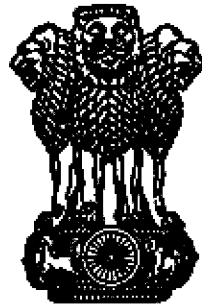


# THE NATIONAL SAMPLE SURVEY

SEVENTEENTH ROUND : JULY 1961—JUNE 1962

NUMBER 106

TABLES WITH NOTES ON  
LAND UTILISATION SURVEY AND  
CROP-CUTTING EXPERIMENTS



सत्यमेव जयते .

Issued by

The Cabinet Secretariat : Government of India

Printed by the Eka Press, Calcutta in 1966 and published  
by the Manager of Publications, Civil Lines, Delhi-8

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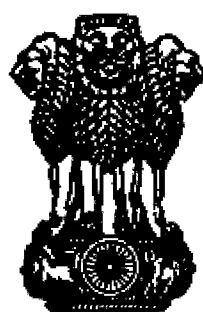
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## TABLES WITH NOTES ON LAND UTILISATION SURVEY AND CROP-CUTTING EXPERIMENTS

*This report entitled 'Tables with Notes on Land Utilisation Survey and Crop-cutting Experiments, Seventeenth Round, July 1961—June 1962' was prepared by the Indian Statistical Institute, Calcutta. The views contained in the report are not necessarily those of the Government of India.\**

### CHAPTER ONE

#### INTRODUCTION

1.1. The land utilisation survey and crop-cutting experiments were continued in the 17th round of NSS (1961-62) to obtain the estimates of production of the seven major cereal crops (rice, jowar, bajra, ragi, maize, wheat and barley) taken together at all-India level. Data on land utilisation were collected by actual observation of the utilisation of the selected plots and the data on yield of crop were collected by harvesting a circular area of radius 4' in selected plots.

1.2. *Geographical coverage*: The survey was carried out in the whole of rural India excluding Andaman and Nicobar Islands, Laccadive, Minicoy and Amin-divi Islands, Ladakh district of Jammu and Kashmir, and certain areas of Manipur and North-East Frontier Agency.

1.3. The survey was started in July 1961 and ended in June 1962.

1.4. *Scope of the survey*: The survey covered only crops of autumn, winter and spring seasons of the agricultural year 1961-62. Summer season was not covered. The results given in this note do not, therefore, cover summer crops.

1.5. *Number of villages planned and number surveyed*: The number of villages planned and number surveyed for land utilisation and for crop-cutting experiments are given in Table (1.1). Villages belonging to sub-sample 3 were surveyed only for winter and spring seasons.

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\*The draft report (No. D. 124) was submitted to the Government of India in January 1964.

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**TABLE (1.1): NUMBER OF SAMPLE VILLAGES PLANNED AND NUMBER SURVEYED FOR LAND UTILISATION SURVEY AND FOR CROP-CUTTING EXPERIMENTS**

all India

season	sub-sample	number of sample villages						total
		area survey		crop-cutting experiments				
		planned	surveyed	planned	surveyed			
(1)	(2)	(3)	(4)	(5)	with specified crops	without specified crops	(8)	
autumn	1	1296	1215	432	332	84	416	
	2	1296	1247	432	314	82	396	
	total	2592	2462	864	646	166	812	
winter	1	1296	1235	432	278	144	422	
	2	1296	1279	432	281	118	399	
	3	1296	1012	432	198	134	332	
total	3888	3526	1296	757	396	1153		
spring	1	1296	1271	432	238	187	425	
	2	1296	1267	432	237	169	406	
	3	1296	1147	432	209	164	373	
total	3888	3685	1296	684	520	1204		

*N.B.* Villages of sub-sample 3 were not planned to be surveyed for autumn season.

1.6. *Number of crop-cutting experiments:* The number of crop-cutting experiments conducted on each of the crops is given in Table (1.2).

**TABLE (1.2): NUMBER OF CROP-CUTTING EXPERIMENTS CONDUCTED**

all India

season	sub-sample	number of crop-cutting experiments conducted on								total
		paddy	jowar	bajra	ragi	maize	wheat	barley		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	
autumn	1	854	113	582	120	816	—	—	2485	
	2	821	124	562	145	880	—	—	2512	
	total	1675	237	1144	265	1696	—	—	4997	
winter	1	1052	643	49	70	4	13	—	1831	
	2	1169	612	124	58	2	—	—	1965	
	3	811	485	30	49	—	8	—	1383	
total	3032	1740	203	177	6	21	—	5179		
spring	1	165	251	8	55	10	1203	582	2274	
	2	184	205	4	54	2	1223	569	2241	
	3	178	199	2	43	6	1105	563	2096	
total	527	655	14	152	18	3531	1714	6811		
all seasons	1	2071	1007	639	245	830	1216	582	6590	
	2	2174	941	690	257	864	1223	569	6718	
	3	889	684	32	92	6	1113	563	3479	
total	5234	2632	1361	594	1700	3552	1714	16787		

*N.B.* Villages of sub-sample 3 were not planned to be surveyed for autumn season.

## CHAPTER TWO

### SAMPLING DESIGN, CONCEPTS AND DEFINITIONS

2.1. For the land utilisation survey, a stratified two-stage sampling design with three independent and interpenetrating network of sub-samples (IPNS) was adopted, with villages as first-stage units, and clusters of plots as second-stage units. The design for the crop-cutting experiments was a multi-stage one where villagea, clusters of plots, sub-plots growing the specified crops and circular area of radius 4' were the successive sampling units.

2.2. *Stratification*: The strata formed for 16th round National Sample Survey were retained for the 17th round also, except in the case of Manipur and Tripura. Manipur was considered as one stratum and Tripura was divided into five strata, by grouping together contiguous sub-divisions. For the purpose of stratification 48 regions were formed in the whole of India by grouping together contiguous districts in each state having similar crop pattern and population density. These were formed in consultation with the Ministry of Food and Agriculture, Government of India, and the State Statistical Bureaus. Within a region, contiguous tehsils fairly homogeneous with respect to population density were grouped together to form compact strata, such that the rural population of the strata were approximately equal. The number of strata formed in a region was one-eighteenth of the allocated number of sample villages in that region. There were altogether 216 strata.

2.3. *Allocation of sample villages to states and regions*: The total number of sample villages for socio-economic and land utilisation surveys (3888) was allocated to the different states on a joint consideration of their rural populations (1951 census) and area under food crops (in 1954-55) except in the case of Tripura, and Jammu and Kashmir. The available strength of investigating staff was also taken into account in finalising the allocations which were ultimately rounded off to multiples of 18. Within a state, its allocation was further distributed among the different regions in proportion to their rural population and in multiples of 18. For Tripura, and Jammu and Kashmir the allocation was 18 times the number of investigators available in the states.

2.4. *Selection of sample villages*: The sampling frame was the list of villages as per 1951 census. In each stratum, three independent sub-samples of 6 villages each (having orders of selection 1 to 6) were selected circular systematically with three independent random starts after arranging the tehsils in order of their geographical nearness. In Tripura, from each stratum, three independent balanced linear systematic samples of 6 villages each were drawn after arranging the villages in a stratum in the increasing order of their 1951 census populations. The sample village selected for price enquiry was given order of selection 7. In sub-samples 1 and 2, area survey was carried out in villages 2 to 7 and in sub-sample 3



### *National Sample Survey*

in villages 1 to 6. Crop-cutting was conducted in villages 3 and 7 in sub-samples 1 and 2 and in 3 and 6 in sub-sample 3. Villages belonging to sub-sample 3 were not planned to be surveyed in autumn season.

2.5. *Selection of sample plots* : In each sample village, selected for area survey only, 8 clusters of 5 plots each (or 8 clusters of 2 plots each in difficult areas) were selected, while in villages selected for both area survey and crop-cutting, 6 clusters of 10 plots each (or 6 clusters of 5 plots each in difficult areas) were selected. The clusters of plots were selected systematically with equal probability through basic plots, using the village map or a list of plots in the village. When neither the village map nor the list of plots was available, a sample of 4 households (or 2 in difficult areas) was selected in villages selected for area survey only and 6 households (or 3 in difficult areas) in villages selected for both area survey and crop-cutting. The households were selected systematically with equal probability from a list of all the households in the sample village. All the plots possessed by each of the sample households were surveyed. The same set of plots or households were surveyed in each of the seasons for land utilisation. In villages selected for crop-cutting, 6 fields (sub-plots) were selected in each season from a list of fields growing the specified crops of the season prepared from the plots selected for land utilisation survey. The 6 fields to be selected were first allocated to the different specified cereal crops in proportion to the total gross area under the crop in the frame so that at least one field was assigned to each crop. The number of fields so allocated to a crop was selected systematically with probability proportional to gross area under the crop.

2.6. *Location of sample cuts* : The ultimate sampling unit for crop-cutting was a circular area of radius 4'. In the field selected for crop-cutting the centre of the circle was located at random. From fields growing paddy, ragi, wheat (pure) and barley (pure), corresponding to an order of selection, one sample cut was taken and in fields growing jowar, bajra, maize, wheat (mixed) and barley (mixed) for each order of selection two sample cuts were taken.

2.7. *Driage experiments* : The harvesting of crops in the sample cut of radius 4' was done in two stages—first in a circle of radius 2'3" and then in the annular portion. The yield of crop from the circle of radius 2'3" from each sample cut was used for driage experiments to obtain the driage factor for obtaining the production of dry crop.

2.8. *Concepts and definitions* : Some of the important concepts and definitions used in the survey are described below.

