0.74	0.15	4.95	12.64	883	4

Table (6): Cropwise break-up of average area under five major crops\* sown by a field-crop cultivator household, by size-class of household ownership holding

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

Table (6): Cropwise break-up of average area	under five major crops*	* sown by a field-crop cultivator household, by size-class of	f
household ownership holding			

size-class of			av	verage area	sown (ha)	) by crop	s			no. of field-crop cultivator hhs.	
ownership	pad	dy	wheat	other	pulses	oil-	fodder	others	all	estd.	sample
holding (ha)	kharif	rabi		cereals		seeds				(00)	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
					Manipu	ır					
nil (< 0.01)	0.38	0.46	-	0.02	0.03	0.02	-	0.22	1.13	198	80
00.01 - 00.20	0.02	0.01	-	0.00	0.00	-	-	0.05	0.08	189	57
00.21 - 00.50	0.20	0.07	-	0.00	0.00	0.00	0.00	0.05	0.33	483	174
00.51 - 01.00	0.49	0.10	-	0.00	0.01	0.00	0.00	0.07	0.68	832	256
01.01 - 02.00	0.86	0.16	0.00	0.02	0.02	-	-	0.10	1.17	353	140
02.01 - 04.00	1.62	0.30	-	0.00	0.05	-	-	0.19	2.16	76	34
04.01 - 10.00	2.39	-	-	-	-	-	-	0.40	2.79	10	6
10.01 & above	-	-	-	-	-	-	-	-	-	-	-
all	0.48	0.13	0.00	0.01	0.01	0.00	0.00	0.09	0.73	2139	747
					Meghala	iya					
nil (< 0.01)	0.07	-	-	-	-	-	-	0.06	0.13	17	6
00.01 - 00.20	0.09	-	0.00	0.01	0.00	-	-	0.16	0.27	385	121
00.21 - 00.50	0.12	0.01	0.00	0.03	0.00	-	-	0.23	0.39	782	210
00.51 - 01.00	0.32	0.06	0.00	0.03	0.00	0.00	0.00	0.40	0.83	796	225
01.01 - 02.00	0.51	0.02	-	0.08	0.00	0.00	-	0.66	1.28	605	193
02.01 - 04.00	0.90	0.03	0.00	0.12	-	-	0.00	1.15	2.21	425	136
04.01 - 10.00	2.61	0.06	-	0.19	-	-	-	1.39	4.25	92	29
10.01 & above	-	-	-	-	-	-	-	-	-	-	-
all	0.42	0.03	0.00	0.05	0.00	0.00	0.00	0.51	1.02	3103	920
					Mizora	m					
nil (< 0.01)	0.25	0.02	-	-	0.03	-	0.00	0.41	0.72	104	72
00.01 - 00.20	0.34	0.07	-	0.02	0.02	-	0.00	0.29	0.74	339	263
00.21 - 00.50	0.39	0.01	-	0.01	0.01	0.00	-	0.29	0.72	43	45
*											

\*Note

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

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00.51 - 01.00	0.26	0.04	-	0.02	0.03	0.00	0.00	0.52	0.88	55	47
01.01 - 02.00	0.44	0.01	-	0.01	0.02	0.00	-	0.61	1.08	66	54
02.01 - 04.00	0.88	0.02	-	0.02	0.12	-	-	0.73	1.77	14	16
04.01 - 10.00	1.73	-	-	-	-	-	-	0.27	2.00	3	3
10.01 & above	-	-	-	-	-	-	-	-	-	-	-
all	0.35	0.05	-	0.01	0.03	0.00	0.00	0.38	0.81	624	500

Table (6): Cropwise break-up of average area under five major crops\* sown by a field-crop cultivator household, by size-class of household ownership holding

size-class of			av	erage area	sown (ha)	) by crop	S			no. of fie cultivat	-
ownership	pad	dy	wheat	other	pulses	oil-	fodder	others	all	estd.	sample
holding (ha)	kharif	rabi		cereals		seeds				(00)	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
					Nagalar	nd					
nil (< 0.01)	0.73	0.49	-	0.16	0.01	0.09	0.02	0.12	1.63	16	13
00.01 - 00.20	0.04	0.00	-	0.03	0.00	0.01	-	0.03	0.12	24	20
00.21 - 00.50	0.11	0.02	-	0.02	0.00	0.00	0.00	0.11	0.27	37	47
00.51 - 01.00	0.31	0.11	0.03	0.10	0.02	0.01	0.00	0.22	0.80	77	71
01.01 - 02.00	0.67	0.38	0.01	0.15	0.02	0.03	0.00	0.33	1.59	190	177
02.01 - 04.00	1.06	0.69	0.00	0.25	0.03	0.01	0.02	0.41	2.47	329	356
04.01 - 10.00	3.29	0.36	0.02	0.26	0.22	-	0.01	2.75	7.00	127	136
10.01 & above	5.95	-	-	0.75	0.20	-	-	4.85	11.75	7	8
all	1.21	0.45	0.01	0.20	0.06	0.01	0.01	0.75	2.71	807	828
					Orissa	ı					
nil (< 0.01)	0.24	0.01	-	0.01	0.01	0.04	-	0.01	0.32	198	20
00.01 - 00.20	0.16	0.01	-	0.01	0.01	0.00	-	0.01	0.19	5949	326
00.21 - 00.50	0.33	0.02	0.00	0.01	0.03	0.00	-	0.01	0.41	12133	657
00.51 - 01.00	0.67	0.03	0.00	0.02	0.06	0.01	-	0.03	0.82	10803	553
01.01 - 02.00	1.13	0.05	0.00	0.06	0.12	0.03	0.00	0.05	1.44	7280	378
02.01 - 04.00	2.19	0.09	-	0.06	0.30	0.01	-	0.05	2.70	2881	146
04.01 - 10.00	4.69	0.27	0.02	0.17	0.69	0.06	-	0.01	5.90	609	32
10.01 & above	9.03	-	-	-	1.11	-	-	1.37	11.50	122	3
all	0.77	0.03	0.00	0.03	0.08	0.01	0.00	0.03	0.96	39975	2115

\*Note

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

					Punja	b					
nil (< 0.01)	0.93	-	2.00	_	-	-	0.79	1.38	5.10	50	5
00.01 - 00.20	0.10	0.01	0.19	0.04	-	-	0.12	0.03	0.48	482	47
00.21 - 00.50	0.17	0.00	0.24	0.04	-	0.01	0.20	0.04	0.69	1130	99
00.51 - 01.00	0.53	0.01	0.80	0.10	0.00	0.01	0.35	0.16	1.97	1462	122
01.01 - 02.00	0.83	0.04	1.18	0.04	0.01	0.01	0.38	0.39	2.88	2909	254
02.01 - 04.00	1.70	0.04	2.33	0.08	0.01	0.03	0.54	0.58	5.32	2202	190
04.01 - 10.00	2.94	0.13	4.55	0.14	0.02	0.04	0.84	1.82	10.48	1575	133
10.01 & above	6.00	0.34	11.51	0.05	-	0.01	1.15	5.32	24.38	377	33
all	1.38	0.06	2.13	0.07	0.01	0.02	0.48	0.75	4.90	10188	883

# Table (6): Cropwise break-up of average area under five major crops\* sown by a field-crop cultivator household, by size-class of household ownership holding

size-class of			av	erage area	sown (ha)	) by crop	s			no. of fie cultivat	-
Ownership	pad	dy	wheat	other	pulses	oil-	fodder	others	all	estd.	sample
holding (ha)	kharif	rabi		cereals		seeds				(00)	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
					<b>D</b> • 4						
					Rajasth	an					
nil (< 0.01)	-	-	0.58	0.95	0.62	0.76	0.08	0.23	3.22	306	19
00.01 - 00.20	0.00	-	0.18	0.12	0.07	0.13	0.02	0.18	0.70	2073	110
00.21 - 00.50	0.02	0.00	0.24	0.29	0.03	0.04	0.01	0.06	0.70	7782	415
00.51 - 01.00	0.03	0.00	0.29	0.39	0.08	0.12	0.04	0.14	1.11	8603	445
01.01 - 02.00	0.03	0.00	0.48	0.71	0.15	0.27	0.07	0.30	2.01	11017	583
02.01 - 04.00	0.03	0.01	0.83	1.27	0.40	0.49	0.10	0.67	3.79	9684	539
04.01 - 10.00	0.03	0.01	1.29	2.29	0.94	0.77	0.27	1.59	7.19	7914	451
10.01 & above	-	-	2.27	5.18	2.68	1.71	0.61	3.55	16.00	2009	124
All	0.03	0.01	0.67	1.11	0.40	0.39	0.11	0.64	3.35	49388	2686
					<b></b>						
					Sikkin	n					
nil (< 0.01)	0.09	-	0.00	0.25	0.02	0.01	0.01	0.16	0.53	60	76
00.01 - 00.20	0.03	0.00	0.00	0.11	0.00	0.00	0.00	0.08	0.23	95	111
00.21 - 00.50	0.04	0.01	0.01	0.19	0.01	0.01	0.01	0.12	0.40	180	216
00.51 - 01.00	0.11	-	0.01	0.34	0.03	0.01	0.02	0.23	0.74	123	136
01.01 - 02.00	0.21	-	0.02	0.54	0.04	0.00	0.04	0.48	1.34	85	92
02.01 - 04.00	0.35	-	0.04	0.79	0.03	-	0.08	1.04	2.33	38	42

<sup>\*</sup>Note

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

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04.01 - 10.00	0.21	-	0.05	2.42	-	-	0.01	1.19	3.89	3	4
10.01 & above	2.03	-	-	1.86	-	-	-	1.22	5.11	1	1
All	0.11	0.00	0.01	0.32	0.02	0.01	0.02	0.26	0.75	586	678
					Tamil Na	adu					
nil (< 0.01)	0.22	-	-	0.00	0.05	0.05	-	0.10	0.42	707	41
00.01 - 00.20	0.07	0.03	0.00	0.01	0.01	0.01	0.00	0.02	0.16	4184	247
00.21 - 00.50	0.14	0.08	0.00	0.06	0.02	0.02	0.01	0.09	0.43	10470	610
00.51 - 01.00	0.24	0.19	0.00	0.11	0.04	0.05	0.01	0.21	0.86	8949	487
01.01 - 02.00	0.43	0.24	0.00	0.25	0.09	0.08	0.04	0.42	1.55	5976	321
02.01 - 04.00	0.63	0.35	0.02	0.45	0.11	0.25	0.02	0.78	2.61	2684	136
04.01 - 10.00	1.31	0.77	-	1.00	0.41	0.31	0.00	1.18	4.99	966	42
10.01 & above	2.44	-	-	-	0.42	2.57	0.98	5.81	12.22	49	3
All	0.29	0.17	0.00	0.16	0.06	0.07	0.01	0.27	1.03	33985	1887

Table (6): Cropwise break-up of average area under five major crops\* sown by a field-crop cultivator household, by size-class of household ownership holding

size-class of			av	verage area	sown (ha)	by crop	S			no. of fie cultivat	-
ownership	pad	dy	wheat	other	pulses	oil-	fodder	others	all	estd.	sample
holding (ha)	kharif	rabi		cereals		seeds				(00)	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
					Tripur	a					
nil (< 0.01)	0.33	0.00	-	-	-	-	-	0.02	0.35	43	8
00.01 - 00.20	0.06	0.02	0.00	0.00	-	-	-	0.04	0.13	490	110
00.21 - 00.50	0.16	0.15	0.01	-	-	-	-	0.04	0.35	910	187
00.51 - 01.00	0.42	0.22	0.04	-	-	-	-	0.11	0.79	652	134
01.01 - 02.00	0.92	0.32	0.07	-	-	-	-	0.16	1.48	215	40
02.01 - 04.00	1.13	0.61	0.03	-	-	-	-	0.29	2.06	71	16
04.01 - 10.00	3.25	0.41	-	-	-	-	-	0.37	4.04	8	2
10.01 & above	-	-	-	-	-	-	-	-	-	-	-
all	0.32	0.17	0.02	0.00	-	-	-	0.08	0.59	2389	497
				I	Uttar Pra	lesh					
nil (< 0.01)	0.25	-	0.59	0.21	0.24	0.11	0.01	0.16	1.57	599	29
00.01 - 00.20	0.09	0.00	0.11	0.02	0.02	0.00	0.01	0.02	0.27	30448	1426
*Note											

\*Note

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

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00.21 - 00.50	0.18	0.00	0.24	0.06	0.03	0.01	0.02	0.05	0.59	50848	2087
00.51 - 01.00	0.33	0.01	0.48	0.12	0.07	0.03	0.04	0.13	1.22	40361	1665
01.01 - 02.00	0.52	0.01	0.79	0.22	0.14	0.08	0.09	0.27	2.12	29586	1205
02.01 - 04.00	0.84	0.02	1.45	0.44	0.28	0.15	0.19	0.57	3.95	14076	606
04.01 - 10.00	1.34	0.07	2.71	0.87	0.90	0.32	0.24	1.16	7.60	5049	226
10.01 & above	2.55	-	4.45	1.45	2.24	0.80	0.73	1.90	14.11	396	19
all	0.35	0.01	0.55	0.16	0.11	0.05	0.06	0.18	1.46	171362	7263
				W	Vest Ben	gal					
nil (< 0.01)	0.64	0.03	0.02	-	0.00	0.00	-	0.21	0.91	1976	87
00.01 - 00.20	0.10	0.03	0.01	0.00	0.00	0.01	0.00	0.04	0.19	15261	758
00.21 - 00.50	0.26	0.09	0.03	0.00	0.01	0.02	0.00	0.07	0.47	19727	972
00.51 - 01.00	0.57	0.16	0.06	0.01	0.01	0.04	-	0.20	1.05	14715	650
01.01 - 02.00	1.06	0.24	0.12	0.00	0.02	0.06	-	0.33	1.86	6730	302
02.01 - 04.00	2.05	0.46	0.25	0.03	0.04	0.11	-	0.49	3.43	2164	97
04.01 - 10.00	2.44	0.99	0.34	-	0.37	0.49	-	2.14	6.78	191	9
10.01 & above	0.40	-	0.20	-	-	-	-	2.86	3.46	24	1
all	0.47	0.12	0.05	0.00	0.01	0.03	0.00	0.15	0.84	60788	2876

Table (6): Cropwise break-up of average area under five major crops\* sown by a field-crop cultivator household, by size-class of household ownership holding

size-class of			av	erage area	sown (ha)	by crop	s			no. of fie cultivat	-
ownership	pad	dy	wheat	other	pulses	oil-	fodder	others	all	estd.	sample
holding (ha)	kharif	rabi		cereals		seeds				(00)	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
				A	& N. Isl	ands					
nil (< 0.01)	0.85	-	-	-	-	-	-	0.30	1.15	33	25
00.01 - 00.20	0.00	-	-	-	-	-	-	0.02	0.02	9	8
00.21 - 00.50	0.20	-	-	-	0.12	-	-	0.04	0.36	5	7
00.51 - 01.00	0.43	-	-	-	0.06	-	-	0.07	0.57	17	16
01.01 - 02.00	0.81	0.01	-	-	0.08	-	-	0.13	1.03	22	21
02.01 - 04.00	1.96	-	-	-	0.32	-	-	0.07	2.35	20	20
04.01 - 10.00	2.55	-	-	-	0.30	-	-	0.16	3.02	6	5
10.01 & above	-	-	-	-	-	-	-	-	-	-	-
all	0.97	0.00	-	-	0.10	-	-	0.15	1.22	113	102

<sup>\*</sup>Note

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

					India							
nil (< 0.01)	0.44	0.04	0.14	0.14	0.07	0.06	0.02	0.15	1.06	10806	914	
00.01 - 00.20	0.08	0.01	0.05	0.02	0.01	0.01	0.00	0.04	0.22	123414	7726	
00.21 - 00.50	0.19	0.02	0.12	0.07	0.03	0.02	0.01	0.06	0.53	191767	11440	
00.51 - 01.00	0.36	0.05	0.22	0.14	0.06	0.05	0.02	0.14	1.04	180495	10274	
01.01 - 02.00	0.55	0.06	0.38	0.28	0.14	0.14	0.04	0.28	1.87	162612	9215	
02.01 - 04.00	0.81	0.08	0.71	0.59	0.29	0.33	0.08	0.55	3.44	97772	5712	
04.01 - 10.00	1.06	0.10	1.36	1.28	0.69	0.82	0.17	1.35	6.82	47354	2716	
10.01 & above	1.96	0.04	3.04	3.32	1.76	2.48	0.44	3.37	16.41	7168	422	
all	0.42	0.04	0.35	0.28	0.14	0.16	0.04	0.28	1.72	821388	48419	

\*Note

<sup>1.</sup> Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

<sup>2.</sup> The set of 5 major crops is not a fixed set but varies from household to household; for any particular household it is understood as the 5 most important field crops cultivated, in terms of value of production, by the household in 1997-98, from among a list of crop-season combinations involving 12 crops and crop-groups spanning the entire range of crops cultivated in the country.

				use	e of imp	roved	seeds				no. of hhs.	using
aron group	certifie	d seeds	uncer see		home- see	grown		mproved eds	not	all	improved	seeds
crop group	entirely	partly	entirely		entirely	partly	entirely	partly	used	all	estd. (00) s	amnle
(1)	(2)	(3)	-	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
(1)	(2)	(3)	(+)	(3)	(0)	(7)	(0)	()	(10)	(11)	(12)	(13)
					Andh	ıra Pra	adesh					
Paddy(kharif)	307	48	126	32	167	73	30	2	214	1000	22383	1046
Paddy(rabi)	409	11	82	7	101	41	70	-	279	1000	5778	242
wheat	507	-	45	-	107	1	-	-	340	1000	181	10
other cereals	270	19	94	31	129	145	2	1	310	1000	7525	381
pulses	324	32	88	40	165	48	13	-	290	1000	5859	277
oil seeds	154	82	100	5	31	12	15	-	600	1000	4878	246
mixed crop	70	226	4	18	23	3	-	-	656	1000	1163	50
sugar cane	264	0	123	38	128	3	116	0	327	1000	1493	71
vegetables	345	64	142	45	33	37	12	-	321	1000	1305	64
fodder	228	-	94	-	9	77	-	54	538	1000	432	19
fruits & nuts	239	44	115	-	23	-	30	19	531	1000	708	32
other cash crops	454	33	123	24	86	19	7	1	254	1000	6827	328
others	260	12	80	6	27	18	41	-	557	1000	874	47
all crops	290	51	102	23	109	51	24	2	347	1000	36800	1756
					Aruna	chal Pi	radesh					
Paddy(kharif)	3	9	0	6	139	36	0	19	788	1000	205	117
Paddy(rabi)	-	315	-	-	-	46	-	-	639	1000	58	11
wheat	330	-	-	-	601	2	-	-	67	1000	68	34
other cereals	71	-	-	3	187	8	-	8	723	1000	157	86
pulses	38	-	-	-	316	11	69	13	553	1000	94	52
oil seeds	42	-	-	-	-	144	-	-	814	1000	4	2
mixed crop	28	-	-	4	6	4	14	1	944	1000	90	57
sugar cane	-	-	-	-	-	-	-	-	1000	1000	-	-
vegetables	154	10	-	6	36	6	19	158	612	1000	250	127
fodder	-	-	-	-		-	-	-	1000	1000	-	-
fruits & nuts	-	9	-	5	-	-	-	49	937	1000	5	5
other cash crops	91	-	-	14	-	4	-	-	892	1000	27	18
others	-	-	-	1	-	-	-	5	994	1000	2	2
all crops	36	37	0	5	114	25	4	23	757	1000	360	187

\*Note

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

				use							no. of hh	•
	certifie	d seeds		tified		grown		mproved			improvec	l seeds
crop group		.1		eds		eds		eds	not	all		
	entirely	partly	entirely		entirely	· ·	entirely	partly	used			sample
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13
					1	Assam						
Paddy(kharif)	66	62	15	77		116	6	12	592	1000	7003	585
Paddy(rabi)	8	49	21	33	18	145	84	20	622	1000	1511	13
wheat	172	81		333		13	-	2	197	1000	1789	16
other cereals	28	29	5	339	62	14	23	-	500	1000	424	3
pulses	46	10	9	159		29	-	1	745	1000	907	8.
oil seeds	128	110	18	16	33	22	4	4	665	1000	590	4′
mixed crop	56	-	-	-	801	87	-	-	57	1000	143	1
sugar cane	456	7	-	-	-	8	-	-	529	1000	217	1
vegetables	120	82	20	108	52	36	9	15	559	1000	6317	56
fodder	133	-	-	-	-	220	-	43	604	1000	44	
fruits & nuts	67	172	-	6	43	18	-	11	683	1000	157	1
other cash crops	385	68	124	225	4	21	-	48	125	1000	316	3
others	215	56	17	364	120	16	1	8	202	1000	1764	15
all crops	78	61	20	96	49	96	16	12	571	1000	11149	95
						Bihar						
						Dinai						
Paddy(kharif)	110	48	20	74	95	73	5	8	566	1000	31203	157
Paddy(rabi)	170	-	59	180	237	56	7	4	285	1000	2221	6
wheat	208	73		108		58	10	8	380	1000	34054	172
other cereals	136	31	31	77	102	70	6	10	536	1000	11633	55
pulses	87	32	36	43	83	35	4	6	674	1000	7778	37
oil seeds	141	42	10	72	26	91	2	1	615	1000	2483	13
mixed crop	20	3	10	93	99	100	-	9	666	1000	1026	5
sugar cane	77	1	81	192	167	219	-	2	261	1000	1467	8
vegetables	255	61	36	52	12	52	30	4	498	1000	9073	46
fodder	51	3	8	-	162	19	-	23	733	1000	378	2
fruits & nuts	178	117	-	-	16	90	-	-	599	1000	332	1
other cash crops	425	102	7	26	5	0	6	6	418	1000	1792	7
Others	2	-	317	-	0	-	3	-	678	1000	141	

\*Note

1. Paddy: *kharif* and paddy: *rabi*, for example, are treated as different "crops" for this purpose.

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				use	of imp	roved s	seeds				no. of hi	is. using
	certifie	d seeds	uncer	tified	home-	grown	other is	mproved			improve	d seeds
crop group			see	eds	see	eds	se	eds	not	all	-	
	entirely	partly	entirely	partly	entirely	partly	entirely	partly	used		estd. (00)	sample
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
					(	Gujarat						
Paddy(kharif)	420	138	22	29	107	50	-	-	234	1000	4932	239
Paddy(rabi)	435	39	128	-	141	29	17	-	210	1000	687	30
wheat	480	156	29	3	84	152	-	-	96	1000	9545	490
other cereals	540	80	28	13	118	77	-	1	144	1000	15905	803
pulses	563	50	3	1	119	78	-	-	186	1000	4813	257
oil seeds	519	30	22	5	54	83	-	-	286	1000	7185	371
mixed crop	861	47	66	2	18	-	-	1	5	1000	2770	137
sugar cane	224	351	11	-	66	-	-	-	349	1000	936	48
vegetables	656	101	17	8	118	14	3	-	82	1000	1764	82
fodder	259	24	36	5	123	49	-	-	505	1000	3840	194
fruits & nuts	364	86	64	-	299	-	9	-	179	1000	312	12
other cash crops	744	18	56	28	36	91	-	12	16	1000	7829	403
others	256	-	15	178	437	12	-	-	102	1000	488	22
all crops	556	74	33	13	82	79	0	2	161	1000	25275	1293
					H	laryana	ì					
Paddy(kharif)	544	27	147	28	51	71	1	-	132	1000	3504	154
Paddy(rabi)	543	-	166	55	-	-	-	-	237	1000	87	3
wheat	343	18	109	55	148	154	10	0	161	1000	7385	340
other cereals	645	34	41	-	38	60	-	-	182	1000	2797	138
pulses	68	-	6	-	39	156	-	-	726	1000	719	35
oil seeds	562	-		-	40	92		-	196	1000	2166	112
mixed crop	-	786	-	-	-	214	-	-	-	1000	97	4
sugar cane	187	4	-	3	55	18	27	-	706	1000	355	14
vegetables	543	32	67	15	122	55	-	-	166	1000	627	29
fodder	90	40		74	39	79		10	481	1000	4227	183
fruits & nuts	-	-	-	-	-	-	-	-	-	-	-	-
other cash crops	450	-	202	177	16	48	-	-	107	1000	1593	66
others	254	30	335	227	31	15	5	-	104	1000	788	34
all crops	389	22		53	82	104	9	1	218	1000	9180	424

Table (7): Cropwise per 1000 distribution of area under five major crops\* sown by households by use of improved seeds

\*Note

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

2. The set of 5 major crops is not a fixed set but varies from household to household; for any particular household it is understood as the 5 most important field crops cultivated, in terms of value of production, by the household in 1997-98, from among a list of crop-season combinations involving 12 crops and crop-groups spanning the entire range of crops cultivated in the country.

				use	e of imp	roved	seeds				no. of hhs	s. using
	certifie	d seeds	uncer	rtified	home-	grown	other is	mproved			improved	l seeds
Crop group			see	eds	see	eds	se	eeds	not	all		
	entirely	partly	entirely	partly	entirely	partly	entirely	partly	used		estd. (00)	sample
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
					Himad	hal Pr	adesh					
Paddy(kharif)	128	18	13	35	112	51	-	2	641	1000	922	161
Paddy(rabi)	313	-		-	-	-		-	687	1000	15	2
wheat	165	14	10	17	44	73	0	5	671	1000	2611	484
other cereals	123	11	9	15	33	69	1	6	733	1000	2038	381
pulses	100	43	-	22	56	36	-	-	743	1000	224	43
oil seeds	54	3		7		2		6	920	1000	109	20
mixed crop	69	-		48	-	-		-	883	1000	19	4
sugar cane	-	-		-	-	10	- 1	-	990	1000	6	1
vegetables	422	52	17	27	79	15	_	-	388	1000	939	183
fodder	49	32		31		61		3	734	1000	301	56
fruits & nuts	119	-		-		9		-	601	1000	215	41
other cash crops		3				95		-	517	1000	484	88
others	127	32	-	19	_	20	-	-	802	1000	130	26
all crops	151	13				20 64		4	683	1000	3385	634
un erops	101	10	10	17	••	01	10	•	002	1000	5565	051
					Jamm	u & Ka	shmir					
Paddy(kharif)	182	62		85		168		16	308	1000	3270	723
Paddy(rabi)	437	-		-		43		-	77	1000	181	31
wheat	277	70				122		51	277	1000	1743	453
other cereals	131	26		33	207	93		19	492	1000	1048	214
pulses	117	13		-		134		19	399	1000	646	146
oil seeds	32	15		63		40		11	459	1000	1102	230
mixed crop	-	-	10			712	-	-	28	1000	114	29
sugar cane	251	-	619	-	64	-	-	-	66	1000	32	11
vegetables	47	24	16	27	457	44	. 0	6	380	1000	1697	375
fodder	186	84	56	53	92	112	7	39	370	1000	1238	335
fruits & nuts	246	34	4	42	246	106		6	313	1000	931	163
other cash crops	-	-		170	- (	453	-	136	240	1000	68	9
others	204	-	-	-	85	286	26	194	205	1000	395	98
all crops	184	49	5	46	221	124	- 2	29	341	1000	4652	1005

\*Note

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

2. The set of 5 major crops is not a fixed set but varies from household to household; for any particular household it is understood as the 5 most important field crops cultivated, in terms of value of production, by the household in 1997-98, from among a list of crop-season combinations involving 12 crops and crop-groups spanning the entire range of crops cultivated in the country.