2.8.1. *Sample Village* : A revenue village corresponding to the census village was taken as the sample village for land utilisation survey and crop-cutting experiments. Generally, the revenue village and census village were identical, but in some cases the two were not identical. When the selected census village was a part of a revenue village, the whole of the revenue village was surveyed. If, on the

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other hand, the census village was formed by more than one revenue village, one of the revenue villages was chosen at random with equal probability for the purpose of the survey.

2.8.2. *Season*: For each of the crops grown in a village, appropriate season was assigned on the basis of the period of harvesting of the crop in the village in a normal year. The months of harvesting in a normal year corresponding to the different seasons are given below.

season of the crop	normal months of harvesting
(1)	(2)
Autumn	August to October
Winter	November to January
Spring	February to April
Summer	May and June

*Note*: July was taken to correspond to summer or autumn depending on the crop and region.

When harvesting of a crop in a normal year was spread over two seasons, the crop was assigned to that season which covered the greater part of the harvesting period.

2.8.3. *'Proper time' of visit for land utilisation survey and crop-cutting experiments*: The land utilisation survey was to be carried out in a village in proper time with respect to cereal and pulse crops for each of the three seasons autumn, winter and spring. The proper time for area survey for a season was the period when the sowing of all the crops of that season had been completed but harvesting had not yet started and the crops were unmistakably identifiable. Crop-cutting experiments were to be carried out when the crop was ripe and ready for harvesting in the selected fields.

2.8.4. *Plot*: For the purpose of the enquiry, a plot was defined as a distinct patch of land generally having a major survey number; in some states (Maharashtra, Madhya Pradesh, Gujarat and Rajasthan) where the boundaries of sub-survey numbers were shown in maps, they were taken as plots.

2.8.5. *Pure crop and mixed crops*: When only one crop was grown in a patch of land, it was considered as growing pure crop. A patch of land which was growing two or more crops in intermixture was taken to be under mixed crops. In the case of mixed crops, the components might be sown (or harvested) at the same time or at different times. Sometimes the components might be at different stages of growth (e.g. one of the components might be harvestable while others might be just sprouting up from the ground). When a crop was grown in an orchard, it was

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considered to be under mixed crop. Also crops grown in alternate strips, each of width less than 8' were treated as mixed crops.

2.8.6. *Sub-plot* : In a plot, a distinct patch growing a crop or a particular mixed crop was treated as a sub-plot. A plot was considered to have as many sub-plots as there were different patches growing the crops singly or in mixture.

2.8.7. *Ail or bund* : A plot is demarcated generally by a strip of raised land commonly known as ails or bunds. Besides these, there may be ails inside the plots. Some of the inside ails will be more or less of a permanent nature having almost the same height as boundary ails. These inside ails were treated in the same manner as boundary ails.

2.8.8. *Gross area under a crop* : If a patch of land was under a mixed crop, then the total area under the mixed crop was taken to be the gross area under each of the components of the mixed crop. When a crop was grown pure in a patch of land, the gross area under the crop was the same as the area under the crop.

CHAPTER THREE  
SUMMARY RESULTS

3.1. The estimates of production and gross area for each of the seven crops paddy, jowar, bajra, ragi, maize, wheat and barley at all-India level are given in this chapter.

3.2. It may be noted that the estimates do not cover summer crops. The villages of sub-sample 3 were an additional sample, surveyed by new staff after the commencement of the survey. Autumn season was not planned to be covered in these villages. For autumn season the combined estimates from sub-samples 1 and 2 have been substituted for sub-sample 3 to make the estimates for all seasons taken together from the three sub-samples comparable. Compared to sub-samples 1 and 2, there has been a heavier casualty in sub-sample 3 particularly in respect of crop-cutting. The estimates obtained from sub-sample 3 are subject to the limitations indicated above.

3.3. Estimates are given for each of the seven crops, paddy, jowar, bajra, ragi, maize, wheat and barley. For paddy, the figures of production and yield rate relate to clean rice. For converting dry paddy to clean rice, the factor 0.662 has been used.

3.4. Table (3.1) gives the estimates of production and gross area by sub-samples for each crop at all-India level.

TABLE (3.1): ESTIMATES OF PRODUCTION AND GROSS AREA UNDER MAJOR CEREAL CROPS BY SUB-SAMPLES: AUTUMN, WINTER AND SPRING 1961-62

crop	production (000) tons					gross area (000) acres				
	sub-sample 1	sub-sample 2	sub-sample 3	combined		sub-sample 1	sub-sample 2	sub-sample 3	combined	
				1 and 2	1, 2 and 3				1 and 2	1, 2 and 3
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
1. paddy*	44396	41116	40949	42757	42146	107376	98506	103297	108441	103394
2. jowar	9994	9523	8255	9794	9264	54939	54075	53334	54457	54082
3. bajra	4054	3644	3985	3849	3894	30161	32836	33685	31499	32227
4. ragi	2672	2278	1904	2475	2384	7488	6434	6063	6961	6661
5. maize	6400	5679	6027	6040	6034	15870	14614	14938	14942	14940
6. wheat	15708	16091	14521	15899	15440	53652	46892	43529	50287	48033
7. barley	3797	3913	3903	3855	3771	13881	13700	14556	13791	14044
8. total	87021	82254	79244	84639	82833	283297	267457	269402	276378	273381

\* Production relates to clean rice.

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3.5. Table (3.2) gives the composition of gross area under each of the 7 crops at all-India level.

TABLE (3.2): COMPOSITION OF GROSS AREA UNDER MAJOR CEREAL CROPS: AUTUMN, WINTER AND SPRING 1961-62

all India: sub-samples combined

crop	estimated gross area (000) acres	percentage of area under		
		pure crop	mixed crop	total
(1)	(2)	(3)	(4)	(5)
1. paddy	103394	94.93	5.07	100.00
2. jowar	54082	29.16	70.84	100.00
3. bajra	32227	26.86	73.14	100.00
4. ragi	6661	43.64	56.36	100.00
5. maize	14940	58.48	41.52	100.00
6. wheat	48033	38.27	61.73	100.00
7. barley	14044	17.68	82.32	100.00
8. all crops	273381	56.73	43.27	100.00

3.6. *Comparison of NSS estimates of production and gross area for 1961-62 and 1960-61*: The NSS estimates of production and gross area for the years 1961-62 and 1960-61 are given in Table (3.3).

TABLE (3.3): NSS ESTIMATES OF PRODUCTION, GROSS AREA AND GROSS YIELD RATE OF CROPS FOR 1960-61 AND 1961-62

all India

crop	production (000 tons)		gross area (000 acres)		gross yield rate (lbs./acre)	
	1960-61	1961-62	1960-61	1961-62	1960-61	1961-62
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1. rice	41608	42146	98525	103394	946	918
2. jowar	15393	9264	60973	54082	566	381
3. bajra	4470	3894	39380	32227	256	260
4. ragi	2317	2294	7863	6661	705	762
5. maize	8522	6034	15148	14940	954	896
6. wheat	15623	15440	45636	48033	767	717
7. barley	4530	3771	13332	14044	761	605
8. total	90472	52533	280809	273381	—	—

For paddy, wheat and barley, though the total gross area in 1961-62 had been more than the corresponding figures in 1960-61, the total production in 1961-62 was less than that of the previous year. In 1961-62 there was a decline in acreage as well as production in respect of jowar, bajra, ragi and maize compared to the previous year. The gross yield of crops was generally less in 1961-62 for all the crops except bajra and ragi. For jowar particularly, the reduction in acreage and production was more marked.

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3.7. Comparison of NSS estimates and official figures of production for 1961-62 and 1960-61.

TABLE (3.4): NSS ESTIMATES AND OFFICIAL FIGURES OF PRODUCTION IN (000) TONS FOR 1960-61 AND 1961-62

all India

crop	NSS (excluding summer crops)			official <sup>1</sup> (including summer crops)		
	1960-61	1961-62	percentage difference <sup>2</sup>	1960-61	1961-62	percentage difference <sup>3</sup>
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1. rice	41606	42146	1.29	33587	34178	1.70
2. jowar	15393	9264	39.83	9215	7619	-17.32
3. bajra	4479	3694	13.06	3177	3498	10.10
4. ragi	2317	2284	1.42	1654	1844	11.49
5. maize	6522	6034	7.48	3962	4202	6.33
6. wheat	15623	15440	1.17	10818	11849	9.53
7. barley	4530	3771	16.75	2821	3102	9.96
8. total	90472	82833	- 8.44	65224	66292	1.64

<sup>1</sup> partially revised figures.

Source : Agricultural Situation in India.

$$^2 \text{ col. (4) } = \frac{\text{col. (3)} - \text{col. (2)}}{\text{col. (2)}} \times 100$$

$$^3 \text{ col. (7) } = \frac{\text{col. (6)} - \text{col. (5)}}{\text{col. (5)}} \times 100$$

## CHAPTER FOUR

### STATISTICAL TABLES

4.1. The various statistical tables relating to the survey are given in this chapter.

4.2. The season-wise estimates of production and gross area at all-India level by sub-samples are given in Table (1). The unweighted gross yield rates of irrigated and non-irrigated crops at state level are given in Tables (2) to (8). In preparing Tables (2) to (8) only those crop-cutting experiments which were reporting irrigation particulars were taken into account and hence the number of crop-cutting experiments shown in those tables may not be equal to the total number of crop-cutting experiments conducted. The unweighted gross yield rates of each of the crops separately for pure crop and mixed crop at state level are given in Tables (9) to (15). Tables (9) to (15) are prepared on the basis of only those experiments included in Tables (2) to (8) and hence the number of experiments shown in Tables (9) to (15) will be differing from the total number of experiments conducted. The drilage factors (i.e. ratio of weights of dry crop to green crop) for each crop are given for each season in Tables (16) to (18). The number of sample villages planned and number surveyed for land utilisation survey and for crop-cutting experiments are given by states and seasons. The number of crop-cutting experiments conducted on each crop separately for pure crop and mixed crop by seasons at state level is also given.

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*National Sample Survey*

**TABLE (1): ESTIMATES OF PRODUCTION AND GROSS AREA UNDER MAJOR CEREAL CROPS BY SEASONS AND SUB-SAMPLES 1961-62**

all India								
season	production (000 tons)				gross area (000 acres)			
	sub-sample 1	sub-sample 2	sub-sample 3	combined	sub-sample 1	sub-sample 2	sub-sample 3	combined
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
<b>paddy*</b>								
autumn	9254	8564	8895	8895	28612	23865	26248	26248
winter	31734	20749	28517	30001	72870	69938	69471	70778
spring	3408	2803	2537	3250	5894	5633	7578	6368
<b>total</b>	<b>44396</b>	<b>41116</b>	<b>40949</b>	<b>42146</b>	<b>107376</b>	<b>99506</b>	<b>103297</b>	<b>103394</b>
<b>jowar</b>								
autumn	913	1184	1047	1047	8034	7709	7872	7872
winter	5373	4276	4199	4619	29546	31079	27297	29306
spring	3708	4073	3009	3598	17259	15287	18165	16904
<b>total</b>	<b>9994</b>	<b>9533</b>	<b>8255</b>	<b>9264</b>	<b>54839</b>	<b>54075</b>	<b>53334</b>	<b>54082</b>
<b>bajra</b>								
autumn	3762	3261	3513	3513	26417	27192	26802	26802
winter	266	379	467	379	3395	5530	6575	5168
spring	26	4	5	11	349	114	308	257
<b>total</b>	<b>4054</b>	<b>3644</b>	<b>3985</b>	<b>3894</b>	<b>30161</b>	<b>32836</b>	<b>33685</b>	<b>32327</b>
<b>ragi</b>								
autumn	936	654	794	794	2859	1992	2424	2424
winter	1345	1188	873	1135	3894	3875	3176	3648
spring	391	436	237	355	735	597	463	589
<b>total</b>	<b>2672</b>	<b>2278</b>	<b>1904</b>	<b>2284</b>	<b>7488</b>	<b>6464</b>	<b>6063</b>	<b>6661</b>
<b>maize</b>								
autumn	6301	5601	5951	5951	15322	13799	14663	14663
winter	21	33	10	21	98	94	115	100
spring	78	45	66	62	250	121	160	177
<b>total</b>	<b>6400</b>	<b>5679</b>	<b>6027</b>	<b>6034</b>	<b>15870</b>	<b>14014</b>	<b>14938</b>	<b>14940</b>
<b>wheat</b>								
autumn	—	—	—	—	—	—	—	—
winter	40	10	43	30	251	31	350	210
spring	15068	16081	14478	15410	53431	46881	43179	47823
<b>total</b>	<b>15708</b>	<b>16091</b>	<b>14521</b>	<b>15440</b>	<b>53682</b>	<b>46912</b>	<b>43529</b>	<b>48033</b>
<b>barley</b>								
autumn	—	—	—	—	—	—	—	—
winter	3	—	6	3	4	—	168	57
spring	3794	3913	3597	3768	13877	13700	14388	13967
<b>total</b>	<b>3797</b>	<b>3913</b>	<b>3603</b>	<b>3771</b>	<b>13881</b>	<b>13700</b>	<b>14556</b>	<b>14044</b>
<b>all crops</b>								
autumn	21168	19264	20200	20200	81444	74577	78000	78000
winter	38782	35035	34115	36179	110058	110597	107152	109267
spring	27073	27355	24920	26454	91795	82283	84241	86103
<b>total</b>	<b>87023</b>	<b>82254</b>	<b>79234</b>	<b>82833</b>	<b>283297</b>	<b>267457</b>	<b>269402</b>	<b>273381</b>

\* Production relates to clean rice.

*Land Utilisation Survey and Crop-cutting Experiments*

TABLE (2): UNWEIGHTED GROSS YIELD RATE OF RICE FOR IRRIGATED AND NON-IRRIGATED CROPS BY STATES AND SUB-SAMPLES

state	number of cuts											
	sub-sample 1			sub-sample 2			sub-sample 3			total		
	irri-gated	non-irri-gated	total	irri-gated	non-irri-gated	total	irri-gated	non-irri-gated	total	irri-gated	non-irri-gated	total
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Rajasthan	3	5	8	—	—	—	—	—	—	3	5	8
Jammu & Kashmir	120	8	137	100	5	105	—	—	—	229	13	242
Punjab	15	8	23	6	5	11	—	—	—	21	13	34
Delhi	—	—	—	—	—	—	—	—	—	—	—	—
Himachal Pradesh	—	—	—	—	—	—	—	—	—	—	—	—
Uttar Pradesh	23	229	252	71	243	314	8	85	93	102	557	659
Madhya Pradesh	11	139	150	12	125	137	—	17	17	23	281	304
Bihar	40	193	242	60	182	242	55	142	197	164	517	681
Orissa	40	97	137	29	110	139	11	21	32	80	228	308
West Bengal	36	119	155	52	111	163	17	39	56	105	269	374
Assam	12	76	88	13	90	103	7	53	60	32	219	251
Manipur	6	2	8	6	14	20	4	2	6	16	18	34
Tripura	—	37	37	18	31	49	7	36	43	25	104	129
Andhra Pradesh	181	22	203	213	13	226	160	3	163	554	38	592
Madras	258	10	268	249	3	252	167	11	178	674	24	698
Kerala	51	91	142	56	119	175	27	54	81	134	264	398
Gujarat	7	24	31	3	18	21	—	—	—	10	42	52
Maharashtra	24	112	136	15	109	124	18	—	18	57	221	278
Mysore	23	30	53	32	60	92	36	10	46	85	100	185

state	gross yield rate per acre (in lbs.)											
	sub-sample 1			sub-sample 2			sub-sample 3			combined		
	irri-gated	non-irri-gated	com-bined	irri-gated	non-irri-gated	com-bined	irri-gated	non-irri-gated	com-bined	irri-gated	non-irri-gated	com-bined
(1)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)
Rajasthan	282	846	634	—	—	—	—	—	—	282	846	634
Jammu & Kashmir	1394	578	1346	1634	563	1583	—	—	—	1499	572	1449
Punjab	800	1104	905	887	1376	1109	—	—	—	825	1200	971
Delhi	—	—	—	—	—	—	—	—	—	—	—	—
Himachal Pradesh	—	—	—	—	—	—	—	—	—	—	—	—
Uttar Pradesh	1089	620	662	909	660	718	718	858	664	935	643	689
Madhya Pradesh	1052	709	734	911	671	692	—	1274	1274	978	736	745
Bihar	924	825	845	1162	697	813	1125	789	882	1078	770	844
Orissa	1124	732	846	993	752	803	1201	944	1033	1087	761	846
West Bengal	940	918	925	1190	739	883	693	660	671	1026	807	869
Assam	436	878	816	962	850	864	1137	953	974	803	884	873
Manipur	680	419	615	1555	1261	1349	925	407	782	1069	1083	1076
Tripura	—	1034	1034	1150	1145	1147	1728	1386	1442	1312	1180	1213
Andhra Pradesh	1254	860	1211	1322	911	1308	1125	1758	1136	1247	948	1227
Madras	1197	664	1177	1190	504	1182	998	755	983	1145	696	1130
Kerala	1253	856	999	1131	923	994	1260	1187	1211	1203	954	1038
Gujarat	930	427	541	405	236	260	—	—	—	772	345	428
Maharashtra	1245	737	827	1074	743	794	1353	—	1353	1234	740	842
Mysore	1687	1063	1333	1128	915	990	2507	824	2086	1766	950	1325

National Sample Survey

TABLE (3): UNWEIGHTED GROSS YIELD RATE OF JOWAR FOR IRRIGATED AND NON-IRRIGATED CROP BY STATES AND SUB-SAMPLES

state	number of cuts											
	sub-sample 1			sub-sample 2			sub-sample 3			total		
	irri-gated	non-irri-gated	com-bined	irri-gated	non-irri-gated	com-bined	irri-gated	non-irri-gated	com-bined	irri-gated	non-irri-gated	com-bined
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Rajasthan	4	34	98	—	28	28	—	14	14	4	76	80
Jammu & Kashmir	—	—	—	—	—	—	—	—	—	—	—	—
Punjab	—	6	6	—	—	—	—	—	—	—	6	6
Delhi	—	—	—	—	—	—	—	—	—	—	—	—
Himachal Pradesh	—	—	—	—	—	—	—	—	—	—	—	—
Uttar Pradesh	19	123	142	—	109	100	4	101	105	23	333	356
Madhya Pradesh	6	154	160	—	159	159	—	99	99	6	412	418
Bihar	—	14	14	—	20	20	—	4	4	—	38	38
Orissa	—	10	10	—	6	6	—	—	—	—	16	16
West Bengal	—	—	—	—	—	—	—	—	—	—	—	—
Assam	—	—	—	—	—	—	—	—	—	—	—	—
Manipur	—	—	—	—	—	—	—	—	—	—	—	—
Tripura	—	—	—	—	—	—	—	—	—	—	—	—
Andhra Pradesh	14	151	165	16	137	153	45	80	125	75	368	443
Madras	1	51	52	4	68	72	14	44	58	19	168	182
Kerala	—	—	—	—	—	—	—	—	—	—	—	—
Gujarat	4	45	49	—	78	78	—	12	12	4	135	139
Maharashtra	18	258	276	30	210	240	22	178	200	70	646	716
Mysore	—	95	95	—	76	76	10	67	67	10	228	238