		1 1		use						<u> </u>	no. of hhs	•
	certified	d seeds	uncer		home-	•		nproved		- 11	improved	seeds
crop group	entirely	partly	entirely	eds partly	see entirely	partly	entirely	eds partly	not used	all	estd. (00)	omnla
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	sample (13
(1)	(2)	(3)	(4)	(3)	(0)	(7)	(0)	())	(10)	(11)	(12)	(1.
					Ka	rnatak	ka 🛛					
Paddy(kharif)	440	32	19	30	112	57	66	8	235	1000	8164	372
Paddy(rabi)	218	36	12	29	271	101	-	-	333	1000	1271	58
wheat	132	100	-	-	84	89	27	-	569	1000	754	30
other cereals	453	23	29	23	81	60	10	1	319	1000	17306	769
pulses	123	17	23	29	180	131	4	1	493	1000	5657	247
oil seeds	469	21	51	22	49	71	2	-	315	1000	5961	257
mixed crop	352	38	6	2	82	35	3	-	482	1000	2696	124
sugar cane	203	-	44	91	153	83	132	16	278	1000	1868	82
vegetables	639	22	2	33	50	14	20	-	219	1000	2088	9
fodder	213	15	17	-	11	10	65	58	612	1000	383	1
fruits & nuts	80	1	44	21	19	4	13	53	765	1000	752	4
other cash crops	516	40	25	17	57	7	27	7	304	1000	5212	24
others	299	22	-	43	23	6	43	23	540	1000	933	4
all crops	391	26	28	24	92	63	19	4	353	1000	30578	136
					]	Kerala						
Paddy(kharif)	96											
		7	31	128	396	89	19	5	230	1000	2264	14
		7	31 70	128 17	396 351	89 96		5	230 281	1000 1000	2264 1285	14
	130	7	70	128 17	396 351	89 96	49	5 6	230 281	1000	1285	8
Paddy(rabi)	130	-		17	351	96	49 -	6	281			14( 8) 2:
Paddy(rabi) wheat other cereals	130 - 55	-	70 1000	17	351 - 96	96 -	49 - 22	6	281 - 768	1000 1000 1000	1285 18 390	80
Paddy(rabi) wheat other cereals pulses	130 - 55 -	- - 17 -	70 1000 -	17 - 9 -	351	96 - 33 -	49 - 22 -	6 - -	281 768 713	1000 1000 1000 1000	1285 18 390 18	8 2.
Paddy(rabi) wheat other cereals pulses oil seeds	130 - 55	- - 17	70 1000 -	17 - 9	351 - 96 287	96 - 33	49 	6 - -	281 - 768	1000 1000 1000	1285 18 390	8) 2. 5
Paddy(rabi) wheat other cereals pulses oil seeds	130 - 55 - 0	- 17 - 24	70 1000 - -	17 - 9 - 29	351 - 96 287	96 - 33 - 87	49 	6 - - 1	281 768 713 858	1000 1000 1000 1000 1000	1285 18 390 18 780	8 2. 5 2.
Paddy(rabi) wheat other cereals pulses oil seeds mixed crop sugar cane	130 - 55 - 0 -	- 17 - 24 4	70 1000 - - -	17 - 9 - 29 -	351 96 287 - 28	96 - 33 - 87 135	49 - 22 - 1 -	6 - - 1 1	281 768 713 858 833 850	1000 1000 1000 1000 1000 1000	1285 18 390 18 780 346 30	80 2: 5 2:
Paddy(rabi) wheat other cereals pulses oil seeds mixed crop	130 - 55 - 0 -	- 17 - 24 4	70 1000 - - - -	17 - 9 - 29 -	351 96 287 - 28 132	96 - 33 - 87 135 18	49 - 22 - 1 - - 8	6 - - 1 1 -	281 768 713 858 833	1000 1000 1000 1000 1000 1000	1285 18 390 18 780 346	8 2 5 2
Paddy(rabi) wheat other cereals pulses oil seeds mixed crop sugar cane vegetables fodder	130 - 55 - 0 - - 22	- 17 - 24 4 - 41	70 1000 - - - 20	17 - 9 - 29 - - 40	351 96 287 - 28 132 98	96 - 33 - 87 135 18 238	49 	6 - - 1 1 - 7	281 768 713 858 833 850 527	1000 1000 1000 1000 1000 1000 1000	1285 18 390 18 780 346 30 2436	8 2. 5 2 14
Paddy(rabi) wheat other cereals pulses oil seeds mixed crop sugar cane vegetables	130 - 55 - 0 - - 22 - 34	- 17 24 4 - 41	70 1000 - - - - 20 -	17 - 9 - 29 - - 40	351 96 287 - 28 132 98	96 - 33 - 87 135 18 238	49 	6 - - 1 1 - 7 -	281 768 713 858 833 850 527 1000	1000 1000 1000 1000 1000 1000 1000 100	1285 18 390 18 780 346 30 2436	8 2 5 2 14 18
Paddy(rabi) wheat other cereals pulses oil seeds mixed crop sugar cane vegetables fodder fruits & nuts	130 - 55 - 0 - - 22 - 34	- 17 24 4 - 41 - 4	70 1000 - - - - 20 - 9	17 - - 29 - - - 40 - 18	351 	96 - 33 - 87 135 18 238 - 49	49 22 1 - - 8 - 13 9	6 - - 1 1 - 7 - 13	281 768 713 858 833 850 527 1000 827	1000 1000 1000 1000 1000 1000 1000 100	1285 18 390 18 780 346 30 2436 - 2980	80 2: 5 2:

\*Note

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

				use							no. of hhs	
	certifie	d seeds	uncer		home-	•		mproved			improved	seeds
crop group		.1		eds	see			eds	not	all		
	entirely	partly	entirely		entirely		entirely	partly	used		· /	sample
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(1
					Madh	iya Pra	adesh					
Paddy(kharif)	27	7	6	8	95	67	0	3	787	1000	8098	40
Paddy(rabi)	150	36	74	74	292	66	-	-	309	1000	780	4
wheat	128	26	12	39	139	100		4	543	1000	16885	91
other cereals	99	18	3	38	157	173	15	7	491	1000	7909	42
pulses	85	14	9	29	85	84	- 1	1	691	1000	7394	39
oil seeds	200	24	23	45	149	62	9	4	484	1000	12138	67
mixed crop	63	24	5	25	150	20	6	1	706	1000	1726	9
sugar cane	70	56	33	175	129	158	-	4	375	1000	465	2
vegetables	251	28	8	25	42	75	0	2	569	1000	1753	8
fodder	71	1	37	18	15	93	-	28	737	1000	696	3
fruits & nuts	-	-	-	-	712	-		-	288	1000	30	
other cash crops	465	37	14	41	75	141	48	8	172	1000	3630	19
others	148	2	-	37	13	80	5	28	687	1000	462	2
all crops	119	19	12	32	124	88	7	4	596	1000	28336	151
					Ma	harash	tra					
Paddy(kharif)	120	32	2	1	166	58	1	8	613	1000	7045	32
Paddy(rabi)	120	- 52		-		126		-	179	1000	403	1
wheat	498	16	6	1		6		-	405	1000	6269	30
other cereals	625	19	11	0		6		0	277	1000	25886	120
pulses	379	32	3	1	53	15	13	2	502	1000	7950	37
oil seeds	515	15	4	0	52	-	8	4	402	1000	4257	19
mixed crop	918	6	-	3		-		-	70	1000	2252	11
sugar cane	408	0	26	-	36	8	10	3	509	1000	1967	9
vegetables	641	14	7	-	105	3	9	-	221	1000	3165	15
fodder	181	2	3	-	238	8	1	-	567	1000	712	3
fruits & nuts	610	71	28	-		-		-	233	1000	1584	6
munts & nuts							2		40	1000	12010	~
	8 870	63	8	2	11	3	3	-	40	1000	13810	62
other cash crops	s 870 492	63 24	- 8	2		-		-	40 474	1000	13810 360	62 1

\*Note

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

### Report no. 451 Appendix I Cultivation Practices in India

				use	e of imp	roved	seeds				no. of hł	ns. using
crop group	certifie	d seeds		rtified eds		grown eds		mproved eeds	not	all	improve	d seeds
	entirely	partly	entirely	partly	entirely	partly	entirely	partly	used		estd. (00)	sample
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
					N	lanipu	r					
Paddy(kharif)	324	10	5	14	183	64	45	7	348	1000	870	287
Paddy(rabi)	311	21	25	40	) 26	242	-	-	336	1000	219	63
wheat	-	-	1000	-		-		-	-	1000	2	1
other cereals	362	-		-	- 215	3	-	-	420	1000	34	14
pulses	-	-		-	- 75	603	-	-	322	1000	81	25
oil seeds	-	-	· -	-	- 40	-	-	-	960	1000	3	2
mixed crop	102	2	-	9	362	49	1	1	475	1000	374	124
sugar cane	-	-		-		-	-	-	-	-	-	-
vegetables	90	2	3	7	112	125	1	8	653	1000	471	163
fodder	-	-		-	- 442	-	-	-	558	1000	7	2
fruits & nuts	-	16	<b>.</b> –	-		403	-	93	488	1000	109	39
other cash crops	217	-		-		-		-	783	1000	7	1
others	-	_		-	- 46	16	-	-	938	1000	45	15
all crops	284	10	8	17	/ 148	106	35	6	385	1000	1199	383
					M	eghalay	ya					
Paddy(kharif)	8	-	. 15	6	5 534	73	1	4	359	1000	1161	289
Paddy(rabi)	54	-		-	- 499	-	-	-	447	1000	144	44
wheat	441	-		-	- 357	-	-	-	201	1000	14	5
other cereals	-	-		-	- 553	37	-	-	409	1000	348	91
pulses	55	-		34	233	73	-	-	605	1000	17	7
oil seeds	-	-		-	- 100 0	-		-	-	1000	11	3
mixed crop	16	-		6		51	6	-	17	1000	831	181
sugar cane	-	-		-		-		-	-	-	-	-
vegetables	1	0	3	15	5 298	73		27	582	1000	1142	295
fodder	-	-		15		-		- 27	582 584	1000	3	293
	-	-	-	-	410		_		504	1000	5	1

Table (7): Cropwise per 1000 distribution of area under five major crops\* sown by households by use of improved seeds

## \*Note

others

all crops

fruits & nuts

other cash crops

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1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

2. The set of 5 major crops is not a fixed set but varies from household to household; for any particular household it is understood as the 5 most important field crops cultivated, in terms of value of production, by the household in 1997-98, from among a list of crop-season combinations involving 12 crops and crop-groups spanning the entire range of crops cultivated in the country.

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### Report no. 451 Appendix I Cultivation Practices in India

				use	e of imp	roved	seeds				no. of hhs.	using
	certifie	d seeds		tified		grown		mproved			improved	seeds
crop group				eds	see			eds	not	all	1 (00)	
	entirely				entirely		entirely	partly	used		estd. (00) s	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
					N	lizoran	n					
Paddy(kharif)	-	1	20	26	281	11	30	-	631	1000	105	79
Paddy(rabi)	-	-		-	-	-	-	-	1000	1000	-	-
wheat	-	-		-		-	-	-	-	-	-	-
other cereals	-	-		19	-	-	-	-	981	1000	1	2
pulses	-	-		-	26	-	-	-	974	1000	9	5
oil seeds	-	-		-		-	-	-	1000	1000	-	-
mixed crop	-	-		46	247	17	13	-	677	1000	65	45
sugar cane	-	-		-	-	-	-	-	1000	1000	-	-
vegetables	-	-		3	61	3	-	0	933	1000	23	17
fodder	-	-		53		-	-	-	947	1000	0	1
fruits & nuts	-	-		12		-		-	805	1000	13	11
other cash crops		-		51	50	5	42	-	852	1000	18	15
others	-	-		-	27	-	-	-	973	1000	10	6
all crops	-	0	9	26	196	10	18	0	740	1000	163	123
					N	agalan	d					
Paddy(kharif)				1	-	33		2	964	1000	13	17
Paddy(rabi)	- 11	-		4		55 5		2	904 979	1000	13	20
wheat		_		-		-		-	1000	1000	-	- 20
other cereals	-	17	-	1		81	-	2	900	1000	13	17
pulses	_	_		-	_	_	_	_	1000	1000	_	_
puises	-		-	-		-	-	-	1000	1000		-

Table (7): Cropwise per 1000 distribution of area under five major crops\* sown by households by use of improved seeds

## \*Note

oil seeds

mixed crop

sugar cane

vegetables

fruits & nuts

other cash crops

fodder

others

all crops

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

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2. The set of 5 major crops is not a fixed set but varies from household to household; for any particular household it is understood as the 5 most important field crops cultivated, in terms of value of production, by the household in 1997-98, from among a list of crop-season combinations involving 12 crops and crop-groups spanning the entire range of crops cultivated in the country.

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certifie	d seeds	uncer					mproved			no. of hhs improved	•
					-		•	not	all	r	
entirely	partly	entirely				entirely	partly			estd. (00)	ample
(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13
				(	Orissa						
57	43	13	8	169	48	6	17	639	1000	13298	720
215	7	17	-	192	8	111	3	447	1000	1437	8
238	-	-	-	299	-	7	-	456	1000	163	,
8	-	37	-	330	-	-	-	624	1000	921	51
125	15	17	2	396	33	4	-	409	1000	3071	171
89			5	158			-	673	1000	602	39
-	-	-	-	-	903	-	-	97	1000	29	
-	-	507	-	5	-	-	-	488	1000	81	4
161	26	12	4	199	30	40	6	521	1000	1857	9
-			-	-			-			-	
710	-	-	-	-	-	-	-			154	
804	47	-	-	-	-	43	-	106	1000	280	1.
-	_	-	-	-	-	_	_	1000	1000	-	
76			7	193	43	10				15763	854
				I	Punjab						
456	50	50	22	196	51	76	-	98	1000	5665	486
129	-	2	-	334	50	-	-	485	1000	170	14
257	25	39	25	406	68	56	-	125	1000	7491	638
397	12	2	4	85	37	8	-	455	1000	464	4
432	-	-	-	-	-	-	-	568	1000	57	:
	40	27	-	135	14	175	-				3
-			49	128			-	623	1000	36	-
240	-	56	77	161	17	104	-	345	1000	254	24
		142	217	74	407	14	_	3	1000	278	24
143	-	14/		, +	.07				1000	2,0	2
143 252	- 8			157	95	74	8	286	1000	6740	57
143 252	- 8	96	23	157	95 1000		8	286	1000 1000	6740 32	
252	8	96 -	23			-					57 14
252	8	96 - 76	23	-	1000	5	-	-	1000	32	
	entirely (2) 57 215 238 8 125 89 - 161 - 710 804 - 76 456 129 257 397 432 337 -	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c c c c c c c c c c c c c c c c c c c $	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	certified seeds uncertified seeds home-seeds   entirely partly entirely partly entirely   (2) (3) (4) (5) (6)   (2) (3) (4) (5) (6)   (2) (3) (4) (5) (6)   (2) (3) (4) (5) (6)   (2) (3) (4) (5) (6)   (2) (3) (4) (5) (6)   (2) (3) (4) (5) (6)   (2) (3) (4) (5) (6)   (2) (3) (4) (5) (6)   (2) (3) (4) (5) (6)   (2) (5) 17 2 396   (2) 15 17 2 396   (3) (2) 12 4 199   - - - - -   (4) 126 12 </td <td>certified seeds uncertified entirely (2) home-grown seeds   (2) (3) (4) (5) (6) (7)   (2) (3) (4) (5) (6) (7)   (2) (3) (4) (5) (6) (7)   (2) (3) (4) (5) (6) (7)   (2) (3) (4) (5) (6) (7)   (2) (3) (4) (5) (6) (7)   (2) (3) (4) (5) (6) (7)   (2) (3) (4) (5) (6) (7)   (2) (3) (4) (5) (6) (7)   (2) (3) (3) (4) (7) (7) (7) (7)   (2) (3) (3) (3) (3) (3) (3) (3)   (12) (12) (12) (12) (12) (13) (14)   (2) (2) (</td> <td><math display="block">\begin{array}{c ccccccccccccccccccccccccccccccccccc</math></td> <td><math display="block"> \begin{array}{c ccccccccccccccccccccccccccccccccccc</math></td> <td><math display="block"> \begin{array}{c ccccccccccccccccccccccccccccccccccc</math></td> <td>certified seeds uncertified seeds home-grown entirely partly entirely partly entirely partly entirely partly (2) not (3) all (4)   (2) (3) (4) (5) (6) (7) (8) (9) (10) (11)   Orissa   57 43 13 8 169 48 6 17 639 1000   215 7 17 - 192 8 111 3 447 1000   238 - - - 299 - 7 - 456 1000   8 - 37 - 330 - - - 624 1000   125 15 17 2 396 33 4 - 409 1000   - - - - 903 - - 97 1000   - - - - - - - 1000 1000   -</td> <td>certified seeds uncertified home-grown other improved not all   entirely partly used estd. (00) seeds   (2) (3) (4) (5) (6) (7) (8) (9) (10) (11) (12)   Orissa   57 43 13 8 169 48 6 17 639 1000 13298   215 7 17 - 192 8 111 3 447 1000 1437   238 - - - 299 - 7 - 456 1000 163   8 - 37 2 396 33 4 - 409 1000 3071   89 - - 5 - - 488</td>	certified seeds uncertified entirely (2) home-grown seeds   (2) (3) (4) (5) (6) (7)   (2) (3) (4) (5) (6) (7)   (2) (3) (4) (5) (6) (7)   (2) (3) (4) (5) (6) (7)   (2) (3) (4) (5) (6) (7)   (2) (3) (4) (5) (6) (7)   (2) (3) (4) (5) (6) (7)   (2) (3) (4) (5) (6) (7)   (2) (3) (4) (5) (6) (7)   (2) (3) (3) (4) (7) (7) (7) (7)   (2) (3) (3) (3) (3) (3) (3) (3)   (12) (12) (12) (12) (12) (13) (14)   (2) (2) (	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	certified seeds uncertified seeds home-grown entirely partly entirely partly entirely partly entirely partly (2) not (3) all (4)   (2) (3) (4) (5) (6) (7) (8) (9) (10) (11)   Orissa   57 43 13 8 169 48 6 17 639 1000   215 7 17 - 192 8 111 3 447 1000   238 - - - 299 - 7 - 456 1000   8 - 37 - 330 - - - 624 1000   125 15 17 2 396 33 4 - 409 1000   - - - - 903 - - 97 1000   - - - - - - - 1000 1000   -	certified seeds uncertified home-grown other improved not all   entirely partly used estd. (00) seeds   (2) (3) (4) (5) (6) (7) (8) (9) (10) (11) (12)   Orissa   57 43 13 8 169 48 6 17 639 1000 13298   215 7 17 - 192 8 111 3 447 1000 1437   238 - - - 299 - 7 - 456 1000 163   8 - 37 2 396 33 4 - 409 1000 3071   89 - - 5 - - 488

\*Note

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

					e of imp						no. of hhs	-
	certifie	d seeds	uncer	tified	home-	grown		mproved			improved	seeds
crop group			see	eds		eds	se	eds	not	all		
	entirely	partly	entirely	partly	entirely	partly	entirely	partly	used		estd. (00)	sample
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
					R	ajastha	n					
Paddy(kharif)	2	153	-	73	-	83	-	_	688	1000	536	24
Paddy(rabi)	751			-		28		-	145	1000	152	8
wheat	437	40		78	104	92		2	218	1000	19898	1110
other cereals	322	27	43	58	117	102		2	328	1000	22179	1231
pulses	269	41	39	28	141	99	1	3	380	1000	8088	458
oil seeds	425	45	34	52		68		2	239	1000	11868	661
mixed crop	118	271	8	1	22	106	-	7	467	1000	3788	200
sugar cane	460	38	19	47	13	-	-	-	422	1000	429	23
vegetables	788	34	58	11	57	3	-	-	48	1000	807	52
fodder	203	14	20	22	186	68	3	1	482	1000	3732	223
fruits & nuts	681	-	-	319	-	-		-	-	1000	86	5
other cash crops	459	57	27	142	33	66	1	0	215	1000	4377	253
others	175	18	5	54	47	18	17	1	665	1000	1621	94
all crops	336	56	32	58	104	89	2	2	322	1000	32074	1766
					S	likkim	l					
Paddy(kharif)	36	49	17	_	3	18	15	5	857	1000	15	18
Paddy(rabi)	-			40		-		-	960	1000	15	10
wheat	80			24		29		-	824	1000	7	7
other cereals	3		-	3		5		-	972	1000	11	15
pulses	-	-	-	-	-	-	-	-	1000	1000	-	-
oil seeds	-	-	-	-	-	-		-	1000	1000	-	
mixed crop	-	-	-	-	-	-	-	-	1000	1000	-	-
sugar cane	-	-	-	-	-	-		-	1000	1000	-	-
vegetables	1	1	-	1	-	-	-	0	997	1000	2	4
fodder	-	-	-	-	-	-	-	-	1000	1000	-	-
fruits & nuts	-	-	-	-	-	-		-	1000	1000	-	-
other cash crops		-	-	3	-	-	-	-	997	1000	1	1
others	-	-	-	-	-	-		-	1000	1000	-	-
all crops	8	14	2	3	1	5	3	1	963	1000	28	33

\*Note

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

				use							no. of hhs	-
	certifie	d seeds		tified		grown		mproved			improved	seeds
crop group	entirely	partly	entirely	eds partly	entirely	eds partly	entirely	eds partly	not	all	(1 (00)	1
(1)		1 2					,	1 7	used	(1.1)		sample
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13
					Ta	mil Nac	lu					
Paddy(kharif)	227	23	108	35	253	50	13	8	283	1000	9572	537
Paddy(rabi)	207	21	128	3		23	10	-	304	1000	6463	365
wheat	358	-		-		-		-	110	1000	138	8
other cereals	227	24	60	32	253	33	6	8	357	1000	3903	209
pulses	83	-	136	7	429	50	16	6	274	1000	1994	113
oil seeds	381	34		11	103	17		33	287	1000	2326	134
mixed crop	4	3		329		9		-	51	1000	505	28
sugar cane	145	15	134	3	183	10		11	499	1000	1285	63
vegetables	262	63	180	-	125	23	-	2	346	1000	1361	70
fodder	100	31	159	-	47	46	-	-	617	1000	368	20
fruits & nuts	62	27	188	135	52	77	-	-	458	1000	1728	102
other cash crops	269	20	143	55	54	29	127	1	302	1000	3455	185
others	215	12	166	-	221	26	-	2	358	1000	849	44
all crops	213	22	118	34	228	36	20	7	323	1000	22197	1227
					1	ripura	a					
Paddy(kharif)	336	-	29	7		33		-	390	1000	889	165
Paddy(rabi)	260	-		4		18		43	337	1000	626	124
wheat other cereals	711	-		-		8		-	89 1000	1000	111	1:
	-	-	-	-	-	-	-	-	1000	1000	-	
pulses	-	-	-	-	-	-		-	-	-	-	
oil seeds	-	-	-	-	-	-		-	-	-	-	
mixed crop	-	-	-	-	-	-		-	1000	1000	-	
sugar cane	-	-	-	-		-		-	-	-	-	
vegetables	396	20	18	12	156	14	16	11	357	1000	503	104
fodder	-	-	-	-	-	-	-	-	-	-	-	
fruits & nuts	64	-		-		-		-	936	1000	8	
other cash crops	-	-	-	-	192	-	-	-	808	1000	3	1
others	102	-	-	-	613	-		-	285	1000	7	4
all crops	331	2	30	6	214	25	10	14	367	1000	1455	280

\*Note

1. Paddy: *kharif* and paddy: *rabi*, for example, are treated as different "crops" for this purpose.

				use							no. of hh	
	certifie	d seeds		tified		grown		mproved			improve	d seeds
crop group	<u> </u>			eds		eds		eds	not	all		
	entirely	partly	entirely		entirely		entirely	partly	used		( /	sample
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(1)
					Utta	r Prad	lesh					
Paddy(kharif)	169	41	18	39	140	89	8	7	489	1000	46501	208
Paddy(ra bi)	118	117	0	143	89	171	-	1	361	1000	1176	5
wheat	212	47	25	37	157	89	4	7	421	1000	72320	321
other cereals	180	41	19	28	88	80	1	2	561	1000	18235	76
pulses	139	34	12	15	88	46	4	4	658	1000	13143	57
oil seeds	174	32	56	16	135	50	2	1	533	1000	7094	30
mixed crop	90	20	2	16	36	33	0	1	802	1000	2389	10
sugar cane	209	29	32	40	218	97	8	2	365	1000	14489	63
vegetables	222	46	69	41	110	47	5	13	447	1000	10625	46
fodder	143	29	46	49	204	151	2	2	373	1000	17294	73
fruits & nuts	84	91	68	22	126	10	-	-	600	1000	819	3
other cash crops	s 206	10	13	37	176	44	20	29	466	1000	2929	12
others	91	66	21	55	104	44	9	2	608	1000	1777	8
all crops	185	41	24	35	141	84	5	6	479	1000	78727	350
					We	st Beng	gal					
Paddy(kharif)	104	29	109	36	334	101	11	6	270	1000	36866	171
Paddy(rabi)	190	41	114	39	262	49		13	283	1000	13724	61
wheat	263	9	235	17		12		9	296	1000	7563	33
other cereals	272	84	70	194	37	58		-	188	1000	958	4
pulses	287	99	66	22	159	47	2	3	307	1000	1886	8
oil seeds	141	12	240	58	186	32	0	13	311	1000	4922	22
mixed crop	204	-	-	95	23	298	-	-	380	1000	347	1
sugar cane	59	-	83	-	376	-	15	-	468	1000	286	1
vegetables	233	41	181	53	68	78	15	8	321	1000	11777	53
fodder	24	-	-	-	-	-	-	-	976	1000	3	
fruits & nuts	78	4	41	14	170	89	10	-	559	1000	625	2
	s 580	67	65	31	54	60	10	11	122	1000	9707	43
other cash crops												
other cash crops	69	-	100	-		3	7	-	817	1000	635	3

\*Note

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

				use	of imp						no. of hh	-
	certifie	d seeds	uncer	tified	home-	grown	other is	mproved			improved	l seeds
crop group				eds		eds		eds	not	all		
	entirely	partly	entirely		entirely			partly	used			sample
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13
					A. &	N. Isla	ands					
Paddy(kh arif) Paddy(rabi)	43	13		-	322	23		-	560 1000	1000 1000	30	27
wheat other cereals	-	-	-	-	-	-	· -	-	-		-	
pulses	202	-	-	-	-	-		-	798	1000	12	1(
oil seeds	-	-	-	-	-	-		-	-	-	-	
mixed crop	-	-	-	-	-	-		-	-	-	-	
sugar cane	-	-	-	-	-	-	· -	-	-	-	-	
vegetables	116	-	-	-	649	4		-	230	1000	43	31
fodder fruits & nuts	-	-	-	-	-	-		-	-	-	-	
other cash crops	-	-	-	-	-	-		-	-	-	-	
others	_	_	-	_	-	-		_	_	_	_	
all crops	65	10	30	-	335	19	- (	-	540	1000	70	50
						India						
Paddy(kharif)	157	39	37	37	146	75	12	7	491	1000	214805	12375
Paddy(rabi)	226			31	193	61		6	344	1000	38469	2118
wheat	248			50	154	88		5	369	1000	189030	10308
other cereals	363			31	102	77		2	362	1000	140124	7520
pulses oil seeds	191 314	28 34		24 30	121 103	70 56		2 3	534 412	1000 1000	70431 68831	374 374
mixed crop	255			50 16	105 64	50 47		3 2	412 491	1000	20810	141
sugar cane	232			41	162	68		3	388	1000	25665	120
vegetables	288	46	60	43	86	51		8	407	1000	60351	426
fodder	175	21		33	146	95		7	442	1000	40416	2450
fruits & nuts	195	37	64	31	69	45	23	13	523	1000	11901	91
other cash crops	582	43	47	41	42	45	13	5	182	1000	67914	351
others	189	21	63	69	59	27	15	7	550	1000	12600	87.
all crops	265	39	37	37	123	71	10	5	413	1000	449958	2538

\*Note

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

size-class of			percentag	e of area s	own with i	mproved se	eds			no. of fi cult.	eld-crop hhs.
ownership holding(ha)	pado kharif	ly rabi	wheat	other cereals	pulses	oil- seeds	fodder	others	all	estd. (00)	sample
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
(1)	(=)	(0)	(.)	(0)	(0)	(/)	(0)	(2)	(10)	(11)	(12)
				An	dhra Pra	desh					
nil (< 0.01)	79.17	78.09	-	94.01	86.11	87.20	-	43.62	79.64	816	35
00.01 - 00.20	68.69	66.40	-	34.38	46.22	46.28	-	45.61	59.19	4366	203
00.21 - 00.50	72.28	73.36	-	67.50	54.92	48.86	80.74	61.59	66.22	12989	627
00.51 - 01.00	76.17	71.99	49.26	80.74	69.32	50.82	41.19	59.69	69.70	12848	596
01.01 - 02.00	75.88	63.96	100.00	72.02	70.49	46.63	27.91	63.29	66.90	10837	499
02.01 - 04.00	81.29	73.51	17.42	73.43	74.11	42.11	61.55	71.93	70.35	7035	347
04.01 - 10.00	84.83	80.60	73.83	63.04	81.07	43.85	39.47	52.02	64.95	3455	164
10.01 & above	83.66	44.57	-	36.14	38.22	18.01	-	33.04	37.55	495	25
all	78.57	72.13	66.01	69.01	70.96	39.95	46.19	59.08	65.26	52840	2496
				Arm	nachal Pr	adesh					
nil (< 0.01)	36.77	57.00	-	7.56	-	-	-	42.25	48.20	203	70
00.01 - 00.20	24.84	-	-	15.72	100.00	-	-	3.01	7.24	79	34
00.21 - 00.50	26.96	-	94.06	37.87	100.00	-	-	16.63	21.72	190	81
00.51 - 01.00	14.54	-	97.35	71.85	91.26	57.45	-	39.60	36.70	221	108
01.01 - 02.00	9.80	-	95.10	16.46	51.65	-	-	7.01	11.16	292	12:
02.01 - 04.00	34.49	-	92.56	44.53	67.15	-	-	15.29	33.47	165	90
04.01 - 10.00	24.46	-	85.12	6.39	21.70	52.92	-	4.45	16.93	161	86
10.01 & above	-	-	-	-	-	-	-	7.65	1.17	11	8
all	21.18	36.09	93.33	27.69	44.68	18.65	-	15.50	24.34	1321	602
					Assam						
r(< 0.01)	21.07							0 02	16.02	F F 0	~
nil (< 0.01 ) 00.01 - 00.20	31.07	-	-	-	-	-	-	8.03	16.02	552 3132	63 307
00.01 - 00.20	53.84 40.86	48.52 42.33	62.43 59.05	3.99 20.22	50.24 21.96	10.96 37.29	- 100.00	29.10 37.25	40.12 39.92	4041	432
00.51 - 01.00	31.13	33.76	58.44	26.50	0.23	28.72	100.00	47.90	34.34	6940	603
01.01 - 02.00	38.07	33.53	78.05	45.48	13.95	27.04	-	49.80	39.08	6968	582
02.01 - 04.00	41.55	44.31	87.82	53.66	28.38	31.27	19.56	58.73	45.19	2536	205
04.01 - 10.00	66.40	47.87	100.00	100.0	75.22	100.00	-	78.46	71.19	520	42
10.01 & above	-	-	-	0	-	-	-	-	-	-	
all	40.78	37.83	80.33	49.95	25.47	33.50	39.61	51.57	42.90	24689	2234
a11	40.70	57.05	00.55	47.75	23.47	55.50	57.01	51.57	42.70	24009	2232

size-class of			percentag	e of area so	own with in	proved see	eds				eld-crop hhs.
ownership holding(ha)	pad kharif	dy rabi	wheat	other cereals	pulses	oil- seeds	fodder	others	all	estd. (00)	sample
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
					Bihar						
nil (< 0.01)	9.86	-	47.26	1.23	9.78	-	-	5.96	13.25	3743	197
00.01 - 00.20	37.62	77.20	46.77	67.84	15.26	36.51	2.27	42.40	42.70	19828	1015
00.21 - 00.50	39.11	69.29	59.12	51.57	27.52	51.93	30.98	58.69	47.34	23571	1234
00.51 - 01.00	38.24	72.13	55.00	51.27	31.50	29.71	30.34	53.78	44.82	20184	976
01.01 - 02.00	39.72	57.88	59.35	43.51	29.84	22.10	6.16	49.66	44.95	15932	781
02.01 - 04.00	50.18	86.11	67.60	57.98	47.93	42.76	41.04	52.49	56.02	6811	331
04.01 - 10.00	45.42	64.54	61.23	46.77	28.88	38.21	11.65	46.80	48.79	2313	111
10.01 & above	79.75	-	89.87	35.99	24.86	56.01	95.30	77.41	74.02	278	14
all	43.43	71.50	61.99	46.42	32.55	38.47	26.72	50.26	48.80	92660	4659
					Gujarat	;					
nil (< 0.01)	68.37	-	-	100.00	-	-	57.36	65.42	68.06	151	5
00.01 - 00.20	20.36	100.00	75.23	54.80	35.35	100.00	-	100.00	76.76	1224	68
00.21 - 00.50	58.71	70.99	84.09	78.93	78.18	87.80	29.25	97.03	78.85	7372	382
00.51 - 01.00	63.88	89.34	87.33	79.58	76.14	84.01	62.12	90.78	79.69	5864	287
01.01 - 02.00	77.89	71.32	91.82	83.12	84.61	75.49	37.39	97.21	84.60	6566	338
02.01 - 04.00	79.69	79.28	92.00	86.14	78.08	69.11	50.90	92.71	82.95	5532	282
04.01 - 10.00	94.02	-	90.02	90.63	86.13	67.47	61.30	96.61	85.81	3742	200
10.01 & above	-	-	100.00	95.28	100.00	79.15	29.33	93.18	86.36	529	30
all	76.63	79.03	90.38	85.60	81.35	71.36	49.51	94.99	83.89	30981	1592
					Haryana	1					
nil (< 0.01)	100.00	-	100.00	-	-	-	54.41	100.00	96.89	109	5
00.01 - 00.20	98.31	-	97.91	100.00	-	100.00	76.18	100.00	95.44	573	27
00.21 - 00.50	76.66	-	76.92	89.18	13.83	96.29	62.34	84.32	76.74	1851	9(
00.51 - 01.00	68.94	-	61.60	71.62	7.39	81.51	41.62	91.62	64.59	1839	85
01.01 - 02.00	73.74	41.15	78.48	84.34	36.00	91.46	56.53	61.93	72.45	2973	138
02.01 - 04.00	82.15	100.00	79.27	91.97	34.60	69.24	53.44	83.79	75.95	2362	110
04.01 - 10.00	92.93	-	91.24	82.36	19.70	88.83	44.40	80.56	81.53	1613	71
10.01 & above	99.99	-	94.00	40.30	12.65	-	56.78	97.73	86.27	229	13
all	86.84	76.32	83.86	81.79	26.90	80.36	51.89	82.48	78.14	11548	551