state	gross yield rate per acre (in lbs.)											
	sub-sample 1			sub-sample 2			sub-sample 3			combined		
	irri-gated	non-irri-gated	com-bined	irri-gated	non-irri-gated	com-bined	irri-gated	non-irri-gated	com-bined	irri-gated	non-irri-gated	com-bined
(1)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)
Rajasthan	0	249	223	—	218	218	—	136	136	0	217	206
Jammu & Kashmir	—	—	—	—	—	—	—	—	—	—	—	—
Punjab	—	312	312	—	—	—	—	—	—	—	312	312
Delhi	—	—	—	—	—	—	—	—	—	—	—	—
Himachal Pradesh	—	—	—	—	—	—	—	—	—	—	—	—
Uttar Pradesh	180	293	277	—	237	237	179	235	233	180	257	252
Madhya Pradesh	400	389	389	—	323	323	—	267	267	400	334	335
Bihar	—	386	386	—	536	536	—	500	500	—	530	530
Orissa	—	340	340	—	506	506	—	—	—	—	436	436
West Bengal	—	—	—	—	—	—	—	—	—	—	—	—
Assam	—	—	—	—	—	—	—	—	—	—	—	—
Manipur	—	—	—	—	—	—	—	—	—	—	—	—
Tripura	—	—	—	—	—	—	—	—	—	—	—	—
Andhra Pradesh	230	458	430	906	336	396	416	421	419	486	405	419
Madras	620	328	334	298	300	300	626	323	393	567	315	339
Kerala	—	—	—	—	—	—	—	—	—	—	—	—
Gujarat	822	554	576	—	438	438	—	567	567	822	488	498
Maharashtra	431	528	522	556	394	406	738	377	416	581	440	463
Mysore	—	264	294	—	522	522	1603	265	374	1003	363	389

*Land Utilisation Survey and Crop-cutting Experiments*

TABLE (4): UNWEIGHTED GROSS YIELD RATE OF BAJRA FOR IRRIGATED AND NON-IRRIGATED CROP BY STATES AND SUB-SAMPLES

state	number of cuts											
	sub-sample 1			sub-sample 2			sub-sample 3			total		
	irri-gated	non-irri-gated	total	irri-gated	non-irri-gated	total	irri-gated	non-irri-gated	total	irri-gated	non-irri-gated	total
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Rajasthan	6	108	114	12	116	128	—	—	—	18	224	242
Jammu & Kashmir	—	20	20	—	48	48	—	—	—	—	68	68
Punjab	15	6	21	—	38	38	—	—	—	15	44	59
Delhi	—	12	12	—	—	—	—	—	—	—	12	12
Himachal Pradesh	—	—	—	—	—	—	—	—	—	—	—	—
Uttar Pradesh	1	66	67	—	81	81	—	3	3	1	150	151
Madhya Pradesh	—	36	36	—	18	18	—	—	—	—	64	64
Bihar	—	—	—	—	13	13	—	—	—	—	13	13
Orissa	—	—	—	—	2	2	—	—	—	—	2	2
West Bengal	—	—	—	—	—	—	—	—	—	—	—	—
Assam	—	—	—	—	—	—	—	—	—	—	—	—
Manipur	—	—	—	—	—	—	—	—	—	—	—	—
Tripura	—	—	—	—	—	—	—	—	—	—	—	—
Andhra Pradesh	24	89	113	10	82	92	—	2	2	34	173	207
Madras	12	40	52	32	45	77	—	20	20	44	106	149
Kerala	—	—	—	—	—	—	—	—	—	—	—	—
Gujarat	—	72	72	—	84	84	—	—	—	—	156	156
Maharashtra	12	88	100	5	80	85	—	—	—	17	168	185
Mysore	1	31	32	—	24	24	—	7	7	1	62	63

state	gross yield rate per acre (in lbs.)											
	sub-sample 1			sub-sample 2			sub-sample 3			combined		
	irri-gated	non-irri-gated	com-bined	irri-gated	non-irri-gated	com-bined	irri-gated	non-irri-gated	com-bined	irri-gated	non-irri-gated	com-bined
(1)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)
Rajasthan	110	247	240	202	146	151	—	—	—	171	196	193
Jammu & Kashmir	—	465	465	—	785	785	—	—	—	—	691	691
Punjab	1325	5	948	—	242	242	—	—	—	1325	210	493
Delhi	—	414	414	—	—	—	—	—	—	—	414	414
Himachal Pradesh	—	—	—	—	—	—	—	—	—	—	—	—
Uttar Pradesh	0	307	302	—	310	310	—	—	—	0	302	300
Madhya Pradesh	—	155	155	—	306	306	—	—	—	—	205	205
Bihar	—	—	—	—	192	192	—	—	—	—	192	192
Orissa	—	—	—	—	149	149	—	—	—	—	149	149
West Bengal	—	—	—	—	—	—	—	—	—	—	—	—
Assam	—	—	—	—	—	—	—	—	—	—	—	—
Manipur	—	—	—	—	—	—	—	—	—	—	—	—
Tripura	—	—	—	—	—	—	—	—	—	—	—	—
Andhra Pradesh	1630	239	535	760	300	404	—	120	120	1374	295	473
Madras	839	290	417	559	137	312	—	143	143	635	196	326
Kerala	—	—	—	—	—	—	—	—	—	—	—	—
Gujarat	—	208	293	—	446	446	—	—	—	—	375	375
Maharashtra	596	171	223	552	195	216	—	—	—	583	182	220
Mysore	244	147	150	—	55	55	—	76	76	244	103	106

*National Sample Survey*

TABLE (5): UNWEIGHTED GROSS YIELD RATE OF RAGI FOR IRRIGATED AND NON-IRRIGATED CROPS BY STATES AND SUB-SAMPLES

state	number of cuts											
	sub-sample 1			sub-sample 2			sub-sample 3			total		
	irri-gated	non-irri-gated	com-bined	irri-gated	non-irri-gated	com-bined	irri-gated	non-irri-gated	com-bined	irri-gated	non-irri-gated	com-bined
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Rajasthan	—	—	—	—	—	—	—	—	—	—	—	—
Jammu & Kashmir	—	—	—	—	—	—	—	—	—	—	—	—
Punjab	—	—	—	—	—	—	—	—	—	—	—	—
Delhi	—	—	—	—	—	—	—	—	—	—	—	—
Himachal Pradesh	—	—	—	—	—	—	—	—	—	—	—	—
Uttar Pradesh	—	7	7	—	16	16	—	—	—	—	23	23
Madhya Pradesh	1	1	2	—	—	—	—	—	—	1	1	2
Bihar	—	31	31	—	31	31	—	—	—	—	62	62
Orissa	—	12	12	—	10	10	—	2	2	—	24	24
West Bengal	—	—	—	—	—	—	—	—	—	—	—	—
Assam	—	—	—	—	—	—	—	—	—	—	—	—
Manipur	—	—	—	—	—	—	—	—	—	—	—	—
Tripura	—	—	—	—	—	—	—	—	—	—	—	—
Andhra Pradesh	35	19	54	52	17	69	20	7	27	107	43	150
Madras	73	9	82	65	10	75	33	15	48	171	34	205
Kerala	—	4	4	—	—	—	—	—	—	—	4	4
Gujarat	—	1	1	—	3	3	—	—	—	—	4	4
Maharashtra	—	10	10	—	3	3	—	—	—	—	13	13
Mysore	7	35	42	10	40	50	—	16	15	17	90	107

state	gross yield rate per acre (in lbs.)											
	sub-sample 1			sub-sample 2			sub-sample 3			combined		
	irri-gated	non-irri-gated	com-bined	irri-gated	non-irri-gated	com-bined	irri-gated	non-irri-gated	com-bined	irri-gated	non-irri-gated	com-bined
(1)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)
Rajasthan	—	—	—	—	—	—	—	—	—	—	—	—
Jammu & Kashmir	—	—	—	—	—	—	—	—	—	—	—	—
Punjab	—	—	—	—	—	—	—	—	—	—	—	—
Delhi	—	—	—	—	—	—	—	—	—	—	—	—
Himachal Pradesh	—	—	—	—	—	—	—	—	—	—	—	—
Uttar Pradesh	—	219	219	—	478	478	—	—	—	—	399	399
Madhya Pradesh	824	507	665	—	—	—	—	—	—	824	507	665
Bihar	—	849	849	—	779	779	—	—	—	—	814	814
Orissa	—	677	677	—	423	423	—	840	840	—	586	586
West Bengal	—	—	—	—	—	—	—	—	—	—	—	—
Assam	—	—	—	—	—	—	—	—	—	—	—	—
Manipur	—	—	—	—	—	—	—	—	—	—	—	—
Tripura	—	—	—	—	—	—	—	—	—	—	—	—
Andhra Pradesh	916	588	794	1846	685	1560	614	904	680	1312	669	1127
Madras	1174	399	1089	1274	1001	1237	1439	440	1127	1263	594	1152
Kerala	—	323	323	—	—	—	—	—	—	—	323	323
Gujarat	—	361	361	—	479	479	—	—	—	—	450	450
Maharashtra	—	924	924	—	1028	1028	—	—	—	—	948	948
Mysore	2758	708	1050	607	556	566	—	603	603	1493	623	761

*Land Utilisation Survey and Crop-cutting Experiments*

TABLE (6): UNWEIGHTED GROSS YIELD RATE OF MAIZE FOR IRRIGATED AND NON-IRRIGATED CROP BY STATES AND SUB-SAMPLES

state	number of cuts											
	sub-sample 1			sub-sample 2			sub-sample 3			combined		
	irri-gated	non-irri-gated	total	irri-gated	non-irri-gated	total	irri-gated	non-irri-gated	total	irri-gated	non-irri-gated	total
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Rajasthan	—	50	50	14	66	80	—	—	—	14	116	130
Jammu & Kashmir	6	213	219	32	204	236	—	—	—	38	417	455
Punjab	24	20	44	46	10	56	—	—	—	70	30	100
Delhi	—	—	—	—	—	—	—	—	—	—	—	—
Himachal Pradesh	—	—	—	—	12	12	—	—	—	—	12	12
Uttar Pradesh	16	133	149	14	103	122	—	—	—	30	241	271
Madhya Pradesh	—	71	71	—	94	94	—	—	—	—	165	165
Bihar	20	178	198	—	189	189	—	—	—	20	367	387
Orissa	—	8	8	—	2	2	—	—	—	—	10	10
West Bengal	—	—	—	—	—	—	—	—	—	—	—	—
Assam	—	—	—	—	12	12	—	—	—	—	12	12
Manipur	—	—	—	—	—	—	—	—	—	—	—	—
Tripura	—	—	—	—	—	—	—	—	—	—	—	—
Andhra Pradesh	14	42	56	16	15	31	4	2	6	34	59	93
Madras	—	—	—	—	—	—	—	—	—	—	—	—
Kerala	—	—	—	—	—	—	—	—	—	—	—	—
Gujarat	2	20	22	—	8	8	—	—	—	2	28	30
Maharashtra	2	10	12	—	18	18	—	—	—	2	28	30
Mysore	—	—	—	—	—	—	—	—	—	—	—	—

state	gross yield rate per acre (in lbs.)											
	sub-sample 1			sub-sample 2			sub-sample 3			combined		
	irri-gated	non-irri-gated	com-bined	irri-gated	non-irri-gated	com-bined	irri-gated	non-irri-gated	com-bined	irri-gated	non-irri-gated	com-bined
(1)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)
Rajasthan	—	889	889	473	965	879	—	—	—	473	932	883
Jammu & Kashmir	1272	1209	1210	1927	1742	1767	—	—	—	1824	1470	1499
Punjab	1844	1354	1822	1476	406	1285	—	—	—	1602	1038	1433
Delhi	—	—	—	—	—	—	—	—	—	—	—	—
Himachal Pradesh	—	—	—	—	904	904	—	—	—	—	904	904
Uttar Pradesh	1037	664	704	185	498	462	—	—	—	639	599	595
Madhya Pradesh	—	593	593	—	594	594	—	—	—	—	594	594
Bihar	1099	948	963	—	1142	1142	—	—	—	1099	1048	1050
Orissa	—	481	481	—	334	334	—	—	—	—	452	452
West Bengal	—	—	—	—	—	—	—	—	—	—	—	—
Assam	—	—	—	—	1210	1210	—	—	—	—	1210	1210
Manipur	—	—	—	—	—	—	—	—	—	—	—	—
Tripura	—	—	—	—	—	—	—	—	—	—	—	—
Andhra Pradesh	1008	674	768	878	1283	1074	793	2980	1522	922	907	913
Madras	—	—	—	—	—	—	—	—	—	—	—	—
Kerala	—	—	—	—	—	—	—	—	—	—	—	—
Gujarat	661	895	874	—	761	761	—	—	—	661	857	844
Maharashtra	0	322	268	—	318	318	—	—	—	0	319	298
Mysore	—	—	—	—	—	—	—	—	—	—	—	—



National Sample Survey

TABLE (7): UNWEIGHTED GROSS YIELD RATE OF WHEAT FOR IRRIGATED AND NON-IRRIGATED CROP BY STATES AND SUB-SAMPLES

state	number of cuts											
	sub-sample 1			sub-sample 2			sub-sample 3			total		
	irri- gated	non- irri- gated	total	irri- gated	non- irri- gated	total	irri- gated	non- irri- gated	total	irri- gated	non- irri- gated	total
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Rajasthan	77	23	100	72	12	84	53	25	78	202	60	262
Jammu & Kashmir	10	63	73	5	72	77	5	51	56	20	186	206
Punjab	44	75	119	68	56	124	51	63	114	163	194	357
Delhi	5	—	5	—	—	—	—	—	—	5	—	5
Himachal Pradesh	—	—	—	—	9	9	—	5	5	—	14	14
Uttar Pradesh	237	195	432	229	155	384	214	200	414	680	550	1230
Madhya Pradesh	28	111	139	17	176	193	27	113	140	72	400	472
Bihar	38	142	180	60	155	215	40	120	160	138	417	555
Orissa	—	—	—	—	—	—	—	—	—	—	—	—
West Bengal	—	—	—	7	6	13	1	6	7	6	12	20
Assam	—	—	—	—	—	—	—	—	—	—	—	—
Manipur	—	—	—	—	—	—	—	—	—	—	—	—
Tripura	—	—	—	—	—	—	—	—	—	—	—	—
Andhra Pradesh	5	—	5	—	—	—	2	—	2	7	—	7
Madras	1	—	1	—	—	—	—	—	—	1	—	1
Kerala	—	—	—	—	—	—	—	—	—	—	—	—
Gujarat	37	16	53	19	23	42	30	12	42	66	51	117
Maharashtra	22	52	74	36	36	72	12	64	76	70	152	222
Mysore	—	34	34	—	10	10	10	9	19	10	53	63

state	gross yield rate per acre (in lbs.)											
	sub-sample 1			sub-sample 2			sub-sample 3			combined		
	irri- gated	non- irri- gated	com- bined	irri- gated	non- irri- gated	com- bined	irri- gated	non- irri- gated	com- bined	irri- gated	non- irri- gated	com- bined
(1)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)
Rajasthan	851	406	839	954	130	836	1168	352	907	1009	351	858
Jammu & Kashmir	1030	798	829	536	639	632	783	755	758	845	725	736
Punjab	1005	869	953	1198	786	1012	1343	656	963	1216	766	977
Delhi	1282	—	1282	—	—	—	—	—	—	1282	—	1282
Himachal Pradesh	—	—	—	—	1357	1357	—	609	609	—	1090	1090
Uttar Pradesh	765	572	678	1010	627	856	661	560	613	815	583	711
Madhya Pradesh	906	480	566	814	527	553	596	834	788	768	601	627
Bihar	640	415	463	561	475	499	614	421	469	598	439	479
Orissa	—	—	—	—	—	—	—	—	—	—	—	—
West Bengal	—	—	—	628	526	585	279	397	378	584	466	513
Assam	—	—	—	—	—	—	—	—	—	—	—	—
Manipur	—	—	—	—	—	—	—	—	—	—	—	—
Manipur	—	—	—	—	—	—	—	—	—	—	—	—
Andhra Pradesh	724	—	724	—	—	—	441	—	441	643	—	643
Madras	1148	—	1148	—	—	—	—	—	—	1148	—	1148
Kerala	—	—	—	—	—	—	—	—	—	—	—	—
Gujarat	1186	211	892	1484	442	913	1639	271	1248	1410	329	1008
Maharashtra	834	497	596	981	417	699	807	497	546	905	478	612
Mysore	—	139	139	—	260	260	1029	149	612	1029	164	301

*Land Utilisation Survey and Crop-cutting Experiments*

**TABLE (8) : UNWEIGHTED GROSS YIELD RATE OF BARLEY FOR IRRIGATED AND NON-IRRIGATED CROP BY STATES AND SUB-SAMPLES**

state	number of cuts											
	sub-sample 1			sub-sample 2			sub-sample 3			total		
	irri-gated	non-irri-gated	total	irri-gated	non-irri-gated	total	irri-gated	non-irri-gated	total	irri-gated	non-irri-gated	total
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Rajasthan	48	23	71	59	13	72	39	18	57	146	54	200
Jammu & Kashmir	2	6	8	—	12	12	1	8	9	3	26	29
Punjab	—	6	6	7	13	20	—	9	9	7	28	35
Delhi	1	4	5	—	—	—	—	—	—	1	4	5
Himachal Pradesh	—	—	—	—	1	1	—	1	1	—	2	2
Uttar Pradesh	128	123	251	149	125	274	178	155	333	455	403	858
Madhya Pradesh	7	24	31	—	28	28	3	20	23	10	72	82
Bihar	21	168	189	28	112	150	27	100	127	86	380	466
Orissa	—	—	—	—	—	—	—	—	—	—	—	—
West Bengal	8	6	14	—	12	12	—	1	1	8	19	27
Assam	—	—	—	—	—	—	—	—	—	—	—	—
Manipur	—	—	—	—	—	—	—	—	—	—	—	—
Tripura	—	—	—	—	—	—	—	—	—	—	—	—
Andhra Pradesh	1	—	1	—	—	—	—	—	—	1	—	1
Madras	—	—	—	—	—	—	—	—	—	—	—	—
Kerala	—	—	—	—	—	—	—	—	—	—	—	—
Gujarat	1	4	5	—	—	—	—	2	2	1	6	7
Maharashtra	—	1	1	—	—	—	—	1	1	—	2	2
Mysore	—	—	—	—	—	—	—	—	—	—	—	—