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size-class of			percentag	ge of area s	own with i	improved so	eeds			no. of fi cult.	-
ownership	pad	dv	wheat	other	pulses	oil-	fodder	others	all	estd.	sample
holding(ha)	kharif	rabi		cereals	L	seeds				(00)	I.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
				Him	achal Pr	adesh					
nil (< 0.01)	-	-	25.22	-	-	-	-	-	11.33	45	8
00.01 - 00.20	32.76	-	22.88	22.48	29.08	-	42.23	34.81	24.38	1691	322
00.21 - 00.50	46.14	53.81	36.59	27.62	48.58	11.31	47.11	42.95	35.11	2939	550
00.51 - 01.00	43.95	-	34.70	27.24	29.01	6.90	30.88	37.91	32.80	2208	404
01.01 - 02.00	26.01	-	26.61	18.47	16.02	11.22	28.19	34.74	24.85	1277	241
02.01 - 04.00	20.93	-	41.42	40.85	26.39	5.67	11.89	47.37	40.34	522	99
04.01 - 10.00	22.18	-	28.66	20.73	18.22	6.62	2.69	72.30	29.72	108	22
10.01 & above	57.98	-	-	28.39	-	-	-	53.88	20.72	35	7
all	35.90	31.34	32.88	26.72	25.72	8.00	26.60	41.80	31.67	8825	1653
				Jam	mu & Ka	shmir					
nil (< 0.01)	100.00	-	-	-	-	-	-	97.49	51.54	11	4
00.01 - 00.20	67.70	100.00	62.12	46.47	50.18	51.09	64.32	61.98	61.71	1039	218
00.21 - 00.50	60.49	99.27	48.88	33.64	48.89	65.69	57.74	57.89	57.18	2807	578
00.51 - 01.00	64.68	78.88	60.16	38.55	42.68	38.60	53.53	76.41	59.61	1978	392
01.01 - 02.00	72.57	100.00	76.28	58.60	61.10	69.67	75.95	67.56	70.97	997	242
02.01 - 04.00	80.98	100.00	81.73	63.28	72.80	20.77	66.22	65.61	73.93	353	84
04.01 - 10.00	83.39	-	95.68	87.50	78.43	70.25	62.33	54.00	84.08	51	17
10.01 & above	-	-	-	-	-	-	-	-	-	-	-
all	69.19	92.32	72.27	50.85	60.13	54.08	62.95	68.55	65.90	7236	1535
					Karnatal	(a					
nil (< 0.01)	100.00	-	-	1.71	-	100.00	-	100.00	60.55	146	7
00.01 - 00.20	83.07	100.00	-	64.07	63.81	82.98	-	45.66	65.16	2826	137
00.21 - 00.50	84.52	66.71	56.61	64.66	51.62	69.38	100.00	64.23	66.09	6735	322
00.51 - 01.00	75.60	70.16	58.41	70.87	55.61	76.55	42.89	66.24	69.00	10269	445
01.01 - 02.00	76.95	68.84	33.60	65.49	55.13	75.41	50.26	58.01	65.19	12321	522
02.01 - 04.00	76.33	73.64	50.47	65.56	50.01	70.16	75.57	68.97	66.17	7165	308
04.01 - 10.00	64.33	56.95	60.57	71.29	44.88	52.03	30.56	57.36	60.69	4250	184
10.01 & above	100.00	-	4.56	69.33	52.48	85.48	-	45.53	66.07	656	28
all	76.45	66.72	43.10	68.07	50.68	68.54	38.80	60.47	64.70	44369	1953

size-class of			percentag	e of area so	own with im	proved see	eds			no. of fie cult.	-
ownership holding(ha)	pad kharif	dy rabi	wheat	other cereals	pulses	oil- seeds	fodder	others	all	estd. (00)	sample
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
					Kerala						
nil (< 0.01)	-	-	-	-	-	-	-	-	-	75	4
00.01 - 00.20	43.41	62.83	-	24.90	-	8.40	-	16.42	18.30	22100	1401
00.21 - 00.50	54.34	62.66	100.00	21.26	-	13.27	-	20.09	26.86	6402	419
00.51 - 01.00	75.44	69.89	-	31.75	-	40.71	-	27.01	39.43	3374	201
01.01 - 02.00	71.01	76.66	-	64.95	-	10.26	-	29.4	35.02	1976	116
02.01 - 04.00	91.97	77.87	-	-	100.00	1.34	-	48.64	56.28	485	29
04.01 - 10.00	98.20	100.00	-	-	-	2.31	-	55.01	57.04	170	10
10.01 & above	100.00	-	-	-	-	100.00	-	5.48	51.07	32	2
all	77.04	71.92	100.00	23.16	28.74	14.17	-	28.15	36.66	34615	2182
				Ma	adhya Prad	lesh					
1 (< 0.01 )	22.42	-	27.77	44.02	25.66	37.52	-	49.49	31.58	421	21
0.01 - 00.20	30.56	49.23	31.46	-	18.78	49.86	14.36	48.56	32.22	2467	139
00.21 - 00.50	25.34	82.34	44.04	22.12	16.97	51.75	12.87	25.62	33.81	9680	539
00.51 - 01.00	20.96	59.39	39.94	44.35	27.60	52.05	26.33	29.81	33.98	15036	774
01.01 - 02.00	19.58	59.90	39.08	42.52	26.04	47.79	8.47	41.96	34.14	21560	1108
02.01 - 04.00	19.03	49.98	46.27	46.61	26.57	49.32	28.70	47.81	38.07	18818	954
04.01 - 10.00	26.10	100.00	50.78	54.14	35.26	55.56	32.72	51.77	46.11	8158	434
10.01 & above	20.86	100.00	47.49	76.52	42.15	52.31	20.55	78.47	50.88	1028	62
all	21.34	69.12	45.74	50.91	30.91	51.61	26.29	49.02	40.41	77168	4031
				N	/laharashti	a					
nil (< 0.01)	100.00		-	29.37	100.00		-	100.00	52.63	178	7
00.01 - 00.20	29.46	-	- 72.74	76.85	35.74	- 72.86	-	87.92	64.30	3913	188
00.01 - 00.20	41.31	81.37	64.13	73.82	39.48	46.84	- 64.81	73.61	57.85	8349	399
00.21 - 00.30	43.07	68.76	47.87	77.37	43.70	40.84	20.54	79.37	63.79	12111	559
01.01 - 02.00	40.30	100.00	63.91	76.10	58.52	58.58	28.32	86.99	70.83	15774	739
02.01 - 04.00	29.94	64.21	59.10	70.16	40.96	55.08	53.22	87.06	65.57	11295	527
04.01 - 10.00	41.25	-	58.93	74.49	57.23	64.41	49.96	90.28	73.78	6238	287
10.01 & above	52.49	-	62.24	59.07	38.28	70.92	49.40	87.89	69.06	883	40
all	38.66	82.12	59.53	72.31	49.83	59.79	43.30	87.54	69.05	58740	2746

Table (7.1): Percentage of area under a crop sown with any kind of improved seeds by size-class of household ownership holding

size-class of			percentage	e of area sov	wn with in	nproved se	eds			no. of fie cult.	
ownership holding(ha)	pac kharif	ldy <i>rabi</i>	wheat	other cereals	pulses	oil- seeds	fodder	others	all	estd. (00)	sample
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
					Manipu	ır					
nil (< 0.01)	26.34	81.14	-	-	-	-	-	3.80	42.45	198	80
00.01 - 00.20	17.09	-	-	-	-	-	-	33.92	26.27	189	57
00.21 - 00.50	67.85	61.38	-	76.93	74.68	46.25	100.00	38.96	61.79	483	174
00.51 - 01.00	56.89	55.38	-	89.07	95.60	20.51	-	25.52	53.10	832	256
01.01 - 02.00	80.56	53.13	100.00	97.40	91.26	-	-	68.06	76.65	353	140
02.01 - 04.00	76.11	89.52	-	-	96.18	-	-	69.73	77.80	76	34
04.01 - 10.00	75.32	-	-	-	-	-	-	92.67	77.79	10	6
10.01 & above	-	-	-	-	-	-	-	-	-	-	-
all	65.23	66.41	100.00	57.95	67.78	3.97	44.16	35.06	61.45	2139	747
					Meghala	ya					
nil (< 0.01)	100.00	-	-	-	-	-	-	100.00	100.00	17	6
00.01 - 00.20	77.43	-	100.00	100.00	-	-	-	76.60	78.10	385	121
00.21 - 00.50	58.42	17.75	59.95	48.88	-	-	-	56.88	55.26	782	210
00.51 - 01.00	62.41	33.93	62.88	62.15	47.68	100.00	100.00	51.49	55.01	796	225
01.01 - 02.00	46.77	100.00	-	67.29	43.64	100.00	-	55.48	53.64	605	193
02.01 - 04.00	60.32	100.00	100.00	35.10	-	-	-	40.71	49.35	425	136
04.01 - 10.00	94.39	100.00	-	100.00	-	-	-	61.96	84.13	92	29
10.01 & above	-	-	-	-	-	-	-	-	-	-	-
all	64.11	55.26	79.88	59.09	39.52	100.00	41.64	51.65	57.39	3103	920
					Mizorai	n					
nil (< 0.01)	38.21	-	-	-	-	-	100.00	12.00	20.37	104	72
00.01 - 00.20	22.74	-	-	-	5.43	-	-	12.00	15.38	339	263
00.21 - 00.50	48.70	-	-	-		-	-	18.34	33.92	43	45
00.51 - 01.00	27.21	-	-	18.13	-	-	-	24.12	22.87	55	47
01.01 - 02.00	58.72	-	-	-	-	-	-	49.10	51.30	66	54
02.01 - 04.00	80.23	-	-	-	-	-	-	40.13	56.64	14	16
04.01 - 10.00	100.00	-	-	-	-	-	-	-	86.67	3	3
10.01 & above	-	-	-	-	-	-	-	-	-	-	-

Table (7.1): Percentage of area under a crop sown with any kind of improved seeds by size-class of household ownership holding

size-class of		no. of fie cult.									
ownership	pac	ldy	wheat	other	pulses	oil-	fodder	others	all	estd.	sample
holding(ha)	kharif	rabi		cereals		seeds				(00)	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
					Nagalan	d					
nil (< 0.01)	-	-	-	-	-	-	-	-	-	16	13
00.01 - 00.20	-	100.00	-	-	-	-	-	6.03	5.85	24	20
00.21 - 00.50	-	4.94	-	-	-	-	-	-	0.41	37	47
00.51 - 01.00	3.24	3.95	-	1.29	-	-	23.61	1.92	2.56	77	71
01.01 - 02.00	-	1.53	-	-	-	22.00	-	-	0.81	190	177
02.01 - 04.00	1.45	0.84	-	7.81	-	-	-	1.77	1.93	329	356
04.01 - 10.00	7.08	8.92	-	28.41	-	-	-	2.48	5.83	127	136
10.01 & above	-	-	-	-	-	-	-	-	-	7	8
all	3.63	2.09	-	9.99	-	11.27	0.49	1.89	3.28	807	828
					Orissa						
nil (< 0.01)	0.89	-	-	-	-	-	-	0.68	0.69	198	20
00.01 - 00.20	25.09	29.96	-	58.00	39.83	32.02	-	56.02	28.58	5949	326
00.21 - 00.50	33.42	82.21	37.24	30.52	50.86	16.63	-	25.33	36.11	12133	657
00.51 - 01.00	42.07	57.25	55.47	32.50	58.49	28.50	-	56.56	43.88	10803	553
01.01 - 02.00	37.95	59.37	40.06	29.58	63.04	39.99	-	59.85	41.08	7280	378
02.01 - 04.00	30.83	35.50	-	58.60	49.90	64.56	-	71.09	34.53	2881	146
04.01 - 10.00	32.93	53.86	100.00	56.48	66.84	6.51	-	22.32	38.44	609	32
10.01 & above	42.46	-	-	-	100.00	-	-	89.23	53.55	122	3
all	36.11	55.32	54.37	37.56	59.10	32.73	-	59.70	39.53	39975	2115
					Punjab						
nil (< 0.01)	100.00	-	100.00	-	-	-	67.57	100.00	94.99	50	5
00.01 - 00.20	100.00	36.42	87.84	13.90	-	-	80.91	54.44	80.10	482	47
00.21 - 00.50	70.95	100.00	68.89	46.07	-	73.29	66.40	83.87	68.35	1130	99
00.51 - 01.00	90.71	71.16	86.83	86.99	100.00	100.00	71.40	81.67	84.70	1462	122
01.01 - 02.00	88.96	81.50	84.31	65.94	87.01	100.00	73.23	59.58	80.63	2909	254
02.01 - 04.00	90.06	30.58	84.82	9.78	-	31.67	69.94	72.34	81.63	2202	190
04.01 - 10.00	91.12	11.86	89.28	60.23	36.72	100.00	70.25	81.24	85.43	1575	133
10.01 & above	91.06	100.00	91.20	100.00	-	100.00	75.67	90.76	90.48	377	33
all	90.22	51.49	87.49	54.49	43.21	72.89	71.38	79.20	84.38	10188	883

Table (7.1): Percentage of area under a crop sown with any kind of improved seeds by size-class of household ownership holding

size-class of		percentage of area sown with improved seeds									
ownership	pad	ldy	wheat	other	pulses	oil-	fodder	others	all	estd.	sample
holding(ha)	kharif	rabi		cereals	-	seeds				(00)	-
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
				]	Rajasthan	I					
nil (< 0.01)	-	-	87.73	72.50	-	66.24	96.02	82.88	61.06	306	19
00.01 - 00.20	-	-	26.66	44.62	6.69	67.23	88.25	79.11	50.58	2073	110
00.21 - 00.50	13.36	-	62.76	56.62	33.35	71.25	31.27	46.16	56.08	7782	415
00.51 - 01.00	25.35	62.37	64.11	53.88	34.17	61.96	14.38	45.08	52.61	8603	445
01.01 - 02.00	20.58	92.33	71.35	58.49	50.66	73.06	30.27	49.44	60.08	11017	583
02.01 - 04.00	66.62	76.99	84.08	67.92	56.41	77.14	42.74	67.05	70.58	9684	539
04.01 - 10.00	17.56	100.00	80.40	71.27	67.25	77.92	53.37	59.67	69.68	7914	451
10.01 & above	-	-	88.68	73.01	71.20	80.36	79.69	65.32	74.27	2009	124
all	31.17	85.48	78.19	67.23	62.01	76.11	51.82	60.90	67.83	49388	2686
					Sikkim						
nil (< 0.01)	17.83	_	-	1.58	_	_	_	0.24	3.74	60	76
00.01 - 00.20	8.82	43.48	11.60	1.16	-	-	-	- 0.24	2.17	95	111
00.21 - 00.50	3.72	-	47.28	1.22	-	-	-	1.22	2.63	180	216
00.51 - 01.00	12.27	-	24.52	4.18	-	-	-	0.23	4.26	123	136
01.01 - 02.00	12.56	-	-	1.37	-	-	-	-	2.54	85	92
02.01 - 04.00	14.71	-	-	1.95	-	-	-	0.27	2.98	38	42
04.01 - 10.00	-	-	-	-	-	-	-	-	-	3	4
10.01 & above	100.00	-	-	100.00	-	-	-	-	76.13	1	1
all	14.28	4.04	17.64	2.79	-	-	-	0.30	3.70	586	678
				Т	amil Nad	u					
nil (< 0.01)	100.00	-	-	100.00	92.59	100.00	-	100.00	99.12	707	41
00.01 - 00.20	64.56	88.41	100.00	33.39	100.00	70.90	35.05	61.51	69.81	4184	247
00.21 - 00.50	67.54	65.93	100.00	52.70	75.05	52.95	11.63	63.17	63.36	10470	610
00.51 - 01.00	67.53	73.02	100.00	55.14	84.44	60.76	53.18	65.94	66.95	8949	487
01.01 - 02.00	70.90	70.08	100.00	55.02	83.22	60.93	25.50	68.15	66.61	5976	321
02.01 - 04.00	74.15	83.33	84.13	72.62	72.45	90.32	33.20	63.21	73.18	2684	136
04.01 - 10.00	84.43	44.06	-	86.02	40.54	61.19	-	39.90	62.90	966	42
10.01 & above	22.73	-	-	-	100.00	100.00	100.00	100.00	84.58	49	3
all	71.67	69.58	89.01	64.28	72.63	71.35	38.31	63.64	67.73	33985	1887

size-class of		percentage of area sown with improved seeds									
ownership	pad	dy	wheat	other	pulses	oil-	fodder	others	all	estd.	sample
holding(ha)	kharif	rabi		cereals		seeds				(00)	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
					Tripura						
nil (< 0.01)	38.39	-	-	-	-	-	-	100.00	41.64	43	8
00.01 - 00.20	57.61	42.65	100.00	-	-	-	-	53.45	53.10	490	110
00.21 - 00.50	60.85	74.07	100.00	-	-	-	-	59.31	67.63	910	187
00.51 - 01.00	67.14	64.38	89.22	-	-	-	-	53.72	65.65	652	134
01.01 - 02.00	61.50	67.43	85.11	-	-	-	-	47.55	62.45	215	40
02.01 - 04.00	56.50	58.00	100.00	-	-	-	-	98.87	63.63	71	16
04.01 - 10.00	23.43	-	-	-	-	-	-	-	18.85	8	2
10.01 & above	-	-	-	-	-	-	-	-	-	-	-
all	61.03	66.27	91.07	-	-	_	-	58.04	63.28	2389	497
				U	ttar Prade	esh					
nil (< 0.01)	22.33	-	30.57	18.06	41.95	-	81.97	46.53	29.32	599	29
00.01 - 00.20	33.02	32.45	37.96	29.87	11.61	15.25	35.21	42.42	34.20	30448	1426
00.21 - 00.50	40.69	38.17	41.71	27.01	19.10	16.32	48.12	35.85	37.87	50848	2087
00.51 - 01.00	45.20	40.44	50.72	37.79	24.86	29.59	55.42	46.10	45.48	40361	1665
01.01 - 02.00	50.89	60.45	57.28	41.76	32.43	36.98	60.54	48.37	50.74	29586	1205
02.01 - 04.00	55.91	66.38	62.47	51.87	37.17	53.59	68.84	54.74	56.91	14076	606
04.01 - 10.00	70.40	100.00	77.75	52.37	40.88	67.69	75.07	62.62	66.56	5049	226
10.01 & above	90.35	-	95.44	86.65	63.47	94.62	78.87	72.79	84.60	396	19
all	51.07	63.88	57.92	43.86	34.19	46.66	62.66	51.85	52.09	171362	7263
				v	Vest Beng	gal					
nil (< 0.01)	21.35	39.05	57.49	-	59.67	100.00	_	54.47	30.79	1976	87
00.01 - 00.20	70.55	73.22	82.77	78.02	69.47	86.32	32.70	67.49	71.73	15261	758
00.01 - 00.20	70.33	73.22	82.77 77.34	61.77	50.32	72.67	52.70	67.60	71.73	19727	972
00.21 - 00.30	74.67	76.28	63.55	83.92	70.24	76.52	-	72.73	74.01	19727	650
01.01 - 02.00	75.47	65.23	72.93	77.96	65.52	56.69	-	71.10	72.42	6730	302
02.01 - 04.00	80.10	70.71	69.17	94.78	73.05	78.14	-	69.48	76.54	2164	97
04.01 - 10.00	93.55	67.26	54.85	-	100.00	9.50	-	88.04	80.27	191	9
10.01 & above	100.00	-	100.00	-	-	-	-	100.00	100.00	24	1
all	72.97	71.62	70.45	81.25	68.62	68.35	2.45	70.90	72.04	60788	2876
											- / -

Table (7.1): Percentage of area under a crop sown with any kind of improved seeds by size-class of household ownership holding

size-class of		percentage of area sown with improved seeds									
ownership	pado	dy	wheat	other	pulses	oil-	fodder	others	all	estd.	sample
holding(ha)	kharif	rabi		cereals		seeds				(00)	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
					A. & N. Is	lands					
nil (< 0.01)	82.27	-	-	-	-	-	-	76.70	80.80	33	25
00.01 - 00.20	-	-	-	-	-	-	-	87.65	78.18	9	8
00.21 - 00.50	-	-	-	-	75.55	-	-	-	26.03	5	7
00.51 - 01.00	43.25	-	-	-	42.07	-	-	38.62	42.54	17	16
01.01 - 02.00	26.63	-	-	-	19.19	-	-	92.52	34.24	22	21
02.01 - 04.00	23.28	-	-	-	5.59	-	-	100.00	23.29	20	20
04.01 - 10.00	50.80	-	-	-	41.98	-	-	57.70	50.29	6	5
10.01 & above	-	-	-	-	-	-	-	-	-	-	-
all	43.99	-	-	-	20.17	-	-	76.97	45.97	113	102
					India	1					
nil (< 0.01)	26.94	60.47	53.54	35.03	30.86	60.41	44.78	43.93	37.73	10806	914
00.01 - 00.20	45.03	68.01	46.67	46.16	22.32	57.22	59.06	52.01	47.44	123414	7726
00.21 - 00.50	48.45	68.65	50.81	50.92	37.16	53.77	49.82	52.35	50.36	191767	11440
00.51 - 01.00	49.43	67.25	53.65	58.39	40.37	54.53	51.13	57.85	53.16	180495	10274
01.01 - 02.00	48.61	60.47	59.27	60.46	44.45	56.72	52.70	60.50	55.10	162612	9215
02.01 - 04.00	50.05	65.33	65.37	64.87	44.63	58.43	58.19	67.80	59.51	97772	5712
04.01 - 10.00	57.79	68.50	71.41	69.16	50.91	61.19	57.03	69.67	64.82	47354	2716
10.01 & above	71.46	80.55	78.68	70.08	56.40	60.66	62.74	73.65	69.51	7168	422
all	50.92	65.55	63.12	63.80	46.62	58.83	55.79	65.07	58.70	821388	48419

crop-group	area (per 1000 h	ectares) und	er five major cr	ops treate	ed with	estd. area under the	area cultivating the under crop using			
	fertiliser only	manure only	both manure & fertilisers	None	all	crop (00 ha.)	estd. (00)	sample		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)		
		Аг	ndhra Pradesł	1						
Paddy( <i>kharif</i> )	78	9	911	3	1000	25215	30226	1411		
Paddy(rabi)	194	1	801	5	1000	8145	8802	365		
wheat	49	64	761	126	1000	292	246	13		
other cereals	115	40	787	58	1000	8705	10687	523		
pulses	187	40	693	80	1000	7051	7606	339		
oil seeds	78	67	847	8	1000	13035	10499	483		
mixed crop	90	63	831	16	1000	4407	2928	135		
sugar cane	172	16	812	-	1000	1686	2537	112		
vegetables	38	4	941	18	1000	1109	2178	109		
fodder	118	6	393	483	1000	720	578	24		
fruits & nuts	71	137	622	170	1000	1728	1433	65		
other cash crops	111	39	823	27	1000	8384	8722	413		
others	148	9	693	149	1000	1629	1436	64		
all crops	110	32	827	31	1000	82260	52067	2457		
		Aru	nachal Prade	sh						
Paddy(kharif)	113	61	29	797	1000	626	237	95		
Paddy( <i>rabi</i> )	59	5	4	932	1000	126	10	3		
wheat	601	1	330	68	1000	38	66	33		
other cereals	156	69	46	728	1000	119	107	55		
pulses	307	6	20	667	1000	27	37	18		
oil seeds	-	2	42	956	1000	9	3	2		
mixed crop	26	23		915	1000	137	85	37		
sugar cane		-	-	1000	1000	0	-	-		
vegetables	112	155	129	604	1000	93	243	113		
fodder		-	-	1000	1000	0				
fruits & nuts	-	15	120	865	1000	11	8	5		
other cash crops	-	800	35	165	1000	33	53	33		
others	5	12	29	954	1000	36	9	4		
-	-						-	-		

## Table (8): Cropwise per 1000 distribution of area under five major crops\* by use of fertilisers and manure

\*Note

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

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all crops	112	72	46	770	1000	1266	359	157

\*Note

<sup>1.</sup> Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

<sup>2.</sup> The set of 5 major crops is not a fixed set but varies from household to household; for any particular household it is understood as the 5 most important field crops cultivated, in terms of value of production, by the household in 1997-98, from among a list of crop-season combinations involving 12 crops and crop-groups spanning the entire range of crops cultivated in the country.
	area (per 1000 hectares) under 5 major crops treated with					estd. area under the	no. of hhs. cultivating the crop using fertiliser	
crop-group	fertiliser only	manure only	both manure & fertilisers	none	all	crop (00 ha.)	estd. (00)	sample
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
			Assam					
Paddy(kharif)	122	195	350	333	1000	18424	12899	1091
Paddy(rabi)	238	209	157	396	1000	3931	2509	239
wheat	238	71	616	75	1000	1039	2350	215
other cereals	20	123	751	105	1000	329	822	77
pulses	30	99	278	593	1000	1190	1613	132
oil seeds	264	99	468	169	1000	571	1585	129
mixed crop	10	783	141	67	1000	31	133	13
sugar cane	85	64	474	377	1000	357	388	30
vegetables	114	367	310	209	1000	3612	13913	1136
fodder	133	16	263	588	1000	45	44	4
fruits & nuts	24	308	66	602	1000	96	314	29
other cash crops	78	164	722	36	1000	135	356	35
others	348	64	487	101	1000	854	2159	188
all crops	143	202	339	316	1000	30618	19893	1400
			Bihar					
Paddy(kharif)	273	111	563	53	1000	65258	75082	3751
Paddy(rabi)	571	1	409	20	1000	1383	2798	96
wheat	319	44	632	4	1000	39556	61930	3102
other cereals	243	121	548	88	1000	8585	25904	1232
pulses	183	144	377	295	1000	9398	23226	1089
oil seeds	213	216	418	153	1000	2360	7060	
mixed crop	88	44	430	438	1000	1488	2865	
sugar cane	38	74	888	-	1000	1011	1838	103
vegetables	172	110	648	70	1000	3282	17674	873
fodder	396	58	254	292	1000	242	1444	
fruits & nuts	95	59	704	142	1000	177	498	25
other cash crops	450	62	279	209	1000	1250	2529	
others	39	449	429	84	1000	340	809	32
0.11010	57		12)	07	1000	540	007	52

\*Note

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

all crops 276 94 564 66 1000 13	34585 87084 4189
---------------------------------	------------------

\*Note

<sup>1.</sup> Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

<sup>2.</sup> The set of 5 major crops is not a fixed set but varies from household to household; for any particular household it is understood as the 5 most important field crops cultivated, in terms of value of production, by the household in 1997-98, from among a list of crop-season combinations involving 12 crops and crop-groups spanning the entire range of crops cultivated in the country.

	area (per 100	0 hectares)	under 5 major ci	ops treate	d with	estd. area under the	cultivatir	of hhs. ng the crop fertiliser
crop group	fertiliser	manure	both manure	none	all	crop	estd.	sample
	only	only	& fertilisers			(00 ha.)	(00)	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
			Gujarat					
Paddy(kharif)	41	66	872	21	1000	5643	7682	368
Paddy(rabi)	-	13	987	-	1000	541	849	37
Wheat	109	5	887	-	1000	9146	11115	570
other cereals	64	77	853	7	1000	15927	20704	1032
Pulses	51	68	832	49	1000	3863	5579	300
oil seeds	69	26	904	1	1000	13428	9480	480
mixed crop	60	17	921	2	1000	4023	3176	145
sugar cane	28	-	972	-	1000	1848	1214	64
Vegetables	39	75	886	-	1000	1239	2025	94
Fodder	32	109	701	158	1000	3163	6097	317
fruits & nuts	-	63	886	52	1000	462	433	17
other cash crops	30	14	951	5	1000	14152	8610	439
Others	309	-	660	31	1000	338	590	24
all crops	59	40	887	14	1000	73780	30486	1568
			Haryana					
Paddy(kharif)	384	-	616	-	1000	8077	4634	209
Paddy(rabi)	-	-	1000	-	1000	174	116	4
Wheat	433	16	545	6	1000	16092	9971	475
other cereals	268	53	517	162	1000	3717	3057	150
Pulses	160	86	225	530	1000	2000	1060	53
oil seeds	489	58	292	160	1000	2868	2352	124
mixed crop	-	-	1000	-	1000	96	97	4
sugar cane	269	6	725	-	1000	592	938	56
Vegetables	118	-	882	-	1000	341	809	40
Fodder	335	30	462	173	1000	3898	8343	370
fruits & nuts	-	-	-	-	-	-	-	
other cash crops	507	6	390	97	1000	2506	1687	72
Others	333	3	438	226	1000	1729	935	40
all crops	383	22	511	84	1000	42089	11216	510

\*Note

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

	area (per 1000 hectares) under 5 major crops treated with					estd. area under the	no. of hhs. cultivating the crop using fertiliser	
crop-group	fertiliser only	manure only	both manure & fertilisers	none	all	crop (00 ha.)	estd. (00)	sample
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
		Hir	nachal Prades	sh				
Paddy(kharif)	14	183	800	4	1000	655	2778	523
Paddy(rabi)	-	632	368	-	1000	11	66	12
wheat	21	236	740	3	1000	3634	8303	1559
other cereals	18	227	753	2	1000	2881	7624	1431
pulses	32	610	325	33	1000	139	880	168
oil seeds	3	151	842	4	1000	98	1028	189
mixed crop	-	185	815	-	1000	27	101	20
sugar cane	87	339	574	-	1000	22	161	32
vegetables	4	399	593	4	1000	162	1788	343
fodder	16	99	879	6	1000	105	915	170
fruits & nuts	34	22	940	3	1000	413	630	110
other cash crops	11	128	853	8	1000	317	1030	163
others	12	587	384	18	1000	122	547	103
all crops	19	226	750	4	1000	8587	8774	1642
		Jan	ımu & Kashm	ur				
Paddy(kharif)	144	32	821	3	1000	2191	4989	1065
Paddy(rabi)	219	72	709	-	1000	56	191	33
wheat	44	89	867	-	1000	2010	2677	712
other cereals	28	169	801	2	1000	985	2159	510
pulses	51	161	769	19	1000	193	1297	254
oil seeds	294	19	677	10	1000	642	2298	410
mixed crop	63	-	937	-	1000	23	127	30
sugar cane	915	-	85	-	1000	11	36	12
vegetables	114	98	774	14	1000	424	3680	683
fodder	134	27	727	112	1000	342	2012	484
fruits & nuts	327	23	577	73	1000	500	1328	238
other cash crops	-	-	1000	-	1000	34	86	13

\*Note

others

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

45

222

2. The set of 5 major crops is not a fixed set but varies from household to household; for any particular household it is understood as the 5 most important field crops cultivated, in terms of value of production, by the household in 1997-98, from among a list of crop-season combinations involving 12 crops and crop-groups spanning the entire range of crops cultivated in the country.

728

5

1000

135

488

122

all crops	125	70	791	13	1000	7547	7213	1529

\*Note

<sup>1.</sup> Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

<sup>2.</sup> The set of 5 major crops is not a fixed set but varies from household to household; for any particular household it is understood as the 5 most important field crops cultivated, in terms of value of production, by the household in 1997-98, from among a list of crop-season combinations involving 12 crops and crop-groups spanning the entire range of crops cultivated in the country.

	area (per 100	0 hectares)	under 5 major c	rops treate	d with	estd. area under the	cultivatir	of hhs. ng the crop fertiliser
crop group	fertiliser	manure	both manure	none	all	crop	estd.	sample
	only	only	& fertilisers			(00 ha.)	(00)	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
			Karnataka	I				
Paddy( <i>kharif</i> )	67	9	908	16	1000	9279	10603	475
Paddy(rabi)	115	29	843	12	1000	1707	2023	89
wheat	165	151	651	33	1000	1374	1650	69
other cereals	130	171	631	68	1000	34052	25490	1100
pulses	59	187	670	84	1000	11180	9175	404
oil seeds	197	113	634	55	1000	13590	9401	386
mixed crop	64	93	822	20	1000	5374	4581	200
sugar cane	131	53	795	21	1000	2123	2620	114
vegetables	36	39	891	33	1000	1666	2786	124
fodder	69	158	511	263	1000	572	638	24
fruits & nuts	44	164	626	166	1000	1608	2901	133
other cash crops	83	12	901	4	1000	7099	6770	296
others	80	145	633	141	1000	919	1579	64
all crops	113	122	710	55	1000	90596	41880	1816
			Kerala					
Paddy( <i>kharif</i> )	366	13	589	33	1000	1367	3397	215
Paddy( <i>rabi</i> )	123	41	807	30	1000	517	1788	
wheat	_	-	1000	_	1000	5	45	
other cereals	42	132	697	129	1000	216	1124	
pulses	-	-	287	713	1000	25	18	1
oil seeds	193	261	448	98	1000	488	2671	
mixed crop	67	247	627	59	1000	480	2116	138
sugar cane	-	585	415	-	1000	10	83	6
vegetables	43	272	618	67	1000	263	5649	350
fodder	-	-	447	553	1000	3	15	1
fruits & nuts	63	266	484	187	1000	1585	13902	854
other cash crops	130	236	473	162	1000	4241	12161	712
others	23	209	458	310	1000	393	3601	219
all crops	143	197	523	137	1000	9599	27015	1648

\*Note

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

	area (per 10	00 hectares)	under 5 major cr	ops treate	d with	estd. area under the	cultivatin	of hhs. ng the crop fertiliser
crop group	fertiliser only	manure only	both manure & fertilisers	none	all	crop (00 ha.)	estd. (00)	sample
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
			Madhya Prad	esh				
Paddy(kharif)	108	259	508	125	1000	50255	35642	1822
Paddy(rabi)	87	153	732	28	1000	1299	1236	64
wheat	299	95	546	59	1000	55564	36294	1907
other cereals	76	169	666	89	1000	21844	16846	912
pulses	192	196	444	168	1000	23033	24518	1281
oil seeds	262	138	489	112	1000	41323	24178	1257
mixed crop	287	121	372	221	1000	8529	4938	271
sugar cane	199	78	686	37	1000	527	758	40
vegetables	175	369	365	91	1000	2327	5801	268
fodder	148	66	299	487	1000	1247	1597	85
fruits & nuts	-	4	718	278	1000	165	76	5
other cash crops	122	14	838	26	1000	5995	5156	261
others	302	70	358	270	1000	1842	1209	58
all crops	203	162	525	109	1000	213999	68521	3485
			Maharashtr	a				
Paddy(kharif)	183	108	664	45	1000	11884	16765	773
Paddy( <i>rabi</i> )	103	59	752	45 16	1000	292	504	
wheat	256	139	572	33	1000	7973	10334	498
other cereals	132	206	548	113	1000	42767	34938	1512
pulses	280	112	448	161	1000	11002	12995	612
oil seeds	160	78	591	171	1000	6977	6713	302
mixed crop	364	12	590	34	1000	4585	2542	126
sugar cane	130	12	838	20	1000	3375	4391	203
vegetables	230	55	646	69	1000	1911	3797	184
fodder	56	228	477	239	1000	909	1536	72
fruits & nuts	56	31	857	56	1000	1781	2169	93
other cash crops	225	24	728	23	1000	19732	14245	643
others	371	35	267	328	1000	693	577	26
all crops	189	123	601	87	1000	113969	54606	2514

#### \*Note

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

	area (per 10	cultivatin	no. of hhs. Iltivating the crop using fertiliser					
crop group	fertiliser only	manure only	both manure & fertilisers	none	all	crop (00 ha.)	estd. (00)	sample
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
			Manipur					
Paddy(kharif)	78	156	508	258	1000	1035	1123	368
Paddy(rabi)	726	5	11	257	1000	283	264	86
wheat	-	-	1000	-	1000	0	2	1
other cereals	358	341	245	56	1000	13	88	33
pulses	606	287	6	100	1000	21	140	44
oil seeds	_	805	40	155	1000	6	49	18
mixed crop	2	85	420	493	1000	45	222	84
sugar cane	-	-	-	-	-	-	-	-
vegetables	135	106	251	508	1000	113	594	198
fodder	-	442	-	558	1000	1	7	2
fruits & nuts	28	12	-	960	1000	5	14	3
other cash crops	217	-	187	596	1000	5	10	2
others	33	47	7	912	1000	26	80	20
all crops	205	125	377	293	1000	1566	1520	487
			Meghalaya	1				
Paddy(kharif)	150	104	83	663	1000	1313	789	240
Paddy( <i>rabi</i> )	72	114	364	450	1000	94	110	30
wheat	146	357	496	-	1000	5	20	7
other cereals	18	447	19	515	1000	169	263	68
pulses	-	336	192	472	1000	6	43	16
oil seeds	-	-	-	1000	1000	4	-	-
mixed crop	10	110	55	825	1000	222	116	38
sugar cane	-	-	-	-	-	-	-	-
vegetables	85	592	105	218	1000	898	2038	527
fodder	-	-	-	1000	1000	1	-	-
fruits & nuts	5	158	60	777	1000	234	105	44
other cash crops	-	58	98	844	1000	102	45	15
others		330						

\*Note

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

all crops	91	273	89	548	1000	3171	2052	425

\*Note

<sup>1.</sup> Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

<sup>2.</sup> The set of 5 major crops is not a fixed set but varies from household to household; for any particular household it is understood as the 5 most important field crops cultivated, in terms of value of production, by the household in 1997-98, from among a list of crop-season combinations involving 12 crops and crop-groups spanning the entire range of crops cultivated in the country.

	area (per 10	00 hectares	estd. area under the	no. of hhs. cultivating the crop using fertiliser				
crop group	fertiliser only	manure only	both manure & fertilisers	none	all	crop (00 ha.)	estd. (00)	sample
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
			Mizoram					
Paddy(kharif)	33	18	8	940	1000	219	22	13
Paddy(rabi)	-	-	-	1000	1000	29	-	-
wheat	-	-	-	-	-	-	-	-
other cereals	11	-	19	969	1000	8	1	3
pulses	24	-	-	976	1000	16	3	2
oil seeds	-	-	-	1000	1000	0	-	-
mixed crop	28	-	-	972	1000	125	4	2
sugar cane	-	293	-	707	1000	6	2	1
vegetables	8	-	3	989	1000	46	4	6
fodder	-	-	-	1000	1000	0	-	-
fruits & nuts	30	423	12	535	1000	12	10	10
other cash crops	22	23	28	927	1000	28	10	7
others	-	-	-	1000	1000	18	-	-
all crops	25	22	6	947	1000	508	32	15
			Nagaland	l				
Paddy(kharif)	17	590	22	371	1000	978	337	375
Paddy(rabi)	59	196	49	696	1000	363	142	134
wheat	-	218	-	782	1000	8	3	3
other cereals	33	405	39	523	1000	160	215	219
pulses	4	202	5	789	1000	46	55	63
oil seeds	409	395	75	121	1000	12	34	
mixed crop	51	630	44	274	1000	141	173	186
sugar cane	-	-	-	-	-	-	-	
vegetables	19	562	23	396	1000	254	328	316
fodder	5	322	-	673	1000	8	25	5 17
fruits & nuts	-	122	-	878	1000	2	2	2 3
other cash crops	-	696	8	296	1000	101	75	67
1								

\*Note

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

all crops	28	519	27	426	1000	2190	545	474

\*Note

<sup>1.</sup> Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

<sup>2.</sup> The set of 5 major crops is not a fixed set but varies from household to household; for any particular household it is understood as the 5 most important field crops cultivated, in terms of value of production, by the household in 1997-98, from among a list of crop-season combinations involving 12 crops and crop-groups spanning the entire range of crops cultivated in the country.

	area (per 100	00 hectares) u	inder 5 major cr	ops treate	ed with	estd. area under the	cultivatir	no. of hhs. cultivating the crop using fertiliser		
crop group	fertiliser only	manure only	both manure & fertilisers	none	all	crop (00 ha.)	estd. (00)	sample		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)		
			Orissa							
Paddy(kharif)	43	289	626	41	1000	30778	35924	1919		
Paddy(rabi)	111	4	855	31	1000	1290	2600	149		
Wheat	-	59	751	190	1000	73	249	13		
other cereals	17	413	131	439	1000	1177	2779	153		
Pulses	29	192	499	279	1000	3367	4726	254		
oil seeds	5	480	260	256	1000	439	1747	99		
mixed crop	-	32	968	-	1000	16	90	4		
sugar cane	-	163	715	122	1000	58	301	16		
Vegetables	15	260	486	240	1000	647	4753	252		
Fodder	-	-	-	1000	1000	4	-	-		
fruits & nuts	-	89	716	195	1000	66	321	21		
other cash crops	-	29	902	69	1000	317	438	20		
Others	-	403	-	597	1000	42	68	4		
all crops	42	273	603	81	1000	38276	37128	1980		
			Punjab							
Paddy(kharif)	190	0	805	6	1000	14095	6642	572		
Paddy( <i>rabi</i> )	93	20	887	-	1000	571	314	27		
Wheat	328	2	666	4	1000	21703	9285	800		
other cereals	95	116	782	7	1000	730	873	84		
Pulses	-	38	962	-	1000	89	147	13		
oil seeds	110	12	878	-	1000	199	387	38		
mixed crop	-	-	1000	-	1000	24	59	5		
sugar cane	221	-	779	-	1000	189	358	33		
Vegetables	29	-	971	-	1000	324	329	30		
Fodder	137	26	829	7	1000	4913	14141	1174		
fruits & nuts	-	-	1000	-	1000	146	32	1		
other cash crops	678	0	322	-	1000	6573	2523	204		
Others	13	-	986	1	1000	374	157	13		
all crops	303	5	687	4	1000	49942	10077	875		

\*Note

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

	area (per 10	00 hectares)	under 5 major cr	ops treate	ed with	estd. area under the	cultivati	of hhs. ng the crop fertiliser
crop group	fertiliser only	manure only	both manure & fertilisers	none	all	crop (00 ha.)	estd. (00)	sample
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
			Rajasthan	L				
Paddy(kharif)	265	214	519	3	1000	1259	2369	
Paddy( <i>rabi</i> )	11	-	989	-	1000	285	253	
wheat	185	75	722	19	1000	32952	29623	
other cereals	68	371	441	120	1000	54819	36120	1962
pulses	121	388	361	129	1000	19670	13623	
oil seeds	264	119	574	43	1000	19110	16457	901
mixed crop	23	516	65	396	1000	13654	6255	_
sugar cane	285	434	268	13	1000	582	851	44
vegetables	198	76	718	9	1000	403	945	59
fodder	146	426	307	121	1000	5670	8177	463
fruits & nuts	-	-	1000	-	1000	83	86	5
other cash crops	111	159	699	31	1000	12265	6401	358
others	34	113	303	550	1000	4638	2891	156
all crops	124	273	485	118	1000	165418	45601	2367
			Sikkim					
Paddy(kharif)	69	568	205	158	1000	63	132	152
Paddy(rabi)	-	649	187	164	1000	2	11	11
wheat	100	306	575	20	1000	8	41	45
other cereals	11	619	331	39	1000	189	608	611
pulses	-	894	29	77	1000	10	60	70
oil seeds	-	823	109	68	1000	3	16	
mixed crop	-	1000	-	-	1000	1	13	
sugar cane	-	-	-	1000	1000	0	-	-
vegetables	1	939	49	11	1000	66	526	598
fodder	-	283	155	562	1000	11	39	
fruits & nuts	-	869	-	131	1000	5	22	
other cash crops	-	531	64	405	1000	78	208	225
others	-	217	-	783	1000	3	4	-
all crops	17	638	207	138	1000	438	579	618

\*Note

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

	area (per 10	)00 hectares)	) under 5 major o	crops treat	ed with	estd. area under the	no. of hhs. cultivating the crop using fertiliser	
crop group	fertiliser	manure	both manure	none	all	crop	estd.	sample
	only	only	& fertilisers			(00 ha.)	(00)	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
			Tamil Nadı	1				
Paddy(kharif)	54	13	930	3	1000	9711	14271	806
Paddy(rabi)	74	9	910	8	1000	5861	9050	494
Wheat	38	110	776	76	1000	81	140	8
other cereals	159	116	684	41	1000	5316	6883	360
Pulses	147	116	451	285	1000	1920	1795	106
oil seeds	212	68	674	46	1000	2413	3525	200
mixed crop	-	234	755	11	1000	596	645	36
sugar cane	164	19	790	27	1000	1720	2086	100
Vegetables	192	30	707	70	1000	947	2246	113
Fodder	14	405	227	354	1000	462	803	43
fruits & nuts	175	262	412	151	1000	1796	3091	173
other cash crops	174	79	712	35	1000	3178	5094	270
Others	84	61	742	113	1000	855	1343	64
all crops	115	68	768	49	1000	34863	32476	1789
			Tripura					
Paddy(kharif)	78	179	639	104	1000	766	1445	287
Paddy( <i>rabi</i> )	30	261	627	82	1000	404	864	182
Wheat	48	-	952	-	1000	57	124	102
other cereals	-	1000	-	-	1000	2	5	
Pulses	-	-	_	-	-	-	-	-
oil seeds	-	-	-	-	-	-	-	-
mixed crop	-	-	-	1000	1000	5	-	-
sugar cane	-	-	-	-	-	-	-	-
Vegetables	80	205	592	123	1000	163	818	161
Fodder	-	-	-	-	-	-	-	-
fruits & nuts	430	-	403	167	1000	12	44	10
other cash crops	-	-	1000	-	1000	3	12	3
Others	-	613	102	285	1000	2	7	2
all crops	66	197	638	99	1000	1415	2024	

\*Note

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

	area (per 10	00 hectares)	under 5 major c	crops treated	d with	estd. area under the	the cr	s. cultivating op using tiliser
crop group	fertiliser only	manure only	both manure & fertilisers	none	all	crop (00 ha.)	estd. (00)	sample
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
			Uttar Prac	loch				
Paddy(kharif)	221	33	736	10	1000	60141	116536	4885
Paddy(rabi)	156	5	838	1	1000	1405	2500	110
Wheat	237	26	733	4	1000	94610	157778	6680
other cereals	271	101	589	40	1000	26849	58975	2211
Pulses	224	128	530	118	1000	18741	52024	1980
oil seeds	291	103	540	66	1000	8174	27600	
mixed crop	174	168	517	141	1000	5079	10775	468
sugar cane	123	8	864	5	1000	14807	30375	1335
Vegetables	233	76	677	14	1000	5576	26331	1223
Fodder	280	66	561	92	1000	9734	36582	1574
fruits & nuts	286	69	402	242	1000	890	1892	86
other cash crops	171	67	757	4	1000	2629	5922	243
Others	111	22	844	24	1000	1721	5368	235
all crops	230	51	692	27	1000	250492	168667	7062
			West Ben	gal				
Paddy(kharif)	198	17	754	31	1000	28359	51603	2458
Paddy( <i>rabi</i> )	348	24	623	4	1000	7499	19472	
Wheat	246	4	741	10	1000	3067	10169	461
other cereals	174	185	617	24	1000	257	1153	53
Pulses	346	50	420	183	1000	680	2686	124
oil seeds	194	13	700	92	1000	1811	6966	
mixed crop	56	409	90	444	1000	195	454	19
sugar cane	126	65	809	-	1000	124	607	28
Vegetables	292	40	654	13	1000	3929	17086	763
Fodder	24	-	964	11	1000	18	64	
fruits & nuts	702	31	238	29	1000	252	1187	51
other cash crops	317	46	588	49	1000	3802	11169	507
Others	109	25	844	21	1000	769	2331	106
all crops	241	25	703	31	1000	50792	59426	2775

\*Note

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

	area (per 10	00 hectares)	under 5 major c	rops treate	ed with	estd. area under the	no. of hhs. c the crop fertili	using
crop group	fertiliser	manure	both manure	none	all	crop _	estd.	sample
	only	only	& fertilisers			(00 ha.)	(00)	-
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
			A. & N. Islan	nds				
Paddy(kharif)	86	221	415	278	1000	109	55	46
Paddy(rabi)	-	-	1000	-	1000	0	0	1
Wheat	-	-	-	-	-	-	-	-
other cereals	-	-	-	-	-	-	-	-
Pulses	-	418	459	124	1000	12	29	27
oil seeds	-	-	-	-	-	-	-	-
mixed crop	-	-	-	-	-	-	-	-
sugar cane	-	-	-	-	-	-	-	-
Vegetables	4	42	405	549	1000	17	29	22
Fodder	-	-	-	-	-	-	-	-
fruits & nuts	-	-	-	-	-	-	-	-
other cash crops	-	-	-	-	-	-	-	-
Others	-	-	-	-	-	-	-	-
all crops	68	215	418	298	1000	138	75	59
			India					
Paddy(kharif)	169	112	656	63	1000	348071	436918	24178
Paddy(rabi)	206	44	686	65	1000	36284	56569	3217
Wheat	264	51	667	18	1000	289342		
other cereals	126	203	585	86	1000	229847	251742	14399
Pulses	167	186	486	161	1000	113692	162648	8125
oil seeds	213	105	608	74	1000	127563	132768	
mixed crop	132	211	463	195	1000	49306		
sugar cane	128	26	832	14	1000	29062	49495	2331
Vegetables	165	154	605	76	1000	29845		
Fodder	191	133	538	138	1000	32133		
fruits & nuts	111	137	595 705	156	1000	12150		
other cash crops	189	54	725	32	1000	92959		
Others	151	82	504	263	1000	17715		
all crops	185	117	625	73	1000	1408832	2 751277	42422

\*Note

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

\*Note

<sup>1.</sup> Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

<sup>2.</sup> The set of 5 major crops is not a fixed set but varies from household to household; for any particular household it is understood as the 5 most important field crops cultivated, in terms of value of production, by the household in 1997-98, from among a list of crop-season combinations involving 12 crops and crop-groups spanning the entire range of crops cultivated in the country.

_	per 1000 distr	ibution of area t	reated with		estd. manure- treated area	no.of hhs. r use of m	1 0
crop group	compost	bio-gas slurry	other manure	all	under the crop (00 ha)	estd (00).	sample
(1)	(2)	(3)	(4)	(6)	(7)	(8)	(9)
		Andhra	a Pradesh				
Paddy(kharif)	611	34	354	1000	23190	27332	1285
Paddy(rabi)	681	8	311	1000	6530	7056	297
wheat	380	89	531	1000	241	227	12
other cereals	628	85	286	1000	7197	9056	461
pulses	546	54	400	1000	5173	6149	279
oil seeds	454	51	496	1000	11918	9019	426
mixed crop	167	67	766	1000	3939	2479	113
sugar cane	701	-	299	1000	1396	2043	93
vegetables	597	55	348	1000	1047	1962	99
fodder	596	100	305	1000	287	412	19
fruits & nuts	417	84	499	1000	1312	1223	57
other cash crops	565	67	368	1000	7226	7478	362
others	893	18	90	1000	1145	1157	55
all crops	561	47	392	1000	70660	47004	2227

# Table (8.1): Cropwise per 1000 distribution of manure-treated area under five major crops\* sown by households by type of manure

Paddy(kharif)	-	-	1000	1000	56	157	59
Paddy(rabi)	-	-	1000	1000	1	4	2
wheat	851	-	149	1000	13	30	17
other cereals	641	-	359	1000	14	54	29
pulses	-	-	1000	1000	1	4	3
oil seeds	-	-	1000	1000	0	3	2
mixed crop	528	-	472	1000	8	69	34
sugar cane	-	-	-	-	-	-	-
vegetables	135	-	865	1000	26	187	85
fodder	-	-	-	-	-	-	-
fruits & nuts	-	-	1000	1000	2	8	5
other cash crops	135	-	865	1000	27	53	33
others	-	-	1000	1000	1	7	3

\*Note

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

all crops 207 - 793 1000 150 263 12
-------------------------------------

\*Note

<sup>1.</sup> Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

<sup>2.</sup> The set of 5 major crops is not a fixed set but varies from household to household; for any particular household it is understood as the 5 most important field crops cultivated, in terms of value of production, by the household in 1997-98, from among a list of crop-season combinations involving 12 crops and crop-groups spanning the entire range of crops cultivated in the country.

	per 1000 distr	ibution of area t	reated with		estd. manure- treated area	no.of hhs. r use of m	
crop group	compost	bio-gas slurry	other manure	all	under the crop (00 ha)	estd (00).	sample
(1)	(2)	(3)	(4)	(6)	(7)	(8)	(9)
		As	sam				
Paddy(kharif)	150	98	752	1000	10040	10096	851
Paddy(rabi)	180	10	810	1000	1440	1493	141
wheat	10	140	850	1000	713	1363	127
other cereals	32	-	968	1000	288	782	73
pulses	39	10	951	1000	448	1449	117
oil seeds	115	46	840	1000	324	939	83
mixed crop	-	-	1000	1000	29	130	12
sugar cane	623	77	300	1000	192	316	23
vegetables	131	23	845	1000	2444	11063	1018
fodder	730	-	270	1000	12	33	3
fruits & nuts	4	-	996	1000	36	302	28
other cash	105	12	883	1000	120	292	30
crops							
others	16	3	981	1000	471	1069	96
all crops	139	72	789	1000	16559	16653	1455
		B	ihar				
Paddy(kharif)	429	7	564	1000	43978	51540	2639
Paddy(rabi)	585	-	415	1000	567	1098	49
wheat	340	8	652	1000	26770	41632	2121
other cereals	358	11	631	1000	5739	19381	941
pulses	369	1	630	1000	4902	17402	835
oil seeds	447	2	551	1000	1498	5379	274
mixed crop	690	8	301	1000	706	2185	120
sugar cane	140	10	849	1000	973	1674	95
vegetables	434	10	556	1000	2488	14389	730
fodder	249	-	751	1000	76	446	28
fruits & nuts	910	-	90	1000	135	396	20
other cash	579	-	421	1000	426	1467	80
crops							

# Table (8.1): Cropwise per 1000 distribution of manure-treated area under five major crops\* sown by households by type of manure

\*Note

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

others	525	-	475	1000	298	714	27
all crops	396	7	597	1000	88586	63666	3235

\*Note

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

	per 1000 distr	ibution of area t	reated with		estd. manure-	no.of hhs.	
					treated area	use of n	
crop group	compost	bio-gas slurry	other manure	all	under the crop	estd	sample
	(=)	,			(00 ha)	(00).	
(1)	(2)	(3)	(4)	(6)	(7)	(8)	(9)
		Gu	jarat				
Paddy(kharif)	601	44	355	1000	5292	6956	335
Paddy(rabi)	311	141	548	1000	541	849	37
wheat	433	70	497	1000	8151	9212	483
other cereals	357	62	581	1000	14807	17697	917
pulses	170	120	710	1000	3477	5167	278
oil seeds	411	23	565	1000	12496	7750	406
mixed crop	369	17	614	1000	3774	2405	119
sugar cane	833	41	126	1000	1796	1147	61
vegetables	437	78	485	1000	1191	1839	85
fodder	550	20	430	1000	2562	5400	277
fruits & nuts	301	179	520	1000	438	371	15
other cash crops	397	8	595	1000	13656	7522	389
others	467	-	533	1000	223	347	17
all crops	415	44	542	1000	68412	28778	1487
		Ha	ryana				
Paddy(kharif)	617	1	382	1000	4979	2610	121
Paddy( <i>rabi</i> )	220	-	780	1000	174	116	4
wheat	483	2	516	1000	9030	5369	266
other cereals	588	-	412	1000	2119	1780	93
pulses	175	-	825	1000	620	764	38
oil seeds	233	-	767	1000	1006	1233	65
mixed crop	-	-	1000	1000	96	97	4
sugar cane	756	-	244	1000	433	676	43
vegetables	518	-	482	1000	301	709	34
fodder	549	-	451	1000	1919	4015	185
fruits & nuts	-	-	-	-	-	-	-
other cash crops	504	-	496	1000	992	772	33
others	26	-	974	1000	762	515	22
all crops	495	1	504	1000	22431	7616	371

\*Note

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

	per 1000 distr	ibution of area t	reated with		estd. manure-	no.of hhs. r	1 0
	aammaat	his sos	other	11	treated area	use of m	
crop group	compost	bio-gas slurry	manure	all	under the crop	estd	sample
(1)	(2)	•		$(\epsilon)$	(00 ha)	(00).	(0)
(1)	(2)	(3)	(4)	(6)	(7)	(8)	(9)
		Himach	al Pradesh				
Paddy(kharif)	181	2	816	1000	644	2686	503
Paddy(rabi)	194	-	806	1000	11	59	11
wheat	358	3	639	1000	3545	8019	1504
other cereals	405	3	592	1000	2823	7233	1364
pulses	360	-	640	1000	130	832	160
oil seeds	382	10	609	1000	97	986	181
mixed crop	506	-	494	1000	27	101	20
sugar cane	234	-	766	1000	20	156	31
vegetables	499	1	499	1000	160	1686	323
fodder	280	11	710	1000	103	864	160
fruits & nuts	62	-	938	1000	398	600	105
other cash crops	698	-	302	1000	311	853	152
others	589	-	411	1000	118	515	97
all crops	364	3	633	1000	8388	8517	1593
		Jammu a	& Kashmir				
Paddy(kharif)	393	2	605	1000	1869	4146	879
Paddy(rabi)	204	-	796	1000	43	104	22
wheat	554	-	446	1000	1922	2538	674
other cereals	311	2	687	1000	955	2064	477
pulses	355	0	644	1000	179	1206	239
oil seeds	217	1	782	1000	447	1856	341
mixed crop	236	-	764	1000	22	109	26
sugar cane	-	-	1000	1000	1	7	2
vegetables	140	2	857	1000	370	3255	626
fodder	543	1	456	1000	258	1741	415
fruits & nuts	327	0	673	1000	300	908	171
other cash crops	175	-	825	1000	34	86	13
others	826	-	174	1000	104	298	84
all crops	408	1	591	1000	6504	6797	1466