state	gross yield rate per acre (in lbs.)											
	sub-sample 1			sub-sample 2			sub-sample 3			combined		
	irri-gated	non-irri-gated	com-bined	irri-gated	non-irri-gated	com-bined	irri-gated	non-irri-gated	com-bined	irri-gated	non-irri-gated	com-bined
(1)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)
Rajasthan	1445	249	1058	1194	243	1023	1126	195	833	1258	230	981
Jammu & Kashmir	301	651	663	—	170	170	778	559	683	480	401	407
Punjab	—	712	712	2193	141	859	—	950	950	2193	523	857
Delhi	1394	341	552	—	—	—	—	—	—	1394	341	552
Himachal Pradesh	—	—	—	—	980	980	—	854	854	—	917	917
Uttar Pradesh	514	545	530	1175	537	884	603	419	518	765	494	838
Madhya Pradesh	911	498	591	—	356	356	841	318	380	890	393	453
Bihar	244	293	288	206	551	464	241	244	243	228	356	332
Orissa	—	—	—	—	—	—	—	—	—	—	—	—
West Bengal	392	301	354	—	310	310	—	49	49	392	293	323
Assam	—	—	—	—	—	—	—	—	—	—	—	—
Manipur	—	—	—	—	—	—	—	—	—	—	—	—
Tripura	—	—	—	—	—	—	—	—	—	—	—	—
Andhra Pradesh	1140	—	1140	—	—	—	—	—	—	1140	—	1140
Madras	—	—	—	—	—	—	—	—	—	—	—	—
Kerala	—	—	—	—	—	—	—	—	—	—	—	—
Gujarat	2085	496	814	—	—	—	—	93	93	2085	382	608
Maharashtra	—	0	0	—	—	—	—	7	7	—	4	4
Mysore	—	—	—	—	—	—	—	—	—	—	—	—

National Sample Survey

TABLE (9): UNWEIGHTED GROSS YIELD RATE OF RICE SEPARATELY FOR PURE CROP AND MIXED CROP BY STATES AND SUB-SAMPLES

state	number of cuts											
	sub-sample 1			sub-sample 2			sub-sample 3			total		
	pure	mixed	total	pure	mixed	total	pure	mixed	total	pure	mixed	total
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Rajasthan	8	—	8	—	—	—	—	—	—	8	—	8
Jammu & Kashmir	137	—	137	105	—	105	—	—	—	242	—	242
Punjab	23	—	23	11	—	11	—	—	—	34	—	34
Delhi	—	—	—	—	—	—	—	—	—	—	—	—
Himachal Pradesh	—	—	—	—	—	—	—	—	—	—	—	—
Uttar Pradesh	229	23	252	287	27	314	88	5	93	604	55	659
Madhya Pradesh	139	11	150	136	1	137	12	5	17	287	17	304
Bihar	223	19	242	214	28	242	193	4	197	630	51	681
Orissa	134	3	137	139	—	139	32	—	32	305	3	308
West Bengal	152	3	155	182	1	183	56	—	56	370	4	374
Assam	88	—	88	102	1	103	60	—	60	250	1	251
Manipur	8	—	8	20	—	20	6	—	6	34	—	34
Tripura	37	—	37	49	—	49	43	—	43	129	—	129
Andhra Pradesh	197	6	203	225	1	226	163	—	163	585	7	592
Madras	267	1	268	252	—	252	178	—	178	697	1	698
Kerala	138	4	142	166	9	175	81	—	81	385	13	398
Gujarat	21	10	31	9	12	21	—	—	—	30	22	52
Maharashtra	128	8	136	114	10	124	18	—	18	290	18	278
Mysore	48	5	53	90	2	92	40	—	40	178	7	185

state	gross yield rate per acre (in lbs.)											
	sub-sample 1			sub-sample 2			sub-sample 3			combined		
	pure	mixed	pure and mixed	pure	mixed	pure and mixed	pure	mixed	pure and mixed	pure	mixed	pure and mixed
(1)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)
Rajasthan	634	—	634	—	—	—	—	—	—	634	—	634
Jammu & Kashmir	1346	—	1346	1583	—	1583	—	—	—	1449	—	1449
Punjab	905	—	905	1109	—	1109	—	—	—	971	—	971
Delhi	—	—	—	—	—	—	—	—	—	—	—	—
Himachal Pradesh	—	—	—	—	—	—	—	—	—	—	—	—
Uttar Pradesh	693	354	662	746	400	718	687	247	664	717	367	689
Madhya Pradesh	751	522	734	696	60	692	1609	471	1274	701	480	745
Bihar	859	675	845	815	790	813	884	840	862	852	755	844
Orissa	858	280	846	803	—	803	1033	—	1033	851	280	846
West Bengal	922	1072	925	887	133	883	671	—	671	860	887	869
Assam	816	—	816	872	101	864	974	—	974	877	101	873
Manipur	615	—	615	1349	—	1349	782	—	782	1076	—	1076
Tripura	1034	—	1034	1147	—	1147	1442	—	1442	1213	—	1213
Andhra Pradesh	1219	972	1211	1307	1423	1308	1136	—	1136	1229	1036	1227
Madras	1178	851	1177	1182	—	1182	983	—	983	1130	851	1130
Kerala	1014	476	999	1021	306	994	1211	—	1211	1058	421	1038
Gujarat	677	254	541	488	89	260	—	—	—	620	164	428
Maharashtra	857	341	827	820	370	784	1353	—	1353	875	357	842
Mysore	1401	679	1333	1065	334	990	2086	—	2086	1355	680	1325

*Land Utilisation Survey and Crop-cutting Experiments*

TABLE (10) : UNWEIGHTED GROSS YIELD RATE OF JOWAR SEPARATELY FOR PURE CROP AND MIXED CROP BY STATES AND SUB-SAMPLES

state	number of cuts											
	sub-sample 1			sub-sample 2			sub-sample 3			total		
	pure	mixed	total	pure	mixed	total	pure	mixed	total	pure	mixed	total
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Rajasthan	26	12	38	12	16	28	2	12	14	40	40	80
Jammu & Kashmir	—	—	—	—	—	—	—	—	—	—	—	—
Punjab	2	4	6	—	—	—	—	—	—	2	4	6
Delhi	—	—	—	—	—	—	—	—	—	—	—	—
Himachal Pradesh	—	—	—	—	—	—	—	—	—	—	—	—
Uttar Pradesh	2	140	142	—	109	109	4	101	105	6	350	356
Madhya Pradesh	5	155	160	2	157	159	10	89	99	17	401	418
Bihar	4	10	14	10	10	20	4	—	4	18	20	38
Orissa	—	10	10	—	6	6	—	—	—	—	16	16
West Bengal	—	—	—	—	—	—	—	—	—	—	—	—
Assam	—	—	—	—	—	—	—	—	—	—	—	—
Manipur	—	—	—	—	—	—	—	—	—	—	—	—
Tripura	—	—	—	—	—	—	—	—	—	—	—	—
Andhra Pradesh	62	103	165	38	115	153	49	76	125	149	294	443
Madras	8	44	52	30	42	72	26	30	56	66	116	182
Kerala	—	—	—	—	—	—	—	—	—	—	—	—
Gujarat	24	25	49	60	18	78	12	—	12	86	43	139
Maharashtra	88	188	276	52	188	240	82	118	200	322	494	716
Mysore	10	85	95	18	58	76	17	50	67	45	193	238

state	gross yield rate per acre (in lbs.)											
	sub-sample 1			sub-sample 2			sub-sample 3			combined		
	pure	mixed	pure and mixed	pure	mixed	pure and mixed	pure	mixed	pure and mixed	pure	mixed	pure and mixed
(1)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)
Rajasthan	309	35	223	334	131	218	183	128	136	310	101	206
Jammu & Kashmir	—	—	—	—	—	—	—	—	—	—	—	—
Punjab	215	361	312	—	—	—	—	—	—	215	361	312
Delhi	—	—	—	—	—	—	—	—	—	—	—	—
Himachal Pradesh	—	—	—	—	—	—	—	—	—	—	—	—
Uttar Pradesh	648	272	277	—	237	237	228	233	233	368	250	252
Madhya Pradesh	1169	364	399	398	322	323	111	285	267	456	330	335
Bihar	396	382	396	826	446	638	500	—	500	658	414	630
Orissa	—	340	340	—	596	596	—	—	—	—	436	436
West Bengal	—	—	—	—	—	—	—	—	—	—	—	—
Assam	—	—	—	—	—	—	—	—	—	—	—	—
Manipur	—	—	—	—	—	—	—	—	—	—	—	—
Tripura	—	—	—	—	—	—	—	—	—	—	—	—
Andhra Pradesh	507	398	439	575	337	396	376	447	419	481	387	419
Madras	550	295	334	489	166	300	657	147	393	588	210	339
Kerala	—	—	—	—	—	—	—	—	—	—	—	—
Gujarat	800	362	570	437	440	438	567	—	567	544	395	496
Maharashtra	518	522	522	413	403	405	416	416	416	456	451	453
Mysore	289	295	294	1083	348	522	596	299	374	723	312	389