\*Note

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

	per 1000 distr	ibution of area t	reated with		estd. manure- treated area	no.of hhs. 1 use of n	
crop group	compost	bio-gas slurry	other manure	all	under the crop (00 ha)	estd (00).	sample
(1)	(2)	(3)	(4)	(6)	(7)	(8)	(9)
		Karı	nataka				
Paddy(kharif)	649	47	304	1000	8512	9766	441
Paddy(rabi)	581	-	419	1000	1489	1804	80
wheat	283	-	717	1000	1102	1316	55
other cereals	430	35	536	1000	27307	21940	980
pulses	274	54	671	1000	9586	8606	386
oil seeds	287	16	697	1000	10160	7588	322
mixed crop	316	6	678	1000	4920	4286	188
sugar cane	615	22	362	1000	1801	2354	103
vegetables	447	124	429	1000	1550	2642	118
fodder	167	50	783	1000	383	546	21
fruits & nuts	657	30	313	1000	1271	2601	119
other cash crops	472	14	514	1000	6476	6117	271
others	362	4	633	1000	715	1500	61
all crops	419	33	549	1000	75324	38128	1694
		Ke	erala				
Paddy(kharif)	133	18	848	1000	822	2575	167
Paddy(rabi)	211	5	784	1000	438	1537	97
wheat	-	-	1000	1000	5	45	2
other cereals	32	-	968	1000	179	1041	62
pulses	-	1000	-	1000	7	18	1
oil seeds	345	22	633	1000	346	2524	160
mixed crop	291	57	652	1000	420	1941	130
sugar cane	-	-	1000	1000	10	83	6
vegetables	239	23	738	1000	234	5393	333
fodder	1000	-	-	1000	1	15	1
fruits & nuts	222	26	752	1000	1188	12952	796
other cash crops	308	55	637	1000	3003	10403	638
others	115	177	707	1000	262	3391	207
all crops	250	44	707	1000	6916	24650	1550

\*Note

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

	per 1000 distr	ibution of area t	reated with		estd. manure-	no.of hhs. 1	
					treated area	use of n	anure
crop group	compost	bio-gas	other	all	under the crop	estd	sample
		slurry	manure		(00 ha)	(00).	
(1)	(2)	(3)	(4)	(6)	(7)	(8)	(9)
		Madhya	a Pradesh				
Paddy(kharif)	567	42	391	1000	38553	31003	1558
Paddy(rabi)	572	49	379	1000	1150	1052	53
wheat	442	20	538	1000	35644	23841	1238
other cereals	478	7	515	1000	18251	14956	809
pulses	562	15	423	1000	14740	19414	999
oil seeds	433	44	522	1000	25892	17894	931
mixed crop	304	6	690	1000	4201	2949	162
sugar cane	476	147	377	1000	402	612	34
vegetables	436	16	548	1000	1708	4949	236
fodder	399	-	601	1000	456	1223	66
fruits & nuts	832	-	168	1000	119	76	5
other cash crops	653	49	298	1000	5107	3966	196
others	892	9	99	1000	790	756	36
all crops	497	29	474	1000	147042	56464	2936
		Maha	rashtra				
Paddy(kharif)	686	6	308	1000	9170	12844	599
Paddy(rabi)	208	-	792	1000	237	392	19
wheat	636	29	335	1000	5671	7523	363
other cereals	740	13	247	1000	32268	25428	1192
pulses	769	18	213	1000	6156	9577	448
oil seeds	787	28	185	1000	4668	5414	247
mixed crop	304	-	696	1000	2761	1572	73
sugar cane	687	43	270	1000	2869	3391	159
vegetables	662	9	329	1000	1339	2823	140
fodder	638	8	354	1000	641	1328	61
fruits & nuts	751	53	196	1000	1582	1977	85
other cash crops	643	4	353	1000	14842	11029	505
others	883	-	117	1000	209	317	16
all crops	695	14	291	1000	82495	44159	2069

\*Note

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

	per 1000 distr	ibution of area t	reated with		estd. manure-	no.of hhs. reporting	
					treated area	use of n	
crop group	compost	bio-gas	other	all	under the crop	estd	sample
		slurry	manure		(00 ha)	(00).	
(1)	(2)	(3)	(4)	(6)	(7)	(8)	(9)
		Ma	nipur				
Paddy(kharif)	460	4	536	1000	688	994	327
Paddy(rabi)	-	-	1000	1000	5	5	2
wheat	1000	-	-	1000	0	2	1
other cereals	191	-	809	1000	8	71	29
pulses	11	12	977	1000	6	77	28
oil seeds	13	15	972	1000	5	49	18
mixed crop	496	23	481	1000	23	206	82
sugar cane	-	-	-	-	-	-	-
vegetables	197	23	779	1000	40	430	153
fodder		-	1000	1000	0	7	2
fruits & nuts	-	-	1000	1000	0	3	1
other cash crops	1000	-	-	1000	1	3	1
others	-	154	846	1000	1	46	14
all crops	442	6	553	1000	785	1095	357
		Meg	halaya				
Paddy(kharif)	478	8	514	1000	246	460	141
Paddy(rabi)	228	-	772	1000	45	98	26
wheat	517	-	483	1000	4	16	6
other cereals	58	-	942	1000	79	240	63
pulses	715	-	285	1000	3	43	16
oil seeds	-	-	-	-	-	-	-
mixed crop	150	-	850	1000	37	109	37
sugar cane	-	-	-	-	-	-	-
vegetables	124	2	874	1000	626	1477	438
fodder	-	-	-	-	-	-	-
fruits & nuts	106	-	894	1000	51	88	38
other cash crops	75	-	925	1000	16	45	15
others	290	16	694	1000	42	140	51
all crops	208	3	789	1000	1148	1699	503

\*Note

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

	per 1000 distr	ibution of area t	reated with		estd. manure- treated area	no.of hhs. r use of m	
crop group	compost	bio-gas slurry	other manure	all	under the crop (00 ha)	estd (00).	sample
(1)	(2)	(3)	(4)	(6)	(7)	(8)	(9)
		Miz	oram				
Paddy(kharif)	-	101	899	1000	6	10	7
Paddy(rabi)	-	-	-	-	-	-	-
wheat	-	-	-	-	-	-	-
other cereals	-	1000	-	1000	0	1	2
pulses	-	-	-	-	-	-	-
oil seeds	-	-	-	-	-	-	-
mixed crop	-	-	-	-	-	-	-
sugar cane	-	-	1000	1000	2	2	1
vegetables	-	1000	-	1000	0	1	2
fodder	-	-	-	-	-	-	-
fruits & nuts	-	28	972	1000	5	8	8
other cash crops	-	102	898	1000	1	7	4
others	-	-	-	-	-	-	-
all crops	-	83	917	1000	14	26	16
		Nag	aland				
Paddy(kharif)	484	-	516	1000	599	324	357
Paddy( <i>rabi</i> )	67	46	887	1000	89	116	103
wheat	277	-	723	1000	2	3	3
other cereals	167	4	829	1000	71	206	211
pulses	400	-	600	1000	10	54	62
oil seeds	-	-	1000	1000	6	27	13
mixed crop	734	-	266	1000	95	158	170
sugar cane	-	-	-	-	-	-	-
vegetables	603	7	390	1000	148	312	305
f	000	•	1000	1000	2	24	10

\*Note

others

fodder

fruits & nuts

other cash crops

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

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2. The set of 5 major crops is not a fixed set but varies from household to household; for any particular household it is understood as the 5 most important field crops cultivated, in terms of value of production, by the household in 1997-98, from among a list of crop-season combinations involving 12 crops and crop-groups spanning the entire range of crops cultivated in the country.

1000

1000

233

145

1000

1000

1000

1000

3

0

71

92

24

2

75

100

16

3

67

114

all crops	513	6	481	1000	1195	520	528

\*Note

<sup>1.</sup> Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

<sup>2.</sup> The set of 5 major crops is not a fixed set but varies from household to household; for any particular household it is understood as the 5 most important field crops cultivated, in terms of value of production, by the household in 1997-98, from among a list of crop-season combinations involving 12 crops and crop-groups spanning the entire range of crops cultivated in the country.

	per 1000 distr	ibution of area t	reated with		estd. manure-	no.of hhs. reporting		
		1.	.1		treated area	use of m		
crop group	compost	bio-gas slurry	other manure	all	under the crop	estd	sample	
(1)	(2)	-		$(\mathbf{C})$	(00 ha)	(00).	(0)	
(1)	(2)	(3)	(4)	(6)	(7)	(8)	(9)	
		Oı	rissa					
Paddy(kharif)	476	19	505	1000	28176	33886	1812	
Paddy(rabi)	456	3	541	1000	1107	2274	129	
wheat	487	-	513	1000	59	249	13	
other cereals	765	-	235	1000	640	2662	147	
pulses	510	2	488	1000	2327	4542	243	
oil seeds	568	-	432	1000	325	1691	97	
mixed crop	958	-	42	1000	16	90	4	
sugar cane	78	-	922	1000	51	301	16	
vegetables	525	14	461	1000	483	4436	236	
fodder	-	-	-	-	-	-	-	
fruits & nuts	695	-	305	1000	53	321	21	
other cash crops	29	50	921	1000	295	438	20	
others	23	-	977	1000	17	68	4	
all crops	481	17	502	1000	33552	35265	1893	
		Pu	njab					
Paddy(kharif)	453	4	544	1000	11343	5404	472	
Paddy(rabi)	637	27	336	1000	517	273	24	
wheat	420	4	576	1000	14491	6780	600	
other cereals	853	23	124	1000	656	766	74	
pulses	568	-	432	1000	89	147	13	
oil seeds	405	-	595	1000	177	358	34	
mixed crop	672	-	328	1000	24	59	5	
sugar cane	485	-	515	1000	147	287	27	
vegetables	127	56	817	1000	315	266	24	
fodder	469	7	524	1000	4205	8199	715	
fruits & nuts	1000	-	-	1000	146	32	1	
other cash crops	224	6	771	1000	2115	1103	93	
others	104	2	894	1000	369	145	12	
all crops	433	5	561	1000	34597	8761	766	

\*Note

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

	per 1000 distr	ibution of area t	reated with		estd. manure- treated area	no.of hhs. r use of m	1 0
crop group	compost	bio-gas slurry	other manure	all	under the crop (00 ha)	estd (00).	sample
(1)	(2)	(3)	(4)	(6)	(7)	(8)	(9)
		Raja	asthan				
Paddy(kharif)	510	-	490	1000	922	2171	103
Paddy(rabi)	56	26	919	1000	282	239	12
wheat	404	35	561	1000	26248	23320	1267
other cereals	426	21	553	1000	44556	30650	1685
pulses	400	10	591	1000	14740	11103	619
oil seeds	359	25	616	1000	13236	11759	664
mixed crop	332	4	663	1000	7925	5647	286
sugar cane	116	-	884	1000	408	622	32
vegetables	213	-	787	1000	320	837	53
fodder	302	7	690	1000	4159	5968	347
fruits & nuts	681	-	319	1000	83	86	5
other cash crops	407	2	591	1000	10529	5285	305
others	405	-	595	1000	1926	2512	137
all crops	398	19	583	1000	125362	40532	2205
		Sil	ckim				
Paddy(kharif)	564	-	436	1000	49	119	137
Paddy(rabi)	759	-	241	1000	1	11	11
wheat	565	-	435	1000	7	39	43
other cereals	794	0	206	1000	179	520	596
pulses	943	-	57	1000	9	60	70
oil seeds	704	-	296	1000	3	16	16
mixed crop	693	-	307	1000	1	13	15
sugar cane	-	-	-	-	-	-	-
vegetables	732	-	268	1000	65	516	594
fodder	765	27	208	1000	5	39	44
fruits & nuts	937	-	63	1000	4	22	25
other cash crops	801	-	199	1000	46	208	225
others	872	-	128	1000	1	4	5
all crops	753	0	246	1000	371	575	666

\*Note

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

	per 1000 distr	ibution of area t	reated with		estd. manure- treated area	no.of hhs. 1 use of n	1 0
crop group	compost	bio-gas slurry	other manure	all	under the crop (00 ha)	estd (00).	sample
(1)	(2)	(3)	(4)	(6)	(7)	(8)	(9)
		Tami	l Nadu				
Paddy(kharif)	425	19	555	1000	9158	13188	744
Paddy(rabi)	637	8	355	1000	5384	8015	438
wheat	510	-	490	1000	72	119	6
other cereals	459	14	527	1000	4254	5139	280
pulses	86	2	912	1000	1090	1364	81
oil seeds	285	15	700	1000	1790	2606	153
mixed crop	224	-	776	1000	590	642	35
sugar cane	655	14	331	1000	1392	1668	78
vegetables	244	_	756	1000	698	1825	94
fodder	494	60	446	1000	292	767	41
fruits & nuts	226	1	773	1000	1211	2460	150
other cash crops	407	29	563	1000	2514	3878	214
others	507	-	493	1000	687	1002	57
all crops	443	14	542	1000	29138	28946	1597
		Tri	ipura				
Paddy(kharif)	254	158	588	1000	627	1235	242
Paddy( <i>rabi</i> )	248	162	589	1000	359	815	172
wheat	160	41	799	1000	54	119	16
other cereals	-	-	1000	1000	2	5	1
pulses	-	-	-	-	-	-	-
oil seeds	-	-	-	-	-	-	-
mixed crop	-	-	-	-	-	-	-
sugar cane	-	-	-	-	-	-	-
vegetables	296	507	197	1000	130	636	132
fodder		_	-	-	-	-	-
fruits & nuts	148	159	693	1000	5	31	7
other cash crops	192	-	808	1000	3	12	3
others	-	143	857	1000	1	7	2
all crops	251	192	557	1000	1181	1830	363

\*Note

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

	per 1000 distr	ibution of area t	reated with		estd. manure- treated area	no.of hhs. i use of n	1 0
crop group	compost	bio-gas slurry	other manure	all	under the crop (00 ha)	estd (00).	sample
(1)	(2)	(3)	(4)	(6)	(7)	(8)	(9)
		Uttar	Pradesh				
Paddy(kharif)	623	10	367	1000	46210	88910	3696
Paddy(rabi)	615	-	385	1000	1184	1914	85
wheat	593	7	400	1000	71785	118973	4999
other cereals	593	4	403	1000	18504	44082	1607
pulses	502	5	492	1000	12326	41735	1567
oil seeds	646	2	352	1000	5255	22691	634
mixed crop	649	7	343	1000	3479	8202	368
sugar cane	684	8	308	1000	12913	25546	1129
vegetables	707	4	290	1000	4196	20885	1007
fodder	669	4	327	1000	6110	24773	1100
fruits & nuts	680	-	320	1000	420	1294	62
other cash crops	742	0	258	1000	2168	5188	217
others	780	34	186	1000	1490	4615	202
all crops	612	7	381	1000	186128	137303	5790
		West	Bengal				
Paddy(kharif)	610	9	381	1000	21873	37169	1800
Paddy( <i>rabi</i> )	637	14	350	1000	4857	11520	535
wheat	535	28	438	1000	2285	7977	359
other cereals	419	42	539	1000	206	964	45
pulses	653	-	347	1000	320	1746	74
oil seeds	586	23	391	1000	1292	5111	240
mixed crop	50	-	950	1000	98	430	18
sugar cane	306	32	662	1000	109	463	22
vegetables	650	10	340	1000	2729	12153	564
fodder	1000	-	-	1000	18	33	2
fruits & nuts	826	-	174	1000	68	479	24
other cash crops	583	3	414	1000	2411	7207	332
others	658	-	342	1000	668	1831	82
all crops	608	11	381	1000	36952	44241	2126

\*Note

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

	per 1000 distr	ibution of area t	reated with	_	estd. manure- treated area	no.of hhs. r use of m	
crop group	compost	bio-gas slurry			under the crop (00 ha)	estd (00).	sample
(1)	(2)	(3)	(4)	(6)	(7)	(8)	(9)
		A. & N	. Islands				
Paddy(kharif)	473	58	469	1000	69	49	42
Paddy(rabi)	1000	-	-	1000	0	0	1
wheat	-	-	-	-	-	-	-
other cereals	-	-	-	-	-	-	-
pulses	262	-	738	1000	10	29	27
oil seeds	-	-	-	_	-	-	-
mixed crop	-	-	-	-	-	-	-
sugar cane	-	-	-	-	-	-	-
vegetables	335	-	665	1000	8	27	19
fodder	_	-	-		-	-	-
fruits & nuts	-	-	-	-	-	-	-
other cash crops	-	-	-	-	-	-	-
others	-	-	_	-	-	_	-
all crops	438	46	516	1000	87	68	59
		Ir	ndia				
Paddy(kharif)	530	22	448	1000	267390	346212	19437
Paddy( <i>rabi</i> )	572	15	413	1000	26463	40903	2362
wheat	480	16	504	1000	207870	258788	14184
other cereals	508	23	468	1000	181134	206868	12178
pulses	455	23	522	1000	76359	131564	6600
oil seeds	431	30	538	1000	90945	104901	5309
mixed crop	347	14	639	1000	33190	33877	2021
sugar cane	651	18	331	1000	24928	41357	1957
vegetables	476	27	497	1000	22644	94724	7461
fodder	509	10	481	1000	21547	55880	3515
fruits & nuts	476	39	485	1000	8905	26340	1774
other cash crops	501	18	481	1000	72395	73507	4201
others	529	13	458	1000	10393	21055	1401
all crops	496	21	483	1000	1044592	644297	37227

\*Note

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

\*Note

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

	per	1000 distribution of	of area trea	ated with		estd. area under the	no. of h cultivating using pest	the crop
crop group	weedicides only	pesticides, etc. only	both	none	all	crop (00 ha)	estd. (00)	sample
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
		Ar	ndhra Pra	adesh				
Paddy(kharif)	8	589	299	104	1000	25215	26564	1239
Paddy(rabi)	1	588	284	127	1000	8145	7687	316
wheat	74	525	199	202	1000	292	207	11
other cereals	11	611	149	228	1000	8705	8371	412
pulses	6	515	258	221	1000	7051	6256	280
oil seeds	2	665	111	222	1000	13035	6658	312
mixed crop	-	672	78	250	1000	4407	1809	85
sugar cane	31	689	192	88	1000	1686	2160	97
vegetables	19	654	234	93	1000	1109	1891	101
fodder	42	343	6	610	1000	720	465	23
fruits & nuts	-	539	249	212	1000	1728	996	46
other cash crops	8	722	150	119	1000	8384	7249	348
others	-	669	92	239	1000	1629	1112	52
all crops	7	615	210	168	1000	82260	43882	2057
		Aru	nachal P	radesh				
Paddy(kharif)	5	183	64	747	1000	626	196	127
Paddy(rabi)	-	359	-	641	1000	126	37	11

Table (9): Cropwise per 1000 distribution of area under five major crops\* sown by households by use of pesticides, etc.\*\* and weedicides

Paddy(kharif)	5	183	64	747	1000	626	196	127
Paddy(rabi)	-	359	-	641	1000	126	37	11
wheat	-	933	-	67	1000	38	68	34
other cereals	-	281	0	719	1000	119	176	107
pulses	-	509	1	490	1000	27	108	69
oil seeds	-	298	-	702	1000	9	19	15
mixed crop	3	79	1	917	1000	137	110	69
sugar cane	263	-	263	474	1000	0	2	2
vegetables	-	274	3	723	1000	93	186	112
fodder	-	-	-	1000	1000	0	-	-
fruits & nuts	-	346	21	633	1000	11	26	20
other cash	-	127	-	873	1000	33	30	20
crops								

\*Note

1. Paddy: *kharif* and paddy: *rabi*, for example, are treated as different "crops" for this purpose.

2. The set of 5 major crops is not a fixed set but varies from household to household; for any particular household it is understood as the 5 most important field crops cultivated, in terms of value of production, by the household in 1997-98, from among a list of crop-season combinations involving 12 crops and crop-groups spanning the entire range of crops cultivated in the country.

\*\*"Pesticides, etc." covers pesticides, insecticides, fungicides, etc. but weedicides" covers "weedicides only.

others	1	173	15	812	1000	36	13	7
all crops	3	233	33	731	1000	1266	323	192

\*Note

1. Paddy: *kharif* and paddy: *rabi*, for example, are treated as different "crops" for this purpose.

\*\*"Pesticides, etc." covers pesticides, insecticides, fungicides, etc. but weedicides" covers "weedicides only.

<sup>2.</sup> The set of 5 major crops is not a fixed set but varies from household to household; for any particular household it is understood as the 5 most important field crops cultivated, in terms of value of production, by the household in 1997-98, from among a list of crop-season combinations involving 12 crops and crop-groups spanning the entire range of crops cultivated in the country.
	per	1000 distribution of	of area trea	ated with		estd. area under the	no. of h cultivating using pest	the crop
crop group	weedicides only	pesticides, etc. only	both	none	all	crop (00 ha)	estd. (00)	sample
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9
			Assam					
Paddy(kharif)	15	179	99	708	1000	18424	6621	572
Paddy(rabi)	26	165	47	762	1000	3931	1202	115
wheat	18	212	331	439	1000	1039	1583	141
other cereals	60	105	346	489	1000	329	454	38
pulses	12	136	75	777	1000	1190	1311	104
oil seeds	31	220	322	427	1000	571	1174	91
mixed crop	-	791	107	103	1000	31	132	13
sugar cane	19	462	105	414	1000	357	327	25
vegetables	18	217	128	637	1000	3612	6284	560
fodder	-	204	-	796	1000	45	14	1
fruits & nuts	26	143	8	823	1000	96 125	88	9
other cash crops	-	4	149	846	1000	135	74	6
others	40	173	344	443	1000	854	1623	137
all crops	18	184	116	682	1000	30618	9891	874
			Bihar					
Paddy(kharif)	40	321	145	494	1000	65258	35731	1785
Paddy(rabi)	9	307	113	570	1000	1383	1245	54
wheat	47	371	202	380	1000	39556	32078	1612
other cereals	12	360	54	574	1000	8585	10566	487
pulses	20	260	100	619	1000	9398	10012	469
oil seeds	41	238	99	622	1000	2360	2498	123
mixed crop	18	239	86	656	1000	1488	1935	105
sugar cane	1	219	92	688	1000	1011	446	24
vegetables	12	540	60	388	1000	3282	10166	515
fodder	7	294	4	695	1000	242	425	27
fruits & nuts	-	608	166	226	1000	177	355	18
other cash	2	213	105	679	1000	1250	1153	57

crops \*Note

1. Paddy: *kharif* and paddy: *rabi*, for example, are treated as different "crops" for this purpose.

2. The set of 5 major crops is not a fixed set but varies from household to household; for any particular household it is understood as the 5 most important field crops cultivated, in terms of value of production, by the household in 1997-98, from among a list of crop-season combinations involving 12 crops and crop-groups spanning the entire range of crops cultivated in the country.

others	-	413	11	575	1000	340	357	7
all crops	37	335	148	481	1000	134585	44159	2201

\*Note

1. Paddy: *kharif* and paddy: *rabi*, for example, are treated as different "crops" for this purpose.

<sup>2.</sup> The set of 5 major crops is not a fixed set but varies from household to household; for any particular household it is understood as the 5 most important field crops cultivated, in terms of value of production, by the household in 1997-98, from among a list of crop-season combinations involving 12 crops and crop-groups spanning the entire range of crops cultivated in the country.

	per	1000 distribution	of area trea	ated with		estd. area under the	no. of l cultivating using pes	the crop
crop group	weedicides only	pesticides, etc. only	both	none	all	crop (00 ha)	estd. (00)	sample
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
			Gujara	t				
Paddy( <i>kharif</i> )	3	440	158	399	1000	5643	4143	201
Paddy(rabi)	-	562	320	118	1000	541	754	34
wheat	7	439	244	310	1000	9146	6570	333
other cereals	2	455	226	317	1000	15927	12163	616
pulses	3	524	203	270	1000	3863	4031	215
oil seeds	5	481	435	79	1000	13428	7624	393
mixed crop	-	592	189	220	1000	4023	1621	79
sugar cane	7	266	655	72	1000	1848	1060	57
vegetables	6	750	137	106	1000	1239	1586	74
fodder	5	272	213	511	1000	3163	3445	176
fruits & nuts	-	849	86	65	1000	462	362	15
other cash crops	4	426	423	147	1000	14152	6533	340
others	-	300	203	497	1000	338	318	15
all crops	4	457	304	235	1000	73780	22296	1144
			Haryan	a				
Paddy(kharif)	21	101	871	8	1000	8077	4550	205
Paddy(rabi)	166	-	834	-	1000	174	116	4
wheat	199	56	533	212	1000	16092	7364	354
other cereals	71	19	152	759	1000	3717	696	42
pulses	78	44	186	692	1000	2000	702	36
oil seeds	46	159	156	640	1000	2868	1026	59
mixed crop	-	-	1000	-	1000	96	97	4
sugar cane	-	428	332	240	1000	592	587	31

1000 vegetables 79 254 341 709 34 \_ 667 fodder 43 114 232 682 1000 3898 2440 43 fruits & nuts -\_ \_ other cash 85 247 552 116 1000 25061564 65 crops

\*Note

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

2. The set of 5 major crops is not a fixed set but varies from household to household; for any particular household it is understood as the 5 most important field crops cultivated, in terms of value of production, by the household in 1997-98, from among a list of crop-season combinations involving 12 crops and crop-groups spanning the entire range of crops cultivated in the country.

others	18	9	791	182	1000	1729	769	33
all crops	103	83	506	308	1000	42089	8534	404

\*Note

1. Paddy: *kharif* and paddy: *rabi*, for example, are treated as different "crops" for this purpose.

<sup>2.</sup> The set of 5 major crops is not a fixed set but varies from household to household; for any particular household it is understood as the 5 most important field crops cultivated, in terms of value of production, by the household in 1997-98, from among a list of crop-season combinations involving 12 crops and crop-groups spanning the entire range of crops cultivated in the country.

	per	1000 distribution of	of area trea	ited with		estd. area under the	no. of h cultivating using pes	the crop
crop group	weedicides only	pesticides, etc. only	both	none	all	crop (00 ha)	estd. (00)	sample
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
		Hin	nachal Pı	adesh				
Paddy(kharif)	43	64	165	728	1000	655	626	109
Paddy(rabi)	-	53	-	947	1000	11	7	1
wheat	27	44	42	887	1000	3634	891	157
other cereals	23	19	16	942	1000	2881	552	97
pulses	-	64	5	931	1000	139	24	5
oil seeds	20	21	28	931	1000	98	68	13
mixed crop	8	166	-	826	1000	27	16	3
sugar cane	100	601	-	298	1000	22	30	6
vegetables	8	339	41	612	1000	162	514	99
fodder	-	29	25	946	1000	105	97	17
fruits & nuts	-	543	413	44	1000	413	549	96
other cash	41	643	35	281	1000	317	527	99
crops								
others	-	82	37	881	1000	122	81	16
all crops	25	91	59	825	1000	8587	2025	367
		Jam	mu & Ka	shmir				
Paddy( <i>kharif</i> )	116	148	251	484	1000	2191	2196	482
Paddy( <i>rabi</i> )	42	245	146	404 567	1000	56	127	482
wheat	42 55	156	140	675	1000	2010	710	224
other cereals	9	78	28	885	1000	985	251	67
pulses	8	206	30	755	1000	193	231	63
oil seeds	24	127	165	683	1000	642	824	127
mixed crop	-	110	93	797	1000	23	25	8

Paddy( <i>knarif</i> )	116	148	251	484	1000	2191	2196	482
Paddy(rabi)	42	245	146	567	1000	56	127	17
wheat	55	156	114	675	1000	2010	710	224
other cereals	9	78	28	885	1000	985	251	67
pulses	8	206	30	755	1000	193	231	63
oil seeds	24	127	165	683	1000	642	824	127
mixed crop	-	110	93	797	1000	23	25	8
sugar cane	-	-	849	151	1000	11	28	10
vegetables	12	163	134	691	1000	424	1338	220
fodder	57	86	167	691	1000	342	517	150
fruits & nuts	5	562	263	169	1000	500	1205	214
other cash	-	730	-	270	1000	34	68	9
crops								

\*Note

1. Paddy: *kharif* and paddy: *rabi*, for example, are treated as different "crops" for this purpose.

2. The set of 5 major crops is not a fixed set but varies from household to household; for any particular household it is understood as the 5 most important field crops cultivated, in terms of value of production, by the household in 1997-98, from among a list of crop-season combinations involving 12 crops and crop-groups spanning the entire range of crops cultivated in the country.

others	26	9	61	903	1000	135	34	12
all crops	56	167	158	619	1000	7547	3443	705

\*Note

1. Paddy: *kharif* and paddy: *rabi*, for example, are treated as different "crops" for this purpose.

<sup>2.</sup> The set of 5 major crops is not a fixed set but varies from household to household; for any particular household it is understood as the 5 most important field crops cultivated, in terms of value of production, by the household in 1997-98, from among a list of crop-season combinations involving 12 crops and crop-groups spanning the entire range of crops cultivated in the country.

	per	1000 distribution of	of area trea	ated with		estd. area under the	no. of h cultivating using pest	the crop
crop group	weedicides only	pesticides, etc. only	both	none	all	crop (00 ha)	estd. (00)	sample
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
			Karnata	ka				
Paddy(kharif)	15	287	473	225	1000	9279	7874	363
Paddy(rabi)	7	663	206	125	1000	1707	1679	75
wheat	90	216	39	655	1000	1374	462	19
other cereals	29	236	183	552	1000	34052	13016	587
pulses	17	596	80	307	1000	11180	6574	291
oil seeds	41	449	127	383	1000	13590	5729	242
mixed crop	46	435	195	324	1000	5374	3087	139
sugar cane	105	220	181	494	1000	2123	1404	61
vegetables	48	234	494	224	1000	1666	2037	94
fodder	4	113	86	797	1000	572	196	8
fruits & nuts	2	391	79	528	1000	1608	1230	55
other cash	10	471	189	331	1000	7099	4928	225
crops								
others	44	271	386	300	1000	919	1284	55
all crops	30	357	196	417	1000	90596	29112	1304
			Kerala	ı				
Paddy(kharif)	14	305	445	235	1000	1367	2795	179
Paddy(rabi)	22	433	399	146	1000	517	1532	97
wheat	-	-	-	1000	1000	5	-	-
other cereals	16	224	354	406	1000	216	283	18
pulses	-	557	-	443	1000	25	17	1
oil seeds	127	105	7	761	1000	488	754	53
mixed crop	34	239	54	672	1000	480	592	41
sugar cane	-	-	-	1000	1000	10	-	-
vegetables	8	186	22	785	1000	263	1136	69
fodder	-	-	-	1000	1000	3	-	-
fruits & nuts	7	147	21	825	1000	1585	2183	142
other cash	6	287	54	653	1000	4241	2704	168
crops								

\*Note

1. Paddy: *kharif* and paddy: *rabi*, for example, are treated as different "crops" for this purpose.

2. The set of 5 major crops is not a fixed set but varies from household to household; for any particular household it is understood as the 5 most important field crops cultivated, in terms of value of production, by the household in 1997-98, from among a list of crop-season combinations involving 12 crops and crop-groups spanning the entire range of crops cultivated in the country.

others	6	148	42	804	1000	393	667	42
all crops	16	253	126	605	1000	9599	8123	523

\*Note

1. Paddy: *kharif* and paddy: *rabi*, for example, are treated as different "crops" for this purpose.

<sup>2.</sup> The set of 5 major crops is not a fixed set but varies from household to household; for any particular household it is understood as the 5 most important field crops cultivated, in terms of value of production, by the household in 1997-98, from among a list of crop-season combinations involving 12 crops and crop-groups spanning the entire range of crops cultivated in the country.

	per	1000 distribution of	of area trea	ited with		estd. area under the	no. of h cultivating using pes	the crop
crop group	weedicides only	pesticides, etc. only	both	none	all	crop (00 ha)	estd. (00)	sampl
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9
		M	adhya Pra	adesh				
Paddy(kharif)	18	205	130	648	1000	50255	11975	621
Paddy(rabi)	91	362	180	367	1000	1299	716	37
wheat	22	176	212	590	1000	55564	12038	644
other cereals	24	184	107	685	1000	21844	4677	24.
pulses	9	211	133	647	1000	23033	7402	394
oil seeds	21	193	276	510	1000	41323	9130	485
mixed crop	15	149	115	720	1000	8529	1541	8
sugar cane	-	205	243	553	1000	527	314	1′
vegetables	8	303	122	567	1000	2327	1689	7
fodder	28	100	50	822	1000	1247	556	30
fruits & nuts	-	111	601	288	1000	165	30	
other cash	26	426	216	333	1000	5995	3064	16.
crops								
others	-	84	22	894	1000	1842	227	1(
all crops	19	198	179	604	1000	213999	28751	1510
		Ν	Aaharash	tra				
Paddy(kharif)	13	283	122	582	1000	11884	6519	27
Paddy(rabi)	-	43	-	957	1000	292	102	4
wheat	58	380	113	449	1000	7973	5120	247
other cereals	35	232	63	671	1000	42767	12622	588
pulses	28	428	43	501	1000	11002	7312	340
oil seeds	34	245	194	528	1000	6977	3089	13'
mixed crop	61	822	35	83	1000	4585	2180	10
sugar cane	69	245	238	449	1000	3375	2163	10
vegetables	22	444	284	250	1000	1911	2913	14
fodder	184	28	146	642	1000	909	452	19
fruits & nuts	1	285	479	235	1000	1781	1594	6
other cash	5	777	79	139	1000	19732	12528	56
crops								

\*Note

1. Paddy: *kharif* and paddy: *rabi*, for example, are treated as different "crops" for this purpose.

2. The set of 5 major crops is not a fixed set but varies from household to household; for any particular household it is understood as the 5 most important field crops cultivated, in terms of value of production, by the household in 1997-98, from among a list of crop-season combinations involving 12 crops and crop-groups spanning the entire range of crops cultivated in the country.

others	-	339	175	487	1000	693	357	16
all crops	31	389	97	484	1000	113969	30267	1382

\*Note

1. Paddy: *kharif* and paddy: *rabi*, for example, are treated as different "crops" for this purpose.

<sup>2.</sup> The set of 5 major crops is not a fixed set but varies from household to household; for any particular household it is understood as the 5 most important field crops cultivated, in terms of value of production, by the household in 1997-98, from among a list of crop-season combinations involving 12 crops and crop-groups spanning the entire range of crops cultivated in the country.

	per	1000 distribution of	of area trea	ated with		estd. area under the	no. of l cultivating using pes	the crop
crop group	weedicides only	pesticides, etc. only	both	none	all	crop (00 ha)	estd. (00)	sample
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
			Manipu	ır				
Paddy(kharif)	2	478	207	312	1000	1035	941	318
Paddy(rabi)	-	300	276	424	1000	283	183	50
wheat	-	1000	-	-	1000	0	2	1
other cereals	-	380	208	412	1000	13	37	14
pulses	-	606	-	394	1000	21	64	16
oil seeds	-	24	29	947	1000	6	10	3
mixed crop	-	168	254	578	1000	45	142	56
sugar cane	-	-	-	-	-	-	-	-
vegetables	-	122	126	753	1000	113	176	64
fodder	-	-	-	1000	1000	1	-	-
fruits & nuts	-	-	10	990	1000	5	1	1
other cash	-	-	217	783	1000	5	7	1
crops								
others	-	20	25	955	1000	26	36	5
all crops	2	396	206	396	1000	1566	1158	376
			Meghala	ya				
Paddy(kharif)	12	297	84	607	1000	1313	645	164
Paddy(rabi)	-	74	-	926	1000	94	16	5
wheat	-	588	-	412	1000	5	7	2
other cereals	-	12	-	988	1000	169	4	1
pulses	-	55	-	945	1000	6	3	1
oil seeds	-	-	-	1000	1000	4	-	-
mixed crop	-	9	-	991	1000	222	4	1
sugar cane	-	-	-	-	-	-	-	-
vegetables	-	88	197	714	1000	898	431	147
fodder	-	-	-	1000	1000	1	-	-
fruits & nuts	20	10	91	880	1000	234	47	21
other cash	-	9	28	963	1000	102	8	3

crops \*Note

1. Paddy: *kharif* and paddy: *rabi*, for example, are treated as different "crops" for this purpose.

2. The set of 5 major crops is not a fixed set but varies from household to household; for any particular household it is understood as the 5 most important field crops cultivated, in terms of value of production, by the household in 1997-98, from among a list of crop-season combinations involving 12 crops and crop-groups spanning the entire range of crops cultivated in the country.

others	2	32	2	964	1000	123	14	5
all crops	6	155	98	741	1000	3171	943	269

\*Note

1. Paddy: *kharif* and paddy: *rabi*, for example, are treated as different "crops" for this purpose.

<sup>2.</sup> The set of 5 major crops is not a fixed set but varies from household to household; for any particular household it is understood as the 5 most important field crops cultivated, in terms of value of production, by the household in 1997-98, from among a list of crop-season combinations involving 12 crops and crop-groups spanning the entire range of crops cultivated in the country.

	per	1000 distribution	of area tre	ated with		estd. area	no. of l cultivating using pes	the crop
crop group	weedicides only	pesticides, etc. only	both	none	all	crop (00 ha)	estd. (00)	sample
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
			Mizora	m				
Paddy(kharif)	9	5	-	987	1000	219	6	3
Paddy( <i>rabi</i> ) wheat	-	-	-	1000	1000	29	-	-
other cereals	-	30	-	970	1000	8	3	2
pulses	-	10	-	990	1000	16	3	3
oil seeds	-	-	-	1000	1000	0	-	-
mixed crop	-	2	-	998	1000	125	3	2
sugar cane	-	-	-	1000	1000	6	-	-
vegetables	-	-	-	1000	1000	46	-	-
fodder	-	-	-	1000	1000	0	-	-
fruits & nuts	-	624	-	376	1000	12	9	8
other cash crops	-	41	-	959	1000	28	3	2
others	-	-	-	1000	1000	18	-	-
all crops	4	20	-	977	1000	508	15	12
			Nagalaı	nd				
Paddy(kharif)	216	68	111	605	1000	978	145	159
Paddy(rabi)	84	121	11	784	1000	363	68	52
wheat	60	88	308	543	1000	8	5	3
other cereals	11	71	17	901	1000	160	50	40
pulses	62	6	562	369	1000	46	23	22
oil seeds	-	206	372	422	1000	12	15	8
mixed crop	365	72	208	356	1000	141	107	106
sugar cane	-	-	-	-	-	-	-	-
vegetables	284	33	100	583	1000	254	166	169
fodder	305	-	-	695	1000	8	7	9
fruits & nuts	-	-	-	1000	1000	2	-	-
other cash	407	10	296	287	1000	101	66	63

crops \*Note

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2. The set of 5 major crops is not a fixed set but varies from household to household; for any particular household it is understood as the 5 most important field crops cultivated, in terms of value of production, by the household in 1997-98, from among a list of crop-season combinations involving 12 crops and crop-groups spanning the entire range of crops cultivated in the country.

others	647	19	150	184	1000	107	85	94
all crops	226	67	113	594	1000	2190	239	236

\*Note

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<sup>2.</sup> The set of 5 major crops is not a fixed set but varies from household to household; for any particular household it is understood as the 5 most important field crops cultivated, in terms of value of production, by the household in 1997-98, from among a list of crop-season combinations involving 12 crops and crop-groups spanning the entire range of crops cultivated in the country.

	per	1000 distribution	of area tre	ated with		estd. area under the	no. of h cultivating using pest	the crop
crop group	weedicides only	pesticides, etc. only	both	none	all	crop (00 ha)	estd. (00)	sample
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
			Oriss	a				
Paddy(kharif)	9	215	115	660	1000	30778	11964	685
Paddy(rabi)	3	412	470	116	1000	1290	2405	138
wheat other cereals	- 30	193 40	- 143	807 787	1000 1000	73 1177	97 424	5 25
pulses	2	189	185	624	1000	3367	1969	111
oil seeds	32	85	41	841	1000	439	295	18
mixed crop	-	968	-	32	1000	16	64	3
sugar cane	-	600	-	400	1000	58	75	5
vegetables	8	248	201	543	1000	647	1971	108
fodder	-	-	-	1000	1000	4	-	-
fruits & nuts	-	423	389	188	1000	66	145	9
other cash crops	-	158	694	148	1000	317	248	12
others	-	-	-	1000	1000	42	-	-
all crops	9	214	140	638	1000	38276	13886	791
			Punja	b				
Paddy(kharif)	6	93	881	20	1000	14095	6567	563
Paddy(rabi)	336	59	572	33	1000	571	268	23
wheat	74	129	756	41	1000	21703	8718	745
other cereals	168	111	405	316	1000	730	499	48
pulses	-	227	432	340	1000	89	91	8
oil seeds	-	67	837	96	1000	199	355	32
mixed crop	-	623	200	177	1000	24	34	3
sugar cane	21	237	653	88	1000	189	322	29
vegetables	-	451	549	-	1000	324	288	26
fodder	20	242	319	419	1000	4913	5283	442
fruits & nuts other cash	-	- 162	1000 822	- 13	1000 1000	146 6573	32 2179	1 175
other cash	5	102	022	15	1000	0575	2119	1/5

crops \*Note

1. Paddy: *kharif* and paddy: *rabi*, for example, are treated as different "crops" for this purpose.

2. The set of 5 major crops is not a fixed set but varies from household to household; for any particular household it is understood as the 5 most important field crops cultivated, in terms of value of production, by the household in 1997-98, from among a list of crop-season combinations involving 12 crops and crop-groups spanning the entire range of crops cultivated in the country.

others	25	15	193	767	1000	374	96	8
all crops	43	135	744	78	1000	49942	9193	789

\*Note

1. Paddy: *kharif* and paddy: *rabi*, for example, are treated as different "crops" for this purpose.

<sup>2.</sup> The set of 5 major crops is not a fixed set but varies from household to household; for any particular household it is understood as the 5 most important field crops cultivated, in terms of value of production, by the household in 1997-98, from among a list of crop-season combinations involving 12 crops and crop-groups spanning the entire range of crops cultivated in the country.

	per	1000 distribution	of area tre	ated with		estd. area under the	no. of h cultivating using pest	the crop
crop group	weedicides only	pesticides, etc. only	both	none	all	crop (00 ha)	estd. (00)	sample
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
			Rajasth	an				
Paddy(kharif)	50	434	17	499	1000	1259	467	19
Paddy(rabi)	-	588	239	173	1000	285	134	7
wheat	49	241	137	573	1000	32952	9847	537
other cereals	9	84	78	829	1000	54819	6880	363
pulses	18	105	31	845	1000	19670	2464	130
oil seeds	46	274	84	596	1000	19110	5786	311
mixed crop	3	11	2	985	1000	13654	393	20
sugar cane	3	346	79	572	1000	582	361	20
vegetables	57	437	305	201	1000	403	661	43
fodder	3	182	8	807	1000	5670	2053	112
fruits & nuts	255	-	-	745	1000	83	40	2
other cash crops	25	675	37	263	1000	12265	4003	222
others	17	37	140	806	1000	4638	916	50
all crops	24	185	75	716	1000	165418	15380	820
			Sikkir	n				
Paddy(kharif)	-	63	1	935	1000	63	11	10
Paddy(rabi)	-	-	-	1000	1000	2	-	-
wheat	-	41	-	959	1000	8	4	4
other cereals	-	2	0	998	1000	189	3	3
pulses	-	-	-	1000	1000	10	-	-
oil seeds	-	109	-	891	1000	3	2	2
mixed crop	-	-	-	1000	1000	1	-	-
sugar cane	-	-	-	1000	1000	0	-	-
vegetables	-	105	-	895	1000	66	14	15
fodder	-	-	-	1000	1000	11	-	-
fruits & nuts	-	-	-	1000	1000	5	-	-
other cash	7	27	37	928	1000	78	14	14

crops \*Note

1. Paddy: *kharif* and paddy: *rabi*, for example, are treated as different "crops" for this purpose.

2. The set of 5 major crops is not a fixed set but varies from household to household; for any particular household it is understood as the 5 most important field crops cultivated, in terms of value of production, by the household in 1997-98, from among a list of crop-season combinations involving 12 crops and crop-groups spanning the entire range of crops cultivated in the country.

others	-	-	-	1000	1000	3	-	-
all crops	1	32	7	960	1000	438	33	33

\*Note

1. Paddy: *kharif* and paddy: *rabi*, for example, are treated as different "crops" for this purpose.

<sup>2.</sup> The set of 5 major crops is not a fixed set but varies from household to household; for any particular household it is understood as the 5 most important field crops cultivated, in terms of value of production, by the household in 1997-98, from among a list of crop-season combinations involving 12 crops and crop-groups spanning the entire range of crops cultivated in the country.

	per	1000 distribution of	of area trea	ated with		estd. area under the	no. of h cultivating using pest	the crop
crop group	weedicides only	pesticides, etc. only	both	none	all	crop (00 ha)	estd. (00)	sampl
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9
			Tamil Na	du				
Paddy(kharif)	8	350	608	34	1000	9711	13733	775
Paddy(rabi)	7	312	659	21	1000	5861	8870	481
wheat	-	434	91	475	1000	81	90	6
other cereals	49	258	459	234	1000	5316	5163	286
pulses	7	516	186	291	1000	1920	1783	107
oil seeds	9	442	286	263	1000	2413	2750	156
mixed crop	-	398	552	50	1000	596	491	27
sugar cane	-	190	721	89	1000	1720	1918	90
vegetables	3	368	417	212	1000	947	1737	90
fodder	33	93	380	494	1000	462	806	45
fruits & nuts	65	172	207	556	1000	1796	1724	104
other cash	8	525	362	105	1000	3178	4312	240
crops								
others	21	245	400	334	1000	855	929	52
all crops	17	340	495	148	1000	34863	29183	1612
			Tripur	a				
Paddy(kharif)	15	200	524	261	1000	766	1158	213
Paddy(rabi)	27	202	458	313	1000	404	627	123
wheat	9	49	943	-	1000	57	124	17
other cereals	-	-	-	1000	1000	2	-	
pulses	-	-	-	-	-	-	-	
oil seeds	-	-	-	-	-	-	-	
mixed crop	-	-	-	1000	1000	5	-	
sugar cane	-	-	-	-	-	-	-	
vegetables	43	146	529	282	1000	163	549	110
fodder	-	-	-	-	-	-	-	
fruits & nuts	-	30	476	494	1000	12	22	5
other cash	-	-	192	808	1000	3	3	1
crops								

\*Note

1. Paddy: *kharif* and paddy: *rabi*, for example, are treated as different "crops" for this purpose.

2. The set of 5 major crops is not a fixed set but varies from household to household; for any particular household it is understood as the 5 most important field crops cultivated, in terms of value of production, by the household in 1997-98, from among a list of crop-season combinations involving 12 crops and crop-groups spanning the entire range of crops cultivated in the country.

others	-	-	102	898	1000	2	4	1
all crops	21	186	518	275	1000	1415	1675	316

\*Note

1. Paddy: *kharif* and paddy: *rabi*, for example, are treated as different "crops" for this purpose.

<sup>2.</sup> The set of 5 major crops is not a fixed set but varies from household to household; for any particular household it is understood as the 5 most important field crops cultivated, in terms of value of production, by the household in 1997-98, from among a list of crop-season combinations involving 12 crops and crop-groups spanning the entire range of crops cultivated in the country.

	per	1000 distribution of	of area trea	ited with		estd. area under the	no. of h cultivating using pest	the crop
crop group	weedicides only	pesticides, etc. only	both	none	all	crop (00 ha)	estd. (00)	sample
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
		τ	J <b>ttar Prad</b>	esh				
Paddy(kharif)	50	174	165	610	1000	60141	34750	1571
Paddy(rabi)	116	95	289	500	1000	1405	755	34
wheat	51	145	128	677	1000	94610	38591	1751
other cereals	39	88	40	833	1000	26849	8034	372
pulses	7	180	108	705	1000	18741	9858	468
oil seeds	17	164	56	763	1000	8174	3838	177
mixed crop	27	113	84	776	1000	5079	2224	107
sugar cane	40	189	208	563	1000	14807	9917	445
vegetables	28	367	113	492	1000	5576	9534	445
fodder	22	103	79	796	1000	9734	6303	274
fruits & nuts	24	344	64	568	1000	890	880	41
other cash crops	47	269	162	522	1000	2629	2550	105
others	34	115	127	723	1000	1721	1376	63
all crops	42	156	126	676	1000	250492	54913	2497
			West Beng	gal				
Paddy(kharif)	17	616	249	118	1000	28359	45496	2164
Paddy(rabi)	38	541	311	110	1000	7499	17401	787
wheat	2	720	149	129	1000	3067	7961	368
other cereals	28	534	146	292	1000	257	631	30
pulses	103	460	72	365	1000	680	1952	93
oil seeds	4	525	262	209	1000	1811	5599	261
mixed crop	72	248	29	651	1000	195	330	16
sugar cane	-	554	186	260	1000	124	447	20
vegetables	6	624	248	123	1000	3929	14254	644
fodder	-	989	-	11	1000	18	36	3
fruits & nuts	-	618	306	76	1000	252	1064	45
other cash crops	40	505	123	332	1000	3802	8540	395
others	-	767	153	80	1000	769	2004	93
all crops	21	598	238	143	1000	50792	53072	2505

\*Note

1. Paddy: *kharif* and paddy: *rabi*, for example, are treated as different "crops" for this purpose.

2. The set of 5 major crops is not a fixed set but varies from household to household; for any particular household it is understood as the 5 most important field crops cultivated, in terms of value of production, by the household in 1997-98, from among a list of crop-season combinations involving 12 crops and crop-groups spanning the entire range of crops cultivated in the country.

\*Note

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	per	1000 distribution of	of area trea	ated with		estd. area under the	no. of h cultivating using pest	the crop
crop group	weedicides only	pesticides, etc. only	both	none	all	crop (00 ha)	estd. (00)	sample
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
		А	. & N. Isla	ands				
Paddy(kharif)	3	120	329	549	1000	109	35	31
Paddy(rabi)	-	-	-	1000	1000	0	-	-
wheat	-	-	-	-	-	-	-	-
other cereals	-	-	-	-	-	-	-	-
pulses	-	290	-	710	1000	12	19	14
oil seeds	-	-	-	-	-	-	-	-
mixed crop	-	-	-	-	-	-	-	-
sugar cane	-	-	-	-	-	-	-	-
vegetables	2	174	686	138	1000	17	32	20
fodder	-	-	-	-	-	-	-	-
fruits & nuts	-	-	-	-	-	-	-	-
other cash crops	-	-	-	-	-	-	-	-
others	-	-	-	-	-	-	-	-
all crops	2	140	345	512	1000	138	55	42
			India					
Paddy(kharif)	26	289	231	454	1000	348071	226054	12903
Paddy( <i>rabi</i> )	28	414	321	236	1000	36284	46002	2480
wheat	53	208	228	511	1000	289342	132591	7223
other cereals	24	203	112	661	1000	229847	85595	4497
pulses	15	282	107	596	1000	113692	62225	3244
oil seeds	25	320	205	450	1000	127563	57243	3018
mixed crop	19	290	89	602	1000	49306	16937	1083
sugar cane	39	247	265	449	1000	29062	21568	1042
vegetables	19	399	195	387	1000	29845	60291	3983
fodder	24	153	138	685	1000	32133	23111	1457
fruits & nuts	15	343	217	425	1000	12150	12625	934
other cash crops	15	531	230	225	1000	92959	62381	3305
others	20	191	217	572	1000	17715	12302	773
all crops	29	277	193	500	1000	1408832	410999	23063

\*Note

1. Paddy: *kharif* and paddy: *rabi*, for example, are treated as different "crops" for this purpose.

2. The set of 5 major crops is not a fixed set but varies from household to household; for any particular household it is understood as the 5 most important field crops cultivated, in terms of value of production, by the household in 1997-98, from among a list of crop-season combinations involving 12 crops and crop-groups spanning the entire range of crops cultivated in the country.

size-class of		usin	g machines		all	no. of fiel	
<b>1</b> .			1	1	_	cultivato	r hhs
ownership	manual	owned	hired	both			
holding (ha)	only (2)	only (2)	only	(5)	(6)	est.(00)	sample
(1)	(2)	(3)	(4)	(5)	(0)	(7)	(8)
			Andhra Pra	desh			
nil (<0.01)	997	-	3	-	1000	816	35
00.01 - 00.20	946	19	35	-	1000	4366	203
00.21 - 00.50	942	4	55	-	1000	12989	627
00.51 - 01.00	954	11	35	-	1000	12848	596
01.01 - 02.00	961	8	31	-	1000	10837	499
02.01 - 04.00	966	-	34	-	1000	7035	347
04.01 - 10.00	944	14	42	-	1000	3455	164
10.01 & above	1000	-	-	-	1000	495	25
all	954	8	39	-	1000	52840	2496
		Α	runachal Pr	adesh			
nil (<0.01)	974	26	-	-	1000	203	70
00.01 - 00.20	956	44	-	-	1000	79	34
00.21 - 00.50	848	111	41	-	1000	190	81
00.51 - 01.00	988	12	-	-	1000	221	108
01.01 - 02.00	994	6	-	-	1000	292	125
02.01 - 04.00	1000	-	-	-	1000	165	90
04.01 - 10.00	993	7	-	-	1000	161	86
10.01 & above	1000	-	-	-	1000	11	8
all	967	27	6	-	1000	1321	602
			Assam				
nil (<0.01)	993	7	-	-	1000	552	63
00.01 - 00.20	999	1	-	-	1000	3132	307
00.21 - 00.50	952	41	7	-	1000	4041	432
00.51 - 01.00	959	41	-	-	1000	6940	603
01.01 - 02.00	979	21	-	-	1000	6968	582
02.01 - 04.00	942	24	34	-	1000	2536	205
04.01 - 10.00	928	-	72	-	1000	520	42
10.01 & above	-	-	-	-	-	-	-
all	967	27	6	-	1000	24689	2234

Table (10): Per 1000 distribution of field-crop cultivator households by mode of harvesting for each size-	
class of household ownership holding	

size-class of		usin	g machines		all	no. of fiel	d-crop
	_				_	cultivato	r hhs
ownership	manual	owned	hired	both			•
holding (ha)	only	only	only			est.(00)	sample
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
			Bihar				
			Dillai				
nil (<0.01)	973	27	-	-	1000	3743	197
00.01 - 00.20	994	5	1	-	1000	19828	1015
00.21 - 00.50	992	6	2	-	1000	23571	1234
00.51 - 01.00	994	4	3	-	1000	20184	976
01.01 - 02.00	982	9	9	-	1000	15932	781
02.01 - 04.00	983	2	14	-	1000	6811	331
04.01 - 10.00	979	10	10	-	1000	2313	111
10.01 & above	897	57	46	-	1000	278	14
all	989	7	4	-	1000	92660	4659
			Gujarat				
nil (<0.01)	1000	-	-	-	1000	151	5
00.01 - 00.20	981	-	19	-	1000	1224	68
00.21 - 00.50	965	2	33	-	1000	7372	382
00.51 - 01.00	962	9	28	-	1000	5864	287
01.01 - 02.00	923	44	33	-	1000	6566	338
02.01 - 04.00	923	22	52	4	1000	5532	282
04.01 - 10.00	899	27	74	-	1000	3742	200
10.01 & above	842	76	82	-	1000	529	30
all	939	20	41	1	1000	30981	1592
			Haryana				
			j				
nil (<0.01)	1000	-	-	-	1000	109	5
00.01 - 00.20	1000	-	-	-	1000	573	27
00.21 - 00.50	985	-	15	-	1000	1851	90
00.51 - 01.00	1000	-	-	-	1000	1839	85
01.01 - 02.00	965	9	27	-	1000	2973	138
02.01 - 04.00	947	11	42	-	1000	2362	116
04.01 - 10.00	825	80	96	-	1000	1613	77
10.01 & above	696	102	202	-	1000	229	13
all	947	18	35	-	1000	11548	551

Table (10): Per 1000 distribution of field-cr	op cultivator households by mode of harvesting for each size-
class of household ownership hold	ling

size-class of		usin	g machines		all	no. of fiel	
ownership	manual _	owned	hired	both		cultivato	r nns
holding (ha)	only	only	only	both		est.(00)	sample
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8
(1)	(2)	(3)	(4)	(3)	(0)	(7)	(0
		E	limachal Pra	adesh			
nil <0.01)	1000	-	-	-	1000	45	8
00.01 - 00.20	994	3	3	-	1000	1691	322
00.21 - 00.50	996	4	-	-	1000	2939	55
00.51 - 01.00	990	5	5	-	1000	2208	404
01.01 - 02.00	995	-	5	-	1000	1277	24
02.01 - 04.00	989	-	11	-	1000	522	9
04.01 - 10.00	1000	-	-	-	1000	108	22
10.01 & above	1000	-	-	-	1000	35	
all	994	3	3	-	1000	8825	165
		J	ammu & Ka	shmir			
nil <0.01)	1000	_	-	-	1000	11	
00.01 - 00.20	969	31	-	-	1000	1039	21
00.21 - 00.50	997	2	1	_	1000	2807	57
00.51 - 01.00	970	27	2	-	1000	1978	39
01.01 - 02.00	986	9	5	-	1000	997	24
02.01 - 04.00	979	21	-	-	1000	353	8
04.01 - 10.00	1000	-	-	-	1000	51	1
10.01 & above	-	-	-	-	-	-	
all	983	15	2	-	1000	7236	153
			Karnatak	a			
nil(<0.01)	624	209	166	-	1000	146	
00.01 - 00.20	954	-	46	-	1000	2826	13
00.21 - 00.50	893	4	103	-	1000	6735	32
00.51 - 01.00	893	8	99	-	1000	10269	44
01.01 - 02.00	826	19	152	4	1000	12321	52
02.01 - 04.00	768	16	216	-	1000	7165	30
04.01 - 10.00	690	25	285	-	1000	4250	18
10.01 &above	347	112	541	-	1000	656	2
all	829	15	155	1	1000	44369	195

size-class of		usi	ng machines		all	no. of fiel cultivato	-
ownership	manual –	owned	hired	both		Cultivuto	
holding (ha)	only	only	only			est.(00)	sample
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
			Kerala				
1/ 0.01	1000				1000		
nil(<0.01)	1000	-	-	-	1000	75	4
00.01 - 00.20	971	28	1	-	1000	22100	1401
00.21 - 00.50	978	20	2	-	1000	6402	419
00.51 - 01.00	967	28	6	-	1000	3374	201
01.01 - 02.00	974	26	-	-	1000	1976	116
02.01 - 04.00	968	-	32	-	1000	485	29
04.01 - 10.00 10.01 & above	899 1000	-	101	-	1000	170 32	10 2
	1000 972	- 26	- 3	-	1000	34615	2182
all	912	20	3	-	1000	54015	2182
			Madhya Pra	desh			
nil(<0.01)	1000	-	-	-	1000	421	21
00.01 - 00.20	999	1	-	-	1000	2467	139
00.21 - 00.50	996	4	-	-	1000	9680	539
00.51 - 01.00	992	5	3	-	1000	15036	774
01.01 - 02.00	984	9	7	-	1000	21560	1108
02.01 - 04.00	990	4	6	-	1000	18818	954
04.01 - 10.00	980	5	15	-	1000	8158	434
10.01 & above	960	22	18	-	1000	1028	62
all	988	6	6	-	1000	77168	4031
			Maharash	tra			
nil <0.01)	980	-	20	-	1000	178	7
00.01 - 00.20	981	-	19	-	1000	3913	188
00.21 - 00.50	955	10	35	-	1000	8349	399
00.51 - 01.00	913	10	77	-	1000	12111	559
01.01 - 02.00	899	4	98	-	1000	15774	739
02.01 - 04.00	906	6	88	-	1000	11295	527
04.01 - 10.00	859	9	128	4	1000	6238	287
10.01 &above	722	42	236	-	1000	883	40
all	910	7	82	0	1000	58740	2746