*National Sample Survey*

TABLE (11): UNWEIGHTED GROSS YIELD RATE OF BAJRA SEPARATELY FOR PURE CROP AND MIXED CROP BY STATES AND SUB-SAMPLES

state	number of cuts											
	sub-sample 1			sub-sample 2			sub-sample 3			total		
	pure	mixed	total	pure	mixed	total	pure	mixed	total	pure	mixed	total
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Rajasthan	26	88	114	36	92	128	—	—	—	62	180	242
Jammu & Kashmir	14	6	20	28	20	48	—	—	—	42	26	68
Punjab	13	8	21	2	36	38	—	—	—	15	44	59
Delhi	8	4	12	—	—	—	—	—	—	8	4	12
Himachal Pradesh	—	—	—	—	—	—	—	—	—	—	—	—
Uttar Pradesh	—	67	67	2	79	81	—	3	3	2	149	151
Madhya Pradesh	2	34	36	4	14	18	—	—	—	6	46	54
Bihar	—	—	—	—	13	13	—	—	—	—	13	13
Orissa	—	—	—	—	2	2	—	—	—	—	2	2
West Bengal	—	—	—	—	—	—	—	—	—	—	—	—
Assam	—	—	—	—	—	—	—	—	—	—	—	—
Manipur	—	—	—	—	—	—	—	—	—	—	—	—
Tripura	—	—	—	—	—	—	—	—	—	—	—	—
Andhra Pradesh	56	57	113	38	54	92	—	2	2	84	113	207
Madras	28	24	52	37	40	77	6	14	20	71	78	149
Kerala	—	—	—	—	—	—	—	—	—	—	—	—
Gujarat	32	40	72	36	48	84	—	—	—	68	88	156
Maharashtra	10	90	100	10	75	85	—	—	—	20	165	185
Mysore	2	30	32	6	18	24	—	7	7	8	65	63

state	gross yield rate (in lbs./acre)											
	sub-sample 1			sub-sample 2			sub-sample 3			combined		
	pure	mixed	pure and mixed	pure	mixed	pure and mixed	pure	mixed	pure and mixed	pure	mixed	pure and mixed
(1)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)
Rajasthan	267	232	240	177	141	151	—	—	—	215	185	193
Jammu & Kashmir	582	191	465	718	878	785	—	—	—	673	719	691
Punjab	1425	172	948	360	235	242	—	—	—	1283	224	493
Delhi	414	414	414	—	—	—	—	—	—	414	414	414
Himachal Pradesh	—	—	—	—	—	—	—	—	—	—	—	—
Uttar Pradesh	—	302	302	806	297	310	—	—	—	806	293	300
Madhya Pradesh	352	143	155	128	356	308	—	—	—	203	205	205
Bihar	—	—	—	—	192	192	—	—	—	—	192	192
Orissa	—	—	—	—	149	149	—	—	—	—	149	149
West Bengal	—	—	—	—	—	—	—	—	—	—	—	—
Assam	—	—	—	—	—	—	—	—	—	—	—	—
Manipur	—	—	—	—	—	—	—	—	—	—	—	—
Tripura	—	—	—	—	—	—	—	—	—	—	—	—
Andhra Pradesh	987	90	535	636	240	404	—	120	120	845	162	473
Madras	442	386	417	445	190	312	186	126	143	422	239	326
Kerala	—	—	—	—	—	—	—	—	—	—	—	—
Gujarat	301	286	293	492	411	446	—	—	—	402	354	375
Maharashtra	192	226	228	364	196	216	—	—	—	278	212	220
Mysore	162	149	150	46	58	55	—	76	76	76	110	106

*Land Utilisation Survey and Crop-cutting Experiments*

TABLE (12) : UNWEIGHTED GROSS YIELD RATE OF RAGI SEPARATELY FOR PURE CROP AND MIXED CROP BY STATES AND SUB-SAMPLES

state	number of cuts											
	sub-sample 1			sub-sample 2			sub-sample 3			total		
	pure	mixed	total	pure	mixed	total	pure	mixed	total	pure	mixed	total
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Rajasthan	—	—	—	—	—	—	—	—	—	—	—	—
Jammu & Kashmir	—	—	—	—	—	—	—	—	—	—	—	—
Punjab	—	—	—	—	—	—	—	—	—	—	—	—
Delhi	—	—	—	—	—	—	—	—	—	—	—	—
Himachal Pradesh	—	—	—	—	—	—	—	—	—	—	—	—
Uttar Pradesh	1	6	7	2	14	16	—	—	—	3	20	23
Madhya Pradesh	1	1	2	—	—	—	—	—	—	1	1	2
Bihar	27	4	31	21	10	31	—	—	—	48	14	62
Orissa	8	4	12	1	9	10	2	—	2	11	13	24
West Bengal	—	—	—	—	—	—	—	—	—	—	—	—
Assam	—	—	—	—	—	—	—	—	—	—	—	—
Manipur	—	—	—	—	—	—	—	—	—	—	—	—
Tripura	—	—	—	—	—	—	—	—	—	—	—	—
Andhra Pradesh	46	8	54	63	6	69	24	3	27	133	17	150
Madras	75	7	82	64	11	75	40	8	48	179	26	205
Kerala	4	—	4	—	—	—	—	—	—	4	—	4
Gujarat	1	—	1	2	1	3	—	—	—	3	1	4
Maharashtra	10	—	10	3	—	3	—	—	—	13	—	13
Mysore	13	29	42	20	30	50	2	13	15	35	72	107

state	gross yield rate (in lbs./acre)											
	sub-sample 1			sub-sample 2			sub-sample 3			combined		
	pure	mixed	pure and mixed	pure	mixed	pure and mixed	pure	mixed	pure and mixed	pure	mixed	pure and mixed
(1)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)
Rajasthan	—	—	—	—	—	—	—	—	—	—	—	—
Jammu & Kashmir	—	—	—	—	—	—	—	—	—	—	—	—
Punjab	—	—	—	—	—	—	—	—	—	—	—	—
Delhi	—	—	—	—	—	—	—	—	—	—	—	—
Himachal Pradesh	—	—	—	—	—	—	—	—	—	—	—	—
Uttar Pradesh	310	204	219	738	440	478	—	—	—	595	369	399
Madhya Pradesh	824	507	665	—	—	—	—	—	—	824	507	665
Bihar	791	1237	849	863	605	779	—	—	—	822	786	814
Orissa	660	711	677	1066	349	423	849	—	849	733	460	586
West Bengal	—	—	—	—	—	—	—	—	—	—	—	—
Assam	—	—	—	—	—	—	—	—	—	—	—	—
Manipur	—	—	—	—	—	—	—	—	—	—	—	—
Tripura	—	—	—	—	—	—	—	—	—	—	—	—
Andhra Pradesh	775	905	794	1609	1048	1560	673	821	689	1152	941	1127
Madras	1137	577	1089	1267	1062	1237	1257	475	1127	1210	751	1152
Kerala	323	—	323	—	—	—	—	—	—	323	—	323
Gujarat	361	—	361	719	—	479	—	—	—	600	—	450
Maharashtra	924	—	924	1028	—	1023	—	—	—	948	—	948
Mysore	1723	748	1060	507	605	566	662	594	603	968	661	761

National Sample Survey

TABLE (13): UNWEIGHTED GROSS YIELD RATE OF MAIZE SEPARATELY FOR PURE CROP AND MIXED CROP BY STATES AND SUB-SAMPLES

state	number of cots											
	sub-sample 1			sub-sample 2			sub-sample 3			total		
	pure	mixed	total	pure	mixed	total	pure	mixed	total	pure	mixed	total
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Rajasthan	42	8	50	56	24	80	—	—	—	98	32	130
Jammu & Kashmir	197	22	219	222	14	236	—	—	—	419	36	455
Punjab	24	20	44	44	12	56	—	—	—	68	32	100
Delhi	—	—	—	—	—	—	—	—	—	—	—	—
Himachal Pradesh	—	—	—	8	4	12	—	—	—	8	4	12
Uttar Pradesh	26	123	149	14	108	122	—	—	—	40	231	271
Madhya Pradesh	18	53	71	50	44	94	—	—	—	68	97	165
Bihar	72	126	198	58	131	189	—	—	—	130	257	387
Orissa	6	2	8	2	—	2	—	—	—	8	2	10
West Bengal	—	—	—	—	—	—	—	—	—	—	—	—
Assam	—	—	—	10	2	12	—	—	—	10	2	12
Manipur	—	—	—	—	—	—	—	—	—	—	—	—
Tripura	—	—	—	—	—	—	—	—	—	—	—	—
Andhra Pradesh	29	28	56	23	8	31	6	—	6	57	36	93
Madras	—	—	—	—	—	—	—	—	—	—	—	—
Kerala	—	—	—	—	—	—	—	—	—	—	—	—
Gujarat	8	14	22	4	4	8	—	—	—	12	18	30
Maharashtra	12	—	12	4	14	18	—	—	—	16	14	30
Mysore	—	—	—	—	—	—	—	—	—	—	—	—

state	gross yield rate (in lbs./acre)											
	sub-sample 1			sub-sample 2			sub-sample 3			combined		
	pure	mixed	pure and mixed	pure	mixed	pure and mixed	pure	mixed	pure and mixed	pure	mixed	pure and mixed
(1)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)
Rajasthan	884	911	899	1057	464	879	—	—	—	993	576	883
Jammu & Kashmir	1253	930	1210	1794	1346	1767	—	—	—	1540	1031	1499
Punjab	1844	1354	1822	1164	1728	1285	—	—	—	1404	1494	1433
Delhi	—	—	—	—	—	—	—	—	—	—	—	—
Himachal Pradesh	—	—	—	836	1041	904	—	—	—	836	1041	904
Uttar Pradesh	529	741	704	615	442	482	—	—	—	559	601	595
Madhya Pradesh	889	493	593	497	705	594	—	—	—	601	589	594
Bihar	1209	922	963	1261	1090	1142	—	—	—	1232	959	1050
Orissa	261	1144	481	334	—	334	—	—	—	278	1144	452
West Bengal	—	—	—	—	—	—	—	—	—	—	—	—
Assam	—	—	—	1057	1974	1210	—	—	—	1057	1974	1210
Manipur	—	—	—	—	—	—	—	—	—	—	—	—
Tripura	—	—	—	—	—	—	—	—	—	—	—	—
Andhra Pradesh	980	536	756	1303	419	1074	1522	—	1522	1167	510	913
Madras	—	—	—	—	—	—	—	—	—	—	—	—
Kerala	—	—	—	—	—	—	—	—	—	—	—	—
Gujarat	914	851	874	1074	449	761	—	—	—	967	762	844
Maharashtra	268	—	268	382	300	318	—	—	—	298	300	298
Mysore	—	—	—	—	—	—	—	—	—	—	—	—