Table (10): Per 1000 distribution of field	crop cultivator households by mode of harvesting for each size-
class of household ownership h	lding

size-class of		usir	ig machines		all	no. of fiel	-
ownership	manual	owned	hired	both	_	cultivato	or hhs
holding (ha)	only	only	only	both		est.(00)	sample
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
(1)	(2)	(3)	(1)	(3)	(0)	(7)	(0)
			Manipur				
nil (<0.01)	1000	-	-	-	1000	198	80
00.01 - 00.20	998	2	-	-	1000	189	57
00.21 - 00.50	934	25	41	-	1000	483	174
00.51 - 01.00	989	4	7	-	1000	832	256
01.01 - 02.00	974	26	-	-	1000	353	140
02.01 - 04.00	1000	-	-	-	1000	76	34
04.01 - 10.00	1000	-	-	-	1000	10	6
10.01 & above	-	-	-	-	-	-	-
all	976	12	12	-	1000	2139	747
			Meghalay	'a			
nil <0.01)	1000	_	_	-	1000	17	6
00.01 - 00.20	999	- 1	-	-	1000	385	121
00.21 - 00.50	1000	-	_	-	1000	782	210
00.51 - 01.00	1000	-	-	-	1000	796	225
01.01 - 02.00	1000	_	_	-	1000	605	193
02.01 - 04.00	985	7	8	-	1000	425	136
04.01 - 10.00	1000	-	-	-	1000	92	29
10.01 & above	-	-	-	-	-	-	
all	998	1	1	-	1000	3103	920
			Mizoran	l			
nil (<0.01)	970	30		_	1000	104	72
00.01 - 00.20	970 992	50 8	-	-	1000	339	263
00.01 - 00.20	1000	0 -	-	-	1000	43	203 45
00.51 - 01.00	925	75	-	-	1000	43 55	42
01.01 - 02.00	1000	-	-	-	1000	55 66	47 54
02.01 - 04.00	1000	_	_	-	1000	14	16
04.01 - 10.00	1000	-	-	-	1000	3	3
10.01 & above	-	-	-	-	-	-	
all	984	16			1000	624	500

size-class of		usir	ng machines		all	no. of fiel	d-crop
	_				_	cultivato	or hhs
ownership	manual	owned	hired	both			•
holding (ha)	only	only	only			est.(00)	sample
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
			Nagalano	d			
nil (<.01)	1000	-	-	-	1000	16	13
00.01 - 00.20	1000	-	-	-	1000	24	20
00.21 - 00.50	1000	-	-	-	1000	37	47
00.51 - 01.00	1000	-	-	-	1000	77	71
01.01 - 02.00	998	2	-	-	1000	190	177
02.01 - 04.00	994	6	-	-	1000	329	356
04.01 - 10.00	980	20	-	-	1000	127	136
10.01 & above	1000	-	-	-	1000	7	8
all	994	6	-	-	1000	807	828
			Orissa				
nil (<.01)	1000	-	-	-	1000	198	20
00.01 - 00.20	987	5	8	-	1000	5949	326
00.21 - 00.50	986	6	8	-	1000	12133	657
00.51 - 01.00	987	6	8	-	1000	10803	553
01.01 - 02.00	959	27	15	-	1000	7280	378
02.01 - 04.00	984	9	7	-	1000	2881	146
04.01 - 10.00	1000	-	-	-	1000	609	32
10.01 & above	1000	-	-	-	1000	122	3
all	981	10	9	-	1000	39975	2115
			Punjab				
nil <0.01)	709	_	291	_	1000	50	5
00.01 - 00.20	1000	-		_	1000	482	47
00.21 - 00.50	861	28	111	_	1000	1130	99
00.51 - 01.00	825	12	152	11	1000	1462	122
01.01 - 02.00	62J	41	330	8	1000	2909	254
02.01 - 04.00	458	52	450	39	1000	2202	190
04.01 - 10.00	389	67	497	46	1000	1575	133
10.01 & above	175	123	637	66	1000	377	33
all	608	43	327	22	1000	10188	883

size-class of		usir	ng machines		all	no. of fiel cultivato	-
ownership	- manual	owned	hired	both		cultivate	
holding (ha)	only	only	only			est.(00)	sample
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
			Rajastha	n			
			-				
nil (<.01)	1000	-	-	-	1000	306	19
00.01 - 00.20	990	-	10	-	1000	2073	110
00.21 - 00.50	997	3	-	-	1000	7782	415
00.51 - 01.00	995	5	-	-	1000	8603	445
01.01 - 02.00	983	8	9	-	1000	11017	583
02.01 - 04.00	992	3	5	-	1000	9684	539
04.01 - 10.00	969	12	19	-	1000	7914	451
10.01 & above	974	13	14	-	1000	2009	124
all	987	6	7	-	1000	49388	2686
			Sikkim	L			
nil (<0.01)	986	14	-	-	1000	60	76
00.01 - 00.20	1000	-	-	-	1000	95	111
00.21 - 00.50	993	-	7	-	1000	180	210
00.51 - 01.00	1000	-	-	-	1000	123	130
01.01 - 02.00	979	9	12	-	1000	85	92
02.01 - 04.00	1000	-	-	-	1000	38	42
04.01 - 10.00	1000	-	-	-	1000	3	2
10.01 & above all	1000 993	- 3	- 4	-	1000	1 586	678
an	995	3	4	-	1000	380	0/0
			Tamil Nac	łu			
nil (<0.01)	1000	-	-	-	1000	707	41
00.01 - 00.20	995	-	5	-	1000	4184	247
00.21 - 00.50	978	2	19	-	1000	10470	610
00.51 - 01.00	963	8	29	-	1000	8949	487
01.01 - 02.00	980	-	20	-	1000	5976	321
02.01 - 04.00	958	7	35	-	1000	2684	130
04.01 - 10.00	1000	-	-	-	1000	966	42
10.01 & above	1000	-	-	-	1000	49	3
all	976	3	20	-	1000	33985	188

size-class of		usii	ng machines		all	no. of fiel	-
			1. 1	1 .1	_	cultivato	r hhs
ownership	manual	owned	hired	both		(00)	
holding (ha)	only	only	only	(5)		est.(00)	sample
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
			Tripura				
nil (<0.01)	589	117	294	-	1000	43	8
00.01 - 00.20	919	57	24	-	1000	490	110
00.21 - 00.50	954	12	34	-	1000	910	187
00.51 - 01.00	867	63	70	-	1000	652	134
01.01 - 02.00	796	81	123	-	1000	215	40
02.01 - 04.00	547	388	65	-	1000	71	16
04.01 - 10.00	585	415	-	-	1000	8	2
10.01 & above	-	-	-	-	-	-	-
all	889	56	55	-	1000	2389	497
			Uttar Prad	esh			
nil (<0.01)	1000	-	-	-	1000	599	29
00.01 - 00.20	983	11	5	-	1000	30448	1426
00.21 - 00.50	990	6	4	-	1000	50848	2087
00.51 - 01.00	981	13	6	-	1000	40361	1665
01.01 - 02.00	978	13	10	-	1000	29586	1205
02.01 - 04.00	972	17	11	-	1000	14076	606
04.01 - 10.00	958	33	9	-	1000	5049	226
10.01 & above	937	-	63	-	1000	396	19
all	982	11	6	-	1000	171362	7263
			West Beng	gal			
nil (<0.01)	752	127	121	-	1000	1976	87
00.01 - 00.20	972	5	23	_	1000	15261	758
00.21 - 00.50	957	9	23 34	_	1000	19727	972
00.51 - 01.00	956	3	41	-	1000	14715	650
01.01 - 02.00	952	11	37	-	1000	6730	302
02.01 - 04.00	915	53	32	-	1000	2164	97
04.01 - 10.00	833	167	-	-	1000	191	ç
10.01 & above	-	1000	-	-	1000	24	1
all	951	13	36	-	1000	60788	2876

Table (10): Per 1000 distribution of fiel	d-crop cultivator household	is by mode of harvesting	g for each size-
class of household ownership	holding		

size-class of		usii	ng machines		all	no. of fiel cultivato	-
ownership	manual	owned	hired	both	_		
holding (ha)	only	only	only			est.(00)	sample
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
			A. & N. Isla	nds			
nil (<0.01)	955	45	-	-	1000	33	25
00.01 - 00.20	1000	-	-	-	1000	9	8
00.21 - 00.50	1000	-	-	-	1000	5	7
00.51 - 01.00	1000	-	-	-	1000	17	16
01.01 - 02.00	1000	-	-	-	1000	22	21
02.01 - 04.00	1000	-	-	-	1000	20	20
04.01 - 10.00	1000	-	-	-	1000	6	5
10.01 & above	-	-	-	-	-	-	-
all	987	13	-	-	1000	113	102
			India				
nil (<0.01)	935	37	27	-	1000	10806	914
00.01 - 00.20	981	11	9	-	1000	123414	7726
00.21 - 00.50	975	7	18	-	1000	191767	11440
00.51 - 01.00	967	10	23	0	1000	180495	10274
01.01 - 02.00	948	13	38	0	1000	162612	9215
02.01 - 04.00	938	11	50	1	1000	97772	5712
04.01 - 10.00	899	19	80	2	1000	47354	2716
10.01 & above	817	43	136	3	1000	7168	422
all	958	11	30	0	1000	821388	48419

size-class of ownership holding (ha)	manual	owned machine	hired machine	all	estd. area under 5 major crops.	no. of hhs. using machine for harvesting	
(1)				(5)	(00 ha)	est.(00)	sample
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
			Andhra Prac	lesh			
nil (< 0.01)	1000	-	-	1000	1109	2	1
00.01 - 00.20	955	15	30	1000	1077	238	12
00.21 - 00.50	944	4	52	1000	6374	759	36
00.51 - 01.00	955	11	35	1000	11125	595	27
01.01 - 02.00	961	7	32	1000	17640	418	19
02.01 - 04.00	970	-	30	1000	19148	237	11
04.01 - 10.00	966	8	26	1000	19089	193	9
10.01 & above	1000	-	-	1000	6700	-	-
all	966	5	29	1000	82260	2441	115
		А	runachal Pra	desh			
nil (< 0.01)	991	9	-	1000	142	5	2
00.01 - 00.20	971	29	-	1000	10	3	2
00.21 - 00.50	841	129	30	1000	61	29	12
00.51 - 01.00	991	9	-	1000	117	3	1
01.01 - 02.00	998	2	-	1000	287	2	1
02.01 - 04.00	1000	-	-	1000	307	-	-
04.01 - 10.00	1000	-	-	1000	281	1	1
10.01 & above	1000	-	-	1000	62	-	-
all	990	9	1	1000	1266	43	19
			Assam				
nil (<0.01)	955	45	-	1000	204	4	2
00.01 - 00.20	998	2	-	1000	394	5	1
00.21 - 00.50	964	32	5	1000	1640	192	15
00.51 - 01.00	967	33	-	1000	6278	287	20
01.01 - 02.00	982	18	-	1000	11087	145	10
02.01 - 04.00	948	24	28	1000	7850	145	13
04.01 - 10.00	961	-	39	1000	3164	38	4
10.01 &above	_	-	_	_	-	-	-

## Table (10.1): Per 1000 distribution of area under five major crops\* by mode of harvesting for each size-class of ownership holding

\*Note

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

2. The set of 5 major crops is not a fixed set but varies from household to household; for any particular household it is understood as the 5 most important field crops cultivated, in terms of value of production, by the household in 1997-98, from among a list of crop-season combinations involving 12 crops and crop-groups spanning the entire range of crops cultivated in the country.

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all	967	21	11	1000	30618	818	65	

\*Note

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

<sup>2.</sup> The set of 5 major crops is not a fixed set but varies from household to household; for any particular household it is understood as the 5 most important field crops cultivated, in terms of value of production, by the household in 1997-98, from among a list of crop-season combinations involving 12 crops and crop-groups spanning the entire range of crops cultivated in the country.

size-class of	manual	owned	hired	all	estd. area	no. of hhs.	
ownership		machine	machine		under 5	using machine	
holding (ha)					major crops.	for harv	
					(00 ha)	est.(00)	sample
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
			Bihar				
1(.001)	076	24		1000	27.40	100	-
nil (< 0.01) 00.01 - 00.20	976 991	24 5	- 4	1000 1000	3740 4376	102 125	5 8
00.01 - 00.20	991 993	5	4	1000	4370 14383	123	8 12
00.51 - 01.00	993 994	4	2	1000	24522	185	5
01.01 - 02.00	982	10	8	1000	33955	292	14
02.01 - 04.00 04.01 - 10.00	994 986	0 6	5 9	1000 1000	28125 17326	115 48	6 2
10.01 & above	980 931	25	9 44	1000	8158	48 29	2
all	931	 7	8	1000	134585	1019	54
all	905	1	0	1000	134365	1019	54
			<b>C</b>				
			Gujarat				
nil (< 0.01)	1000	-	-	1000	113	-	-
00.01 - 00.20	980	-	20	1000	467	23	1
00.21 - 00.50	960	1	39	1000	4301	257	15
00.51 - 01.00	956	3	41	1000	6386	221	10
01.01 - 02.00	938	30	32	1000	12302	506	27
02.01 - 04.00	950	18	32	1000	19218	428	20
04.01 - 10.00	955	11	34	1000	23963	378	21
10.01 & above	933	44	23	1000	7030	84	4
all	949	18	33	1000	73780	1896	98
			Haryana				
nil (< 0.01)	1000	_	_	1000	266	_	_
00.01 - 00.20	1000	-	-	1000	1365	_	_
00.21 - 00.50	965	-	35	1000	1940	29	2
00.51 - 01.00	1000	-	-	1000	2907	-	-
01.01 - 02.00	971	4	25	1000	7757	105	6
01.01 - 02.00 02.01 - 04.00	971 957	4 7	25 36	1000	10536	105 126	6 10
02.01 - 04.00	891	48	50 61	1000	10530	283	10
10.01 & above	767	48 52	180	1000	4622	283 70	3
10.01 & 40000	707	52	100	1000	1022	10	5

## Table (10.1): Per 1000 distribution of area under five major crops by mode of harvesting for each size-class of ownership holding

\*Note

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

2. The set of 5 major crops is not a fixed set but varies from household to household; for any particular household it is understood as the 5 most important field crops cultivated, in terms of value of production, by the household in 1997-98, from among a list of crop-season combinations involving 12 crops and crop-groups spanning the entire range of crops cultivated in the country.

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all	924	23	53	1000	42089	612	34	

\*Note

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

<sup>2.</sup> The set of 5 major crops is not a fixed set but varies from household to household; for any particular household it is understood as the 5 most important field crops cultivated, in terms of value of production, by the household in 1997-98, from among a list of crop-season combinations involving 12 crops and crop-groups spanning the entire range of crops cultivated in the country.
size-class of	manual	owned	hired	all	estd. area	no. of	
ownership holding (ha)		machine	machine		under 5 major crops.	using ma for harv	
notung (na)					(00 ha)	est.(00)	sample
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	~ /	× /				~ /	
		]	Himachal Pra	desh			
nil (< 0.01)	1000	-	-	1000	34	-	-
00.01 - 00.20	998	0	2	1000	351	10	2
00.21 - 00.50	996	4	-	1000	1606	11	2
00.51 - 01.00	989	5	6	1000	2228	23	4
01.01 - 02.00	995	-	5	1000	2245	6	1
02.01 - 04.00	988	-	12	1000	1474	6	1
04.01 - 10.00	1000	-	-	1000	538	-	-
10.01 & above	1000	-	-	1000	111	-	-
all	993	2	5	1000	8587	55	10
		J	ammu & Kas	shmir			
nil (< 0.01)	1000	_	_	1000	5	_	_
00.01 - 00.20	969	31	-	1000	225	33	3
00.21 - 00.50	998	1	1	1000	1464	8	2
00.51 - 01.00	977	21	2	1000	2149	59	- 7
01.01 - 02.00	992	5	3	1000	2018	14	3
02.01 - 04.00	992 968	32	-	1000	1335	14	3 1
04.01 - 10.00	1000	- 32	-	1000	351	-	-
10.01 & above	-	_	_	-	- 551	_	-
all	984	14	2	1000	7547	122	16
	,						
			Karnataka	a			
nil (< 0.01)	205	6	789	1000	99	55	2
00.01 - 00.20	937	-	63	1000	464	131	7
00.21 - 00.50	905	4	90	1000	2910	720	30
00.51 - 01.00	878	5	117	1000	9132	1100	50
01.01 - 02.00	828	23	149	1000	20571	2150	88
02.01 - 04.00	794	13	193	1000	22063	1666	67
04.01 - 10.00	755	20	225	1000	24961	1317	55
10.01 & above	435	93	472	1000	10397	428	17

## Table (10.1): Per 1000 distribution of area under five major crops\* by mode of harvesting for each size- class of ownership holding

\*Note

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

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all	762	25	213	1000	90596	7566	316	

\*Note

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

<sup>2.</sup> The set of 5 major crops is not a fixed set but varies from household to household; for any particular household it is understood as the 5 most important field crops cultivated, in terms of value of production, by the household in 1997-98, from among a list of crop-season combinations involving 12 crops and crop-groups spanning the entire range of crops cultivated in the country.

size-class of ownership holding (ha)	manual	owned machine	hired machine	all	estd. area under 5 major crops.	no. of using ma for harv	achine
					(00 ha)	est.(00)	sample
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
			Kerala				
nil (< 0.01)	1000	-	-	1000	1	-	-
00.01 - 00.20	978	18	3	1000	1332	650	43
00.21 - 00.50	982	16	2	1000	1935	138	8
00.51 - 01.00	968	28	4	1000	2091	112	5
01.01 - 02.00	978	22	-	1000	2082	51	2
02.01 - 04.00	976		24	1000	1011	15	- 1
04.01 - 10.00	919	-	81	1000	787	17	1
10.01 & above	1000	-	-	1000	360	-	-
all	972	17	11	1000	9599	984	60
			Madhya Prac	desh			
nil (< 0.01)	1000	-	-	1000	765	-	-
00.01 - 00.20	999	1	-	1000	528	2	1
00.21 - 00.50	997	3	-	1000	4893	34	2
00.51 - 01.00	994	3	3	1000	15992	117	6
01.01 - 02.00	983	9	8	1000	42582	354	21
02.01 - 04.00	990	4	6	1000	66204	185	12
04.01 - 10.00	986	1	12	1000	63206	165	11
10.01 & above	978	4	18	1000	19829	41	4
all	987	4	9	1000	213999	899	57
			Maharasht	ra			
nil (< 0.01)	983	-	17	1000	174	4	1
00.01 - 00.20	967	-	33	1000	827	76	5
00.21 - 00.50	948	8	44	1000	3301	372	18
00.51 - 01.00	920	7	73	1000	10062	1058	53
01.01 - 02.00	920	2	79	1000	24077	1600	78
02.01 - 04.00	940	2	58	1000	30564	1065	50
04.01 - 10.00	920	8	72	1000	33809	878	40
10.01 & above	797	34	170	1000	11154	245	11
all	914	8	78	1000	113969	5299	256

# Table (10.1): Per 1000 distribution of area under five major\* crops by mode of harvesting for each size-class of ownership holding

\*Note

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

size-class of ownership holding (ha)	manual	owned machine	hired machine	all	estd. area under 5 major crops.	no. of using m for harv	achine vesting
(1)	(2)	(3)	(4)	(5)	(00 ha) (6)	est.(00) (7)	sample (8)
(1)	(2)	(3)	(+)	(3)	(0)	(7)	(0)
			Manipur				
nil (< 0.01)	1000	-	-	1000	224	-	-
00.01 - 00.20	1000	-	-	1000	15	0	1
00.21 - 00.50	950	13	37	1000	159	32	12
00.51 - 01.00	994	1	5	1000	564	9	4
01.01 - 02.00	979	21	-	1000	414	9	3
02.01 - 04.00	1000	-	-	1000	164	-	-
04.01 - 10.00	1000	-	-	1000	28	-	-
10.01 & above	-	-	-	-	-	-	-
all	987	7	5	1000	1566	51	20
			Meghalaya	a			
nil (< 0.01)	1000	-	-	1000	2	-	-
00.01 - 00.20	1000	-	-	1000	102	0	2
00.21 - 00.50	1000	-	-	1000	302	-	-
00.51 - 01.00	1000	-	-	1000	658	-	-
01.01 - 02.00	1000	-	-	1000	777	-	-
02.01 - 04.00	990	3	7	1000	938	6	2
04.01 - 10.00	1000	-	-	1000	391	-	-
10.01 & above	-	-	-	-	-	-	-
all	997	1	2	1000	3171	7	4
			Mizoram	l			
-1(-001)	1000			1000	74	2	1
nil (< 0.01) 00.01 - 00.20	1000 994	- 6	-	1000 1000	74 251	3 3	1 3
00.01 - 00.20	994 1000	-	-	1000	231	-	3
00.51 - 01.00	997	3	-	1000	48	4	2
							-
01.01 - 02.00 02.01 - 04.00	1000 1000	-	-	1000 1000	72 25	-	-
02.01 - 04.00	1000	-	-	1000	23 7	-	-
10.01 & above	1000	-	-	1000	/	-	-

# Table (10.1): Per 1000 distribution of area under five major\* crops by mode of harvesting for each size-class of ownership holding

\*Note

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

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	all	997	3	- 1000	508	10	6
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\*Note

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

<sup>2.</sup> The set of 5 major crops is not a fixed set but varies from household to household; for any particular household it is understood as the 5 most important field crops cultivated, in terms of value of production, by the household in 1997-98, from among a list of crop-season combinations involving 12 crops and crop-groups spanning the entire range of crops cultivated in the country.

size-class of ownership holding (ha)	manual	owned machine	hired machine	all	estd. area under 5 major crops.	no. of using ma for harv	achine esting
(1)	(2)	(3)	(4)	(5)	(00 ha) (6)	est.(00) (7)	sample (8)
			Nagaland				
nil (< 0.01)	1000	-	-	1000	26	-	-
00.01 - 00.20	1000	-	-	1000	3	-	-
00.21 - 00.50	1000	-	-	1000	10	-	-
00.51 - 01.00	1000	-	-	1000	62	-	-
01.01 - 02.00	999	1	-	1000	302	0	1
02.01 - 04.00	999	1	-	1000	813	2	3
04.01 - 10.00	993	7	-	1000	891	3	2
10.01 & above	1000	-	-	1000	84	-	-
all	997	3	-	1000	2190	5	6
			Orissa				
nil (< 0.01)	1000	-	-	1000	64	-	-
00.01 - 00.20	991	5	4	1000	1130	76	5
00.21 - 00.50	988	6	7	1000	4953	171	11
00.51 - 01.00	986	4	9	1000	8882	146	9
01.01 - 02.00	980	9	11	1000	10467	301	13
02.01 - 04.00	988	7	5	1000	7779	47	3
04.01 - 10.00	1000	-	-	1000	3596	-	-
10.01 & above	1000	-	-	1000	1406	-	-
all	987	6	7	1000	38276	741	41
			Punjab				
nil (< 0.01)	781	-	219	1000	257	15	2
00.01 - 00.20	1000	-		1000	234	-	-
00.21 - 00.50	918	14	67	1000	781	157	11
00.51 - 01.00	826	14	160	1000	2881	255	22
01.01 - 02.00	742	29	229	1000	8373	1103	97
02.01 - 04.00	608	48	344	1000	11713	1193	97
04.01 - 10.00	508	73	419	1000	16504	962	78

## Table (10.1): Per 1000 distribution of area under five major crops\* by mode of harvesting for each size-class of ownership holding

\*Note

1. Paddy: *kharif* and paddy: *rabi*, for example, are treated as different "crops" for this purpose.

10.01 & above	436	105	459	1000	9200	311	27
all	586	61	354	1000	49942	3996	334

## Table (10.1): Per 1000 distribution of area under five major crops\* by mode of harvesting for each size-class of ownership holding

size-class of ownership holding (ha)	manual	owned machine	hired machine	all	estd. area under 5 major crops.	no. of using m for harv	achine vesting
(1)	(2)	(3)	(4)	(5)	(00 ha) (6)	est.(00) (7)	sample (8)
(1)	(2)	(3)	(4)	(3)	(0)	(7)	(8)
			Rajasthan	L			
nil (< 0.01)	1000	-	-	1000	985	-	-
00.01 - 00.20	965	-	35	1000	1461	20	1
00.21 - 00.50	997	3	-	1000	5472	25	2
00.51 - 01.00	997	3	-	1000	9512	46	2
01.01 - 02.00	984	5	11	1000	22182	187	8
02.01 - 04.00	996	2	2	1000	36728	76	3
04.01 - 10.00	969	10	21	1000	56934	246	12
10.01 & above	962	15	23	1000	32144	53	4
all	978	8	14	1000	165418	653	32
			Sikkim				
nil (< 0.01)	983	17	-	1000	32	1	1
00.01 - 00.20	1000	-	-	1000	22	-	-
00.21 - 00.50	994	-	6	1000	72	1	1
00.51 - 01.00	1000	-	-	1000	92	-	-
01.01 - 02.00	978	8	14	1000	114	2	2
02.01 - 04.00	1000	-	-	1000	89	-	-
04.01 - 10.00	1000	-	-	1000	13	-	-
10.01 & above	1000	-	-	1000	4	-	-
all	992	3	5	1000	438	4	4
			Tamil Nad	u			
nil (< 0.01)	1000	-	-	1000	299	-	-
00.01 - 00.20	994	-	6	1000	690	19	1
00.21 - 00.50	973	3	24	1000	4450	226	13
00.51 - 01.00	966	5	29	1000	7714	331	19
01.01 - 02.00	986	-	14	1000	9283	117	6
02.01 - 04.00	962	8	29	1000	7008	113	5
						_	

\*Note

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

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04.01 - 10.00	1000	-	-	1000	4817	-	-
10.01 & above	1000	-	-	1000	603	-	-
all	978	3	19	1000	34863	805	44

\*Note

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

#### Appendix I

<sup>2.</sup> The set of 5 major crops is not a fixed set but varies from household to household; for any particular household it is understood as the 5 most important field crops cultivated, in terms of value of production, by the household in 1997-98, from among a list of crop-season combinations involving 12 crops and crop-groups spanning the entire range of crops cultivated in the country.

size-class of ownership holding (ha)	manual	owned machine	hired machine	all	estd. area under 5 major crops.	no. of using ma for harv	achine
					(00 ha)	est.(00)	sample
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
			Tripura				
nil (< 0.01)	584	94	322	1000	15	18	3
00.01 - 00.20	940	39	21	1000	66	40	11
00.21 - 00.50	961	12	27	1000	323	42	9
00.51 - 01.00	897	51	52	1000	515	87	18
01.01 - 02.00	835	59	107	1000	318	44	9
02.01 - 04.00	453	498	49	1000	147	32	7
04.01 - 10.00	281	719	-	1000	32	3	1
10.01 & above	-	-	-	-	-	-	-
all	837	105	58	1000	1415	265	58
-1(-0.01)	1000		Uttar Prade		042		
nil (< 0.01)	1000	-	-	1000	942	-	-
00.01 - 00.20	986	12	2	1000	8230	505	25
00.21 - 00.50	994	4	2	1000	29992	528	25
00.51 - 01.00	988	9	3	1000	49080	751	36
01.01 - 02.00	987	8	6	1000	62695	657	27
02.01 - 04.00	985	10	5	1000	55575	394	16
04.01 - 10.00	981	12	8	1000	38392	212	11
10.01 & above	975	-	25	1000	5587	25	1
all	986	9	5	1000	250492	3071	141
			West Beng	al			
nil (< 0.01)	694	80	226	1000	1795	490	15
00.01 - 00.20	973	3	220	1000	2917	433	25
00.21 - 00.50	950	8	42	1000	9347	841	37
00.51 - 01.00	957	3	40	1000	15448	653	27
01.01 - 02.00	956	11	32	1000	12485	321	15
02.01 - 04.00	936 939	46	52 16	1000	7423	521 184	1.
04.01 - 10.00	801	40 199	-	1000	1293	32	1
10.01 & above	884	199	-	1000	83	32 24	1

## Table (10.1): Per 1000 distribution of area under five major crops\* by mode of harvesting for each size-class of ownership holding

\*Note

1. Paddy: *kharif* and paddy: *rabi*, for example, are treated as different "crops" for this purpose.

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all	940	20	39	1000	50792	2977	130

\*Note

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

<sup>2.</sup> The set of 5 major crops is not a fixed set but varies from household to household; for any particular household it is understood as the 5 most important field crops cultivated, in terms of value of production, by the household in 1997-98, from among a list of crop-season combinations involving 12 crops and crop-groups spanning the entire range of crops cultivated in the country.

size-class of ownership holding (ha)	manual	owned machine	hired machine	all	estd. area under 5 major crops.	no. of using m for harv	achine
					(00 ha)	est.(00)	sample
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
			A. & N. Islar	nds			
nil (< 0.01)	922	78	-	1000	39	2	1
00.01 - 00.20	1000	-	-	1000	0	-	-
00.21 - 00.50	1000	-	-	1000	2	-	-
00.51 - 01.00	1000	-	-	1000	9	-	-
01.01 - 02.00	1000	-	-	1000	22	-	-
02.01 - 04.00	1000	-	-	1000	48	-	-
04.01 - 10.00	1000	-	-	1000	17	-	-
10.01 & above	-	-	-	-	-	-	-
all	978	22	-	1000	138	2	1
			India				
nil (< 0.01)	931	22	48	1000	11503	700	36
00.01 - 00.20	983	7	10	1000	26575	2393	159
00.21 - 00.50	978	5	17	1000	100803	4760	276
00.51 - 01.00	971	7	22	1000	188584	5985	328
01.01 - 02.00	957	10	33	1000	304245	8384	451
02.01 - 04.00	952	9	39	1000	336368	6043	337
04.01 - 10.00	925	14	61	1000	323143	4774	262
10.01 & above	853	31	116	1000	117611	1310	74
all	943	12	45	1000	1408832	34348	1923

## Table (10.1): Per 1000 distribution of area under five major crops\* by mode of harvesting for each size-class of ownership holding

\*Note

1. Paddy: kharif and paddy: rabi, for example, are treated as different "crops" for this purpose.

<sup>2.</sup> The set of 5 major crops is not a fixed set but varies from household to household; for any particular household it is understood as the 5 most important field crops cultivated, in terms of value of production, by the household in 1997-98, from among a list of crop-season combinations involving 12 crops and crop-groups spanning the entire range of crops cultivated in the country.

	no. of cultivator			no. of cult	
	hhs.			househ	
states / UT	owning land	Н	Р	est.	sample
	per 1000 hhs.			(00)	
(1)	(2)	(3)	(4)	(5)	(6)
Andhra Pradesh	985	61	36	52840	2496
Arunachal Pradesh	845	41	-	1321	602
Assam	978	34	26	24962	2259
Bihar	960	35	5	92660	4659
Gujarat	995	55	43	30981	1592
Haryana	991	55	46	11548	551
Himachal Pradesh	995	36	20	8825	1653
Jammu & Kashmir	998	12	4	7236	1535
Karnataka	998	42	29	44369	1953
Kerala	999	43	20	35908	2263
Madhya Pradesh	995	27	11	77270	4037
Maharashtra	997	36	10	58839	2753
Manipur	919	84	2	2140	747
Meghalaya	996	20	1	3103	920
Mizoram	833	18	-	624	500
Nagaland	980	66	4	807	828
Orissa	996	9	2	40365	2134
Punjab	995	46	24	10188	883
Rajasthan	994	30	14	49388	2686
Sikkim	898	14	2	586	678
Tamil Nadu	984	82	60	33985	1887
Tripura	980	36	-	2443	509
Uttar Pradesh	996	20	12	171515	7268
West Bengal	968	26	4	62076	2927
A. & N. Islands	715	284	245	113	102
India	987	34	17	825058	48649

### Table (11): Number of households (H) reporting testing of soil of their fields per 1000 cultivator households and number of cultivator households (P) reporting having followed the recommendations per 1000 households reporting soil test

	no. of cultivator			no. of household			
states / UT	households	Н	Р	est.	sample		
	per 1000 hhs.			(00)			
(1)	(2)	(3)	(4)	(5)	(6)		
	110	250	5.00	110222	5701		
Andhra Pradesh	443	359	568	119333	5721		
Arunachal Pradesh	813	71	56	1625	719		
Assam	711	269	114	35114	3243		
Bihar	618	214	105	150028	7464		
Gujarat	569	419	326	54468	2939		
Haryana	455	523	29	25388	1222		
Himachal Pradesh	863	28	137	10226	1914		
Jammu & Kashmir	915	50	265	7907	1719		
Karnataka	637	225	324	69692	3152		
Kerala	791	607	402	45411	2911		
Madhya Pradesh	719	275	232	107483	5802		
Maharashtra	529	339	548	111247	5359		
Manipur	854	107	176	2505	873		
Meghalaya	898	25	-	3457	1040		
Mizoram	869	-	-	718	594		
Nagaland	927	69	763	871	895		
Orissa	636	76	282	63451	3401		
Punjab	364	732	153	27971	2533		
Rajasthan	792	501	183	62377	3501		
Sikkim	690	-	-	849	936		
Tamil Nadu	353	493	285	96319	5324		
Tripura	436	194	181	5606	1216		
Uttar Pradesh	746	232	106	230008	10003		
West Bengal	562	189	86	110552	5312		
A. & N. Islands	253	140	349	447	502		
India	612	294	259	1348695	78990		

# Table (12): Number of cultivator households (H) reporting ownership of well / tubewell per 1000 cultivator households and number of households (P) reporting well / tubewell remaining unused for some time due to inadequacy of ground water per 1000 hhs. owning well/tubewell

	no. of cultivator			no. of cult	
	hhs.			househ	
states / UT	owning land	Н	Р	est.	sample
	per 1000 hhs.			(00)	
(1)	(2)	(3)	(4)	(5)	(6)
Andhra Pradesh	985	61	36	52840	2496
Arunachal Pradesh	845	41	-	1321	602
Assam	978	34	26	24962	2259
Bihar	960	35	5	92660	4659
Gujarat	995	55	43	30981	1592
Haryana	991	55	46	11548	551
Himachal Pradesh	995	36	20	8825	1653
Jammu & Kashmir	998	12	4	7236	1535
Karnataka	998	42	29	44369	1953
Kerala	999	43	20	35908	2263
Madhya Pradesh	995	27	11	77270	4037
Maharashtra	997	36	10	58839	2753
Manipur	919	84	2	2140	747
Meghalaya	996	20	1	3103	920
Mizoram	833	18	-	624	500
Nagaland	980	66	4	807	828
Orissa	996	9	2	40365	2134
Punjab	995	46	24	10188	883
Rajasthan	994	30	14	49388	2686
Sikkim	898	14	2	586	678
Tamil Nadu	984	82	60	33985	1887
Tripura	980	36	-	2443	509
Uttar Pradesh	996	20	12	171515	7268
West Bengal	968	26	4	62076	2927
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### Table (11): Number of households (H) reporting testing of soil of their fields per 1000 cultivator households and number of cultivator households (P) reporting having followed the recommendations per 1000 households reporting soil test

	no. of cultivator			no. of household			
states / UT	households	Н	Р	est.	sample		
	per 1000 hhs.			(00)			
(1)	(2)	(3)	(4)	(5)	(6)		
	110	250	5.00	110222	5701		
Andhra Pradesh	443	359	568	119333	5721		
Arunachal Pradesh	813	71	56	1625	719		
Assam	711	269	114	35114	3243		
Bihar	618	214	105	150028	7464		
Gujarat	569	419	326	54468	2939		
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Maharashtra	529	339	548	111247	5359		
Manipur	854	107	176	2505	873		
Meghalaya	898	25	-	3457	1040		
Mizoram	869	-	-	718	594		
Nagaland	927	69	763	871	895		
Orissa	636	76	282	63451	3401		
Punjab	364	732	153	27971	2533		
Rajasthan	792	501	183	62377	3501		
Sikkim	690	-	-	849	936		
Tamil Nadu	353	493	285	96319	5324		
Tripura	436	194	181	5606	1216		
Uttar Pradesh	746	232	106	230008	10003		
West Bengal	562	189	86	110552	5312		
A. & N. Islands	253	140	349	447	502		
India	612	294	259	1348695	78990		

# Table (12): Number of cultivator households (H) reporting ownership of well / tubewell per 1000 cultivator households and number of households (P) reporting well / tubewell remaining unused for some time due to inadequacy of ground water per 1000 hhs. owning well/tubewell

states / UT	diesel pun	np	electric p	ump	no. of cu housel		
	Н	Р	Н	Р	est.(00)	sample	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	
Andhra Pradesh	58	159	302	714	52840	2496	
Arunachal Pradesh	40	-	32	-	1321	602	
Assam	26	210	5	110	24962	2259	
Bihar	148	184	20	303	92660	4659	
Gujarat	235	170	211	391	30981	1592	
Haryana	283	27	298	304	11548	551	
Himachal Pradesh	8	65	10	97	8825	1653	
Jammu & Kashmir	8	50	13	368	7236	1535	
Karnataka	23	48	193	529	44369	1953	
Kerala	21	21 76 138	329	35908	2263		
Madhya Pradesh	79	208	196	546	77270	4037	
Maharashtra	38	265	287	544	58839	2753	
Manipur	102	242	40	45	2140	747	
Meghalaya	4	-	6	248	3103	920	
Mizoram	7	-	1	-	624	500	
Nagaland	9	323	1	-	807	828	
Orissa	24	250	9	340	40365	2134	
Punjab	381	68	510	309	10188	883	
Rajasthan	244	113	204	525	49388	2686	
Sikkim	7	-	1	-	586	678	
Tamil Nadu	147	72	326	250	33985	1887	
Tripura	44	73	18	199	2443	509	
Uttar Pradesh	206	145	45	428	171515	7268	
West Bengal	124	122	14	261	62076	2927	
A. & N. Islands	67	582	36	-	113	102	
India	126	143	132	482	825058	48649	

### Table (13): Number of cultivator households (H) reporting ownership of irrigation pumps per 1000 cultivator households and number of households (P) reporting irrigation pumps remaining unused for some time due to unavailability of diesel or irregular supply of electricity per 1000 hhs. owning pumps

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Appendix II

# Note on Editing and Imputation

# Appendix II

## A Note on Editing and Imputation of Survey Data of the Enquiry on Cultivation Practices, NSS 54<sup>th</sup> Round

As in all large-scale sample surveys, response and non-response errors are present in the data of surveys conducted by the NSSO. Errors of other kinds, like coverage errors and data processing errors, which occur even in the best of surveys, are also common in NSSO survey data. Usually, certain measures are taken to eliminate or at least control these errors either at the data-collection phase or during data processing. This note gives a brief account of the steps taken to edit the errors during the processing of survey data of the enquiry on Cultivation Practices conducted in the 54<sup>th</sup> Round of the NSSO.

In the NSSO, the data collection and subsequent data processing are carried out in two separate divisions of the organisation. While the Field Operations Division (FOD) conducts the data collection through its field staff, the Data Processing Division (DPD) performs all the data processing operations. A field investigator of the FOD visits a sampled unit, interviews a person who is available for providing the necessary information, and records the responses in the schedule of enquiry meant for the survey. The essential information is invariably recorded in the numeric form - code numbers for categorical data, and values in prescribed units for quantitative data. After examination by the supervisory staff, completed schedules of enquiry are despatched to a centre of the DPD.

The completed schedules received by the DPD are first examined manually, particularly for coverage and documentation. At the same time, a pre-data-entry edit, aimed at eliminating gross errors and inconsistencies, is carried out on each schedule. The editing at this stage is generally based on a small set of rules, meant primarily for spotting and correcting the data not recorded in the prescribed unit or format. The schedules of enquiry, thus edited, are then sent for data entry on computers.

Like all large survey organisations, the NSSO has developed a computer-aided system of editing survey data. This is carried out in two phases. In the first phase, a series of edit checks embodied in a computer program are run on the data loaded on the computer to identify inconsistencies, i.e. logically impossible values in the data, suspect data or outlying values, and item nonresponse cases, i.e. essential items left blank in a (partly) filled-in schedule. This edit program, called Computer Scrutiny Program (CSP), produces a list of errors which is sent to the scrutiny sections for editing inconsistent data. The scrutinisers trace out the corresponding schedules, manually compare the computer-entered data with responses recorded in the schedules and make corrections on the error lists whenever required. The main data file in the computer is accordingly updated. Besides the CSP, often a special program consisting of a very limited number of checks

is run on the data to spot a "too high" or "too low" value of an item or ratio (implicit price, for example) of two items. The main data file is similarly updated for the resulting corrections.

Though the first phase of computer-aided editing is supposed to remove all data-entry errors, the inconsistencies, a few suspect large values and item nonresponses continue to persist in the data file. The second phase of computer-aided editing becomes necessary for removing these errors to the extent possible. This is a mechanical procedure that eliminates inconsistencies, corrects suspect values and generates imputed values for non-response items. Usually, the set of rules constituting the procedure of computerised editing are framed with a great deal of care after critical examination of a large volume of data.

## I. Computerised Editing

The essential features of computerised editing for the present survey as well as the frequency of each type of error is discussed below in some detail. This will give a fair idea of the magnitude and direction of possible biases in the estimates presented in this report.

This report pertains to use of advanced technology in cultivation of field crops - based on data collected on crops cultivated, their season, area under each, use of irrigation and other inputs and use of machinery, in the 54<sup>th</sup> round of the NSS.

Data collected and used for this report can, therefore, be grouped as follows:

- A. On crops cultivated: crop-group code, season code, area sown with the crop.
- B. For each crop reported, use of machinery :
  - a) tractor/power tiller and whether services hired
  - b) electric pump, oil pump
  - c) how harvested manually or using machines like harvesters, combiners.
- C. For each crop reported, use of inputs, viz.:
  - a) manure and its type
  - b) fertilizers
  - c) improved seeds and their types
  - d) irrigation and whether services hired
  - e) weedicide and pesticides etc.
- D. Household-level information:
  - a) land owned, possessed, net sown area area cropped more than once
  - b) whether soil tested and whether followed
  - c) irrigation facilities and machinery and whether some of them remain unused.

Editing and imputation involved for each of the items mentioned above are briefly discussed below:

### A. On crops cultivated

From each sample household, information was collected on field crops cultivated by it during the agricultural year 1997-98. Collection of information about cultivation was restricted to the five most important crops, from the point of view of value of produce, reported by the household.

A variety of field crops are cultivated in India. To collect information on each of them separately would have required an elaborate code structure as the responses were recorded in pre-specified codes. The enquiry on Cultivation Practices being just a small part of the subject coverage of the 54<sup>th</sup> round, it was essential to make the recording of information as simple as possible. An elaborate code structure, it was felt, would have made the job of the investigators rather difficult, and thus would have produced more errors in recording the responses. With this object in view, individual crops were classified into 12 exhaustive groups with a distinct code for each.

In all, details for 122,565 crops were recorded in the schedules, based on the information provided by the 78,990 households in the entire sample. For each of the crops cultivated by a household (a maximum of five), the crop-group code, season code (*kharif* or *rabi*) and area cultivated in hectares were recorded in the schedule. The data on these items, on the whole, were found to be consistent. Only the inconsistencies relating to area under a crop could be a matter of concern.

1. *Crop-group code*: The frequency of blank or invalid entries for the crop-group code was negligible. Out of a total of 122,565 cases of crop-cultivation recorded, the crop-group code was found to be blank or inadmissible in only 247 (0.2%) cases. Since such a negligible proportion of invalid cases is not expected to have any perceptible effect on the final estimates, all such cases were put in the group 'other crops'.

2. Season code: For the season code, the number of invalid cases (i.e. cases with blank or inadmissible entries) was found to be only 587 (0.48%) out of a total of 122,565 cases of cropcultivation recorded in the survey. For paddy, an invalid season code was edited as '*rabi*' when crop was reported to have been irrigated and as *kharif* in all other cases. For sugarcane, the season code was edited as *kharif* in all cases. For the rest of the crops, a sequential hot-deck method<sup>1</sup> within each State was used to impute the missing season code. As the agricultural practices tend to vary little within a small area, the season for the same crop cultivated by the nearest geographically located sample household would be the best proxy for the missing season code.

<sup>&</sup>lt;sup>1</sup> This is one of the most commonly used computer-aided techniques for imputation of missing values. This involves a single pass through the data file, arranged in a suitable order. When a missing value is detected during the run, the value of the valid entry for the item found last (i.e. the nearest preceding value) is substituted for of the missing value. The procedure requires an initial value (or a cold-deck value) at the start for each imputation class. Here a State was taken as an imputation class and the data file was arranged according to the order of selection of both first-stage and second-stage units in the sample drawn systematically from same geographically arranged frame. An initial value of season code for each crop-group was determined on the basis of the most likely practice in the State.

3. *Area sown under a crop*: The data on area sown under a reported crop were examined for outliers prior to computer-aided editing, at which stage it was compared with net sown area and area sown more than once as reported by the household. The detectable outliers were examined in consultation with the figures actually recorded in the schedules and were edited if required. However, no editing of area sown under a crop was done at the stage of computer-aided editing. Instead, the inconsistency was removed by appropriate editing of the (household-level) entry against 'net sown area' or 'area sown more than once'. The types of inconsistency encountered are discussed under Section D.

## B. Use of machinery

For each of the 5 most important crops reported by a household, a small set of questions on use of machinery for ploughing, harvesting and irrigation was put to the household. As mentioned earlier, the data file contains details of 122,565 cases of crop-cultivation by all the households in the sample. The information on use of machinery was found to be consistent for most of them. The number of inconsistent cases was well within acceptable limits.

1. *Use of tractor/power tiller*: Households reporting use of tractor/power tiller for a crop were asked whether the tractor/power tiller was hired. The frequency of inconsistent entries found for 'use of tractor/power tiller' & 'whether hired' was 984 (0.8%) out of 122,565 cases of crop-cultivation recorded. To remove these inconsistencies, the following procedure was adopted.

(i) In about one-fifth of the 984 cases, a specific crop was found with blank or inadmissible entry for use of tractor/power tiller but with a 'yes' code for hiring of the machine. In such cases, if the household was found to have used tractor/power tiller for cultivation of any of the other major crops reported, then the invalid code for 'use of tractor/power tiller' was replaced by the same code as that for the other crop reporting use of tractor, 'entirely' or 'partly'. But when no such record was available, the code for 'use of tractor/power tiller' was put as 'partly used'.

(ii) There were cases where 'use' entries were valid but corresponding entries for 'hiring of the machine' were inadmissible. Such inadmissible entries were edited on the basis of the information available on 'hiring of the machine' in the same household for cultivation of any other crop. When no such record was available, the code for 'use of tractor/tiller' was put as 'not used' and the entry for 'hiring of the machine' was made 'blank'.

(iii) In the cases where both 'use' and 'hiring of the machine' entries were found blank or inadmissible, the code for 'use of tractor/power tiller' was put as 'not used' and the entry for 'hiring of the machine' was made 'blank'.

2. *Use of electric/oil pumps*: Three different responses were permitted for these two items, viz. 'entirely used'-1, 'partly used'-2 and 'not used'-3. Blank or inadmissible entries were found in

320 (0.26%) cases for electric pump and 340 (0.28%) cases for oil pump in the entire data file consisting of details for 122,565 cases of crop-cultivation.

'Blank' cases were treated as electric/oil pump 'not used' for cultivation, since leaving the entry blank when the response is not in the affirmative is a common phenomenon. For the inadmissible entries, if the crop cultivated was reported as a *rabi* crop, the code for the item set to 'partly used', otherwise to 'not used'. It may be noted that cases of 'inadmissible' entries considerably fewer than 'blank' cases.

3. *How harvested*: For the item 'how crop was harvested' by the household, only 388 (0.32%) invalid (blank or inadmissible) entries were found among 122,565 cases of crop-cultivation recorded. All such cases were edited as 'harvested manually', which is still the most widely practised form of harvesting throughout the country.

## C. On inputs used

For each of the five most important crops reported by a household, data on use of different inputs were collected. For the inputs 'improved seeds', 'fertilizer', 'manure' and 'pesticides', responses were classified as 'entirely used', 'partly used' and 'not used at all'. For the other three inputs, viz. 'irrigation', 'weedicide and pesticide', the responses classification was just 'yes'(used)/'no'(not used). For manure and improved seeds, a question on 'type' was also included.

1. *Manure and its type*: For the items 'use of manure' and 'type of manure', a total of 1,152 (0.94%) cases were found out of 122,565 cases of crop-cultivation recorded. Inconsistencies found were of the following types:

(i) Both 'use' and 'type' entries were blank. In such cases, since no supporting evidence was available on use of manure, the 'use' code was set to household 'not using' manure. (About one in six inconsistencies are of this type, as observed in the case of Madhya Pradesh)

(ii) Use of manure was recorded but 'type' entry was either blank or inadmissible. In such cases 'type' was set to 'other manures'. In about 10% of inconsistent cases of manure-using, the type was not recorded.

(iii) 'Use' entry was blank or inadmissible but 'type' information was recorded. In these cases, inconsistency was edited by using information on 'use of manure' for any other crop reported by the same household. In case no such information was available, 'use' code was set to 'not using' manure and the'type' entry was made blank. In Madhya Pradesh no such inconsistency was found.

2. *Fertilizer*: Only 253 (0.21%) inadmissible entries were found for this item, where the code recorded was other than 'entirely used' or 'partly used' or 'not at all used'. (a) In the case of households reporting use of 'certified' or 'uncertified' improved seeds, inconsistent entries were

set to 'partly using fertilizer' in view of the dependence of the yield of such seeds on fertilizer input, and (b) in the case of other households, as 'not using fertilizer'

3. *Improved seeds and type of improved seeds*: For the items 'use' of improved seeds' and 'type of improved seeds', a total of 712 (0.58%) cases were found out of 122,565 cases of crop-cultivation recorded. Inconsistencies found were of the following types:

(i) Both 'use' and 'type' entries were blank. In such cases, since no supporting evidence was available on use of improved seeds, the 'use' code was set to 'not using such seeds'.

(ii) Use of improved seeds was recorded but the corresponding 'type' code was either blank or inadmissible. In such cases, the 'type' code was set to 'other type of seeds'.

(iii) 'Use' entry was blank or inadmissible but information was recorded on the type of such seeds used by the household. In these cases, the inconsistency was edited by using information on 'use' for any other crop reported of the same household. In case no such information was available, the 'use' code was set to 'not using' improved seeds and the 'type' entry was made blank.

4. *Whether irrigated*: Out of a total of 122,565 cases of crop-cultivation recorded, in 3694 (3.01%) cases inconsistencies were observed, where the households reported use of oil/electric pump for the crop but the code for irrigation recorded was either 'no' or blank. As use of pump itself strongly indicates that the crop was irrigated, the inconsistent codes were set to household 'irrigating cultivation field'. The largest number of such inconsistencies was found for the State of Bihar, with 646 such inadmissible cases out of a total 12520 cases of crop-cultivation.

5. *Whether irrigation services hired*: Households reporting use of irrigation were asked whether irrigation services were hired by them. (a) In case of other households, no information on hiring of irrigation services was to be recorded. But 420 (0.34%) cases were found, out of 122,565 cases of crop-cultivation recorded, where the crop was not reported to have been irrigated but information was recorded on irrigation services hired by the household for the crop. Here the obvious correction, viz. making the entry for 'whether irrigation services hired' blank, was made in all such cases.

(b) Apart from the inconsistency mentioned in (a), there were other inconsistencies due to invalid (blank or inadmissible) entries for 'hiring of irrigation services' where irrigation had been reported by the household. Such inconsistencies in 'hiring of irrigation services' were edited by using the following information:

(i) In case 'owning of pump set' was recorded for the household, the code for 'irrigation services hired' was set to 'not hiring irrigation services'.

(ii) In case ' not owning pump set' was recorded for the household, code for 'irrigation services hired' was set to household 'hiring irrigation services'.

In all 3373 (2.75%) cases were found where these types of inconsistency occurred.

6. Whether weedicide/ pesticide, etc., used: For the items 'weedicide/pesticide used for the crop', responses were to be recorded in codes for just 'yes' and 'no'. Not many invalid entries were observed for these items. In all 445 (0.36%) and 448 (0.37%) cases were found for the items 'weedicide used' and 'pesticide used', respectively, where the entries were either blank or inadmissible. For both the items such inconsistent code was set to household 'not using weedicide/pesticide', since no other information was available from the data set to support use of 'weedicide/pesticide'.

## **D.** Household-level inputs

Out of 78,990 households surveyed, 78,539 reported one or more of the following items, and no information was available on any of the items for 451 households.

1. *Net area sown and area sown more than once*: For 236 (0.30%) households, the net area sown was less than the largest area sown by the household with individual crop. In such cases, the net area sown was edited as the maximum of area sown by the household under five individual crops by the household. These apart, discrepancies were found in the data of 'net area sown' & 'area sown more than once' when compared with total of 'area reported sown' under five major crops. In all 3042 (3.85%) cases were found where the sum of 'net area sown' and 'area sown more than once' was less than the 'total of area reported sown under five major crops'. In such cases, the area sown more than once was edited as the difference between the total area sown under five major crops and the net area sown. The largest number of such inconsistencies (508) was observed in Bihar in a sample of 7457 households.

2. Whether soil tested and whether recommendations followed: For the items (a) whether soil for cultivation was got tested by the household and (b) in case of households reporting soil testing, whether the recommendations of the laboratory arrying out the tests was followed by the household, quite a large number of inconsistencies. Out of 78,539 households, 14761 (19%) households were found where responses recorded for both the items were blank or inadmissible. The largest number of such cases was observed in Andhra Pradesh (2846 cases out of 5714 households), followed by Maharashtra (1562 out of 5328 households), West Bengal (1551 out of 5019 households), and Bihar with 1317 invalid entries out of 7457 households. In all these inconsistent cases, the code for 'soil testing done' was set to 'no soil testing done' and that for 'recommendations followed' was made blank.

Besides these 14761 households, there were 604 households, where information on 'whether soil tested' was missing but information on 'whether recommendations followed' was recorded. For such cases the code for 'soil testing for cultivation' was set to 'soil testing for cultivation was done' by the household.

3. *Equipment used for irrigation*: The following three sets of questions were put to the household:

(i) (a) whether well/tubewell owned by the household and (b) whether the well/tubewell remained unused for some time;

(ii) (a) whether diesel pump owned by the household and (b) whether the pump remained unused for some time;

(iii) (a) whether electric pump owned by the household and (b) whether the pump remained unused for sometime.

1. For all the three pairs of questions, a large number of errors were of the type where both (a) and (b) were left blank or were inadmissible. Since no evidence supporting ownership of well, etc., was available in the data set, such cases were edited as (a) household 'not owning' and the (b) entry made blank

- In case of (i), 14762 (19%) such errors were found, the largest number being in Andhra Pradesh (2841).
- In case of (ii), 14838 (20%) such errors were found, the largest number being in Andhra Pradesh (2861) followed by West Bengal (1537).
- In case of (iii), 14894 (19%) errors were found, again the largest number being in Andhra Pradesh (2864) followed by West Bengal (1528).

2. A second type of inconsistency arose when information on (b) was recorded but information on (a) was missing. Such cases were edited as (a) household 'owning' since otherwise the information on (b) would not make sense.

- In case of (i), in all 707 inconsistent entries were observed.
- In case of (ii), in all 516 inconsistent entries were observed.
- In case of (iii), in all 237 inconsistent entries were observed.

### **II.** Unit nonresponse

Out of 5242 sample villages proposed to be surveyed, 5115 villages could be surveyed; 127 villages could not be surveyed for various reasons and no substitute villages could be surveyed for them either. Such unsurveyed villages were considered to be casualty villages. There were cases where the originally selected unit could not be surveyed but a similar unit was surveyed in lieu of it. All such units are called as substitute units. Apart from the casualty villages there were certain casualty households as well in the non-casualty villages. All such nonreponse cases were taken care of in our estimation procedure by making appropriate adjustments in the weights for generating estimates. Essential information relating to unit nonresponse are given in the table below.

Nonresponse typeFrequencycasualty village127

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substitute village	22
casualty household	71
no. of household schedules rejected owing to inconsistency	Nil

Appendix III

# **Facsimile of Schedule 31**

(Blocks 0, 1, 2, 13 & 14)

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RURAL	1
URBAN	1

### GOVERNMENT OF INDIA NATIONAL SAMPLE SURVEY ORGANISATION SOCIO-ECONOMIC SURVEY FIFTY-FOURTH ROUND: JANUARY-JUNE-1998 SCHEDULE 31: COMMON PROPERTY RESOURCES, SANITATION & HYGIENE, SERVICES

CENTRIAL

STATE

\*

1

(0) descriptive identification of sample household.								
state/ u.t. ward /Inv. unit/block								
district								
tehsil/town		house number						
village name		name of head						

\*tick mark () may be put in the appropriate place

\*

(1)	identification of sample ho	ouseh	nold.				
sl.	descriptions		cod	le	sl.	description	code
no					no.		
1.	round number		54		12.	sl.no.of sample vill./block	
2.	schedule number		31				
3.	sample (central-1, state-2)				13.	second stage stratum	
4.	sector (rural-1, urban-2)				14.	sample household no.	
5.	FOD sub-region				15.	Sl.no. of informant (as in block 4)	
6.	state region					Name	
7.	district code				16.	response code	
8.	stratum no				17.	survey code	
9.	sub-stratum				18.	reason for substitution of original household	
10.	sub-sample						
11.	sub-round						
					Code	es estatution esta estatution estatution est	

item 16 : response code

informant co-operative and capable-1, informant co-operative but not capable,-2, informant relucant-3, others-9. item 17 : survey code

original household surveyed-1, substitute household surveyed-2 nothing surveyed -3.

item 18 : reason for substitution of original household

informant not available -1, unwilling -2, others-9.

casual-3, other-9.

(2) P	articulars of field operation										
sl. no.	particulars	Inv	Investigator		Investigator Assistant Superintenden			nt	Superintendent		
(1)	(2)		(3)	)		(4	4)			(5)	
1.	(I) Name										
	(ii) code										
2.	total time taken to canvass the schedule (in hours 0.0)					:	x			х	
3.	(I) date of receipt										
	(ii) date of survey/inspection		Х								
	(iii) date of scrutiny		Х								
	<ul><li>(iv) date of duplication</li><li>(v) date of despatch</li></ul>						x			х	
4.	no. of additional sheets/ schedules attached.					2	х			Х	
5.	signature										

(3)	Household characteristics						
1.	size			principal industry	-occupation code		
2.	household type (code)		4.	description	industry		
3.	social group (code)						
			5.		occupation		

### CODE

item-2	household type :Rural Rural-self-employed in non- agriculture-1	item 3	social group : schedule tribe-1, schedule caste-2, other Backward caste-3,
	agriculture labour-2, other labour-3. self employed in agriculture-4 other-9	item 4&5	principal industry occupation codes these are 3 digits codes of as in NIC-1987 and NCO-1968 respectively
	Urban: selfemployed-1, regular wage/salaried -2		

(13) Some general information on cultivation by the household	
1. Land owned (0.00 ha)       (i) with right of sale         (ii) without right of sale         (iii) total	
2. Land possessed (0.00 ha)	
3. Net area sown during 1997-98 (0.00 ha)	
4. Area sown more than once (0.00 ha)	
5. Whether soil of cultivation fields ever tested ? (yes-1, no-2)	
6. If 'yes'(code 1) in item 5, whether recommendations followed ? (yes -1 no-2)	
7. Does the household own well or tubewell ? (yes-1, no-2)	
If 'yes' (code 1) in item 7, fill in item 8&9 with code: yes-1, no-2	
8. Whether dug well remains unused during some months due to lack of groundwater	
9. Whether tubewell remains unused sometimes due to lack of groundwater	
<ol> <li>Are there any surface water irrigation sources which can be used only in some seasons due to lack of water supply ? (yes-1,no-2)</li> </ol>	
11. does the household own any diesel pump for irrigation? (yes -1, no-2)	
<ol> <li>If yes (code 1 in item 11) does the diesel pump remain unused some times due to unavailability of oil (yes -1, no-2)</li> </ol>	
13. does the household own any electric pump for irrigation? (Yes -1, no-2)	
14. If "yes" (code-1, in item 13) does the electric pump remained unused some times due to irregular supply of electricity? (yes-1, no-2)	

(14)	Some particulars of cultivation during 1997-98 (five major crops)								
1.	Serial no.			1	2	3	4	5	
2.	Crop-group (code)								
3.	Season (Khrif-1, Rabi-2)								
4.	Area sown (Hectare 0.00)								
5.	Whether the following used	for cultivation of t	he crop? (entirely-1,						
	partly-2, not at all 3)								
5.1	tractor/power tiller								
5.2	electric pump								
5.3	oil pump								
5.4	manure								
5.5	fertilizers								
5.6	improved seeds								
6.	If '1' or '2' in item 5.6 type o	f seeds (certified	1, uncertified2,						
	home grown3, other4)								
7.	If '1' or '2' in item 5.4 type of manure (compost1,								
	bio-gas slurry2, other manures3)								
8.	If '1' or '2' in item 5.1 whether hired ? (yes1, no2)								
9.	Whether irrigated ? (yes1, no2)								
10.	If '1' in item 9, whether irrigation services hired from other								
	households (yes,1, no2)								
11.	Whether weedicide used (yes1, no2)								
12.	Whether pesticide inecticide, fungicide etc, used? (yes1, no2)								
13.	How harvested (manually1	, owned machine	.2,						
	hired machine3)								
	(crop-group Code)								
	paddy	1	wheat				2	2	
	other cereals	3	pulses				4	ļ	
	oil seeds	5	mixed crop				6	5	
	sugar cane	7	vegetables				8	3	
	fodder	9	fruits & nuts				1	0	
	other cash crops	11	others				9	9	