*Land Utilisation Survey and Crop-cutting Experiments*

TABLE (14): UNWEIGHTED GROSS YIELD RATE OF WHEAT SEPARATELY FOR PURE CROP AND MIXED CROP BY STATES AND SUB-SAMPLES

state	number of cuts											
	sub-sample 1			sub-sample 2			sub-sample 3			total		
	pure	mixed	total	pure	mixed	total	pure	mixed	total	pure	mixed	total
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Rajasthan	28	72	100	33	51	84	26	52	78	87	175	262
Jammu & Kashmir	61	12	73	45	32	77	42	14	56	148	58	206
Punjab	37	82	119	42	82	124	44	70	114	123	234	357
Delhi	1	4	5	—	—	—	—	—	—	1	4	5
Himachal Pradesh	—	—	—	9	—	9	5	—	5	14	—	14
Uttar Pradesh	29	403	432	21	363	384	38	376	414	69	1142	1230
Madhya Pradesh	59	83	139	75	118	193	76	64	140	207	265	472
Bihar	26	164	190	28	187	215	31	129	160	85	470	555
Orissa	—	—	—	—	—	—	—	—	—	—	—	—
West Bengal	—	—	—	7	6	13	2	5	7	9	11	20
Assam	—	—	—	—	—	—	—	—	—	—	—	—
Manipur	—	—	—	—	—	—	—	—	—	—	—	—
Tripura	—	—	—	—	—	—	—	—	—	—	—	—
Andhra Pradesh	3	2	5	—	—	—	2	—	2	5	2	7
Mysore	1	—	1	—	—	—	—	—	—	1	—	1
Kerala	—	—	—	—	—	—	—	—	—	—	—	—
Gujarat	44	9	53	36	6	42	34	8	42	114	23	137
Maharashtra	64	10	74	47	25	72	44	32	76	155	67	222
Mysore	2	32	34	—	10	10	11	8	19	13	50	63

state	gross yield rate (in lbs./acre)											
	sub-sample 1			sub-sample 2			sub-sample 3			combined		
	pure	mixed	pure and mixed	pure	mixed	pure and mixed	pure	mixed	pure and mixed	pure	mixed	pure and mixed
(1)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)
Rajasthan	1235	685	830	1269	558	836	1721	500	907	1393	592	858
Jammu & Kashmir	858	604	829	696	1543	632	788	666	758	788	604	736
Punjab	877	988	933	1178	930	1012	1113	870	983	1062	932	977
Delhi	813	1399	1282	—	—	—	—	—	—	813	1399	1282
Himachal Pradesh	—	—	—	1367	—	1367	609	—	609	1090	—	1090
Uttar Pradesh	1077	648	678	764	661	856	887	588	613	907	695	711
Madhya Pradesh	662	501	666	626	508	553	1085	459	788	797	493	627
Bihar	534	451	463	746	462	499	518	457	469	598	467	479
Orissa	—	—	—	—	—	—	—	—	—	—	—	—
West Bengal	—	—	—	747	397	585	145	471	378	613	431	613
Assam	—	—	—	—	—	—	—	—	—	—	—	—
Manipur	—	—	—	—	—	—	—	—	—	—	—	—
Tripura	—	—	—	—	—	—	—	—	—	—	—	—
Andhra Pradesh	971	355	724	—	—	—	441	—	441	759	355	643
Mysore	1148	—	1148	—	—	—	—	—	—	1148	—	1148
Kerala	—	—	—	—	—	—	—	—	—	—	—	—
Gujarat	1006	334	692	1050	94	918	1510	137	1248	1170	203	1008
Maharashtra	628	390	598	798	512	699	612	464	646	675	466	612
Mysore	349	128	139	—	260	260	1000	79	612	900	145	301



National Sample Survey

TABLE (15) : UNWEIGHTED GROSS YIELD RATE OF BARLEY SEPARATELY FOR PURE CROP AND MIXED CROP BY STATES AND SUB-SAMPLES

state	number of cuts											
	sub-sample 1			sub-sample 2			sub-sample 3			total		
	pure	mixed	total	pure	mixed	total	pure	mixed	total	pure	mixed	total
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Rajasthan	7	64	71	13	59	72	13	44	57	33	167	200
Jammu & Kashmir	2	6	8	2	10	12	5	4	9	9	20	29
Punjab	4	2	6	8	12	20	3	6	9	15	20	35
Delhi	1	4	5	—	—	—	—	—	—	1	4	5
Himachal Pradesh	—	—	—	1	—	1	1	—	1	2	—	2
Uttar Pradesh	—	251	251	3	271	274	10	323	333	13	845	858
Madhya Pradesh	5	28	31	10	19	28	9	15	23	23	59	82
Bihar	8	181	189	11	189	190	7	120	127	26	440	466
Orissa	—	—	—	—	—	—	—	—	—	—	—	—
West Bengal	10	4	14	2	10	12	1	—	1	13	14	27
Assam	—	—	—	—	—	—	—	—	—	—	—	—
Manipur	—	—	—	—	—	—	—	—	—	—	—	—
Tripura	—	—	—	—	—	—	—	—	—	—	—	—
Andhra Pradesh	1	—	1	—	—	—	—	—	—	1	—	1
Madras	—	—	—	—	—	—	—	—	—	—	—	—
Kerala	—	—	—	—	—	—	—	—	—	—	—	—
Gujarat	1	4	5	—	—	—	—	2	2	1	6	7
Maharashtra	1	—	1	—	—	—	1	—	1	2	—	2
Mysore	—	—	—	—	—	—	—	—	—	—	—	—

state	gross yield rate (in lbs./acre)											
	sub-sample 1			sub-sample 2			sub-sample 3			combined		
	pure	mixed	pure and mixed	pure	mixed	pure and mixed	pure	mixed	pure and mixed	pure	mixed	pure and mixed
	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)
Rajasthan	2110	943	1058	1292	963	1023	2024	480	833	1754	828	981
Jammu & Kashmir	444	603	568	708	62	170	603	560	583	591	324	407
Punjab	840	457	712	1696	301	859	1269	791	950	1382	404	657
Delhi	1394	341	552	—	—	—	—	—	—	1394	341	552
Himachal Pradesh	—	—	—	980	—	980	854	—	854	917	—	917
Uttar Pradesh	—	530	530	452	889	824	974	504	518	854	635	639
Madhya Pradesh	514	606	591	322	375	356	670	234	388	485	441	453
Bihar	416	282	299	1488	333	464	456	231	243	880	300	332
Orissa	—	—	—	—	—	—	—	—	—	—	—	—
West Bengal	336	395	354	610	250	310	49	—	49	356	291	323
Assam	—	—	—	—	—	—	—	—	—	—	—	—
Manipur	—	—	—	—	—	—	—	—	—	—	—	—
Tripura	—	—	—	—	—	—	—	—	—	—	—	—
Andhra Pradesh	1140	—	1140	—	—	—	—	—	—	1140	—	1140
Madras	—	—	—	—	—	—	—	—	—	—	—	—
Kerala	—	—	—	—	—	—	—	—	—	—	—	—
Gujarat	2085	496	814	—	—	—	—	93	93	2085	362	608
Maharashtra	0	—	0	—	—	—	7	—	7	4	—	4
Mysore	—	—	—	—	—	—	—	—	—	—	—	—

TABLE (16): RATIO OF DRY WEIGHT TO GREEN WEIGHT OF CEREAL CROPS OF AUTUMN SEASON

state	paddy		jowar		bajra		ragi		maize	
	sub-sample 1	sub-sample 2	sub-sample 1	sub-sample 2	sub-sample 1	sub-sample 2	sub-sample 1	sub-sample 2	sub-sample 1	sub-sample 2
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Rajasthan	0.7335	—	0.7654	0.5717	0.4833	0.4284	—	—	0.5280	0.5503
Jammu and Kashmir	0.7963	0.8821	—	—	0.5426	0.5176	—	—	0.5017	0.5924
Punjab	0.8230	0.8313	0.4176	—	0.5870	0.4961	—	—	0.6140	0.4965
Delhi	—	—	—	—	0.5522	—	—	—	—	—
Himachal Pradesh	—	—	—	—	—	—	—	—	—	0.5257
Uttar Pradesh	0.8408	0.8382	—	0.5128	0.3989	0.4964	0.4367	0.4211	0.4552	0.5205
Madhya Pradesh	0.8896	0.8531	0.5664	0.5758	0.3950	0.4521	—	—	0.5420	0.4581
Bihar	0.8914	0.8443	0.4376	0.4667	—	0.5909	0.4983	0.4186	0.4601	0.4999
Orissa	0.8708	0.8719	—	—	—	—	0.5838	—	0.4626	0.2601
West Bengal	0.8593	0.8862	—	—	—	—	—	—	—	—
Assam	0.8886	0.9026	—	—	—	—	—	—	—	—
Manipur	—	0.8806	—	—	—	—	—	—	—	—
Tripura	0.6977	—	—	—	—	—	—	—	—	—
Andhra Pradesh	0.8296	0.8924	0.4653	0.5843	0.5587	0.5312	0.4508	0.5742	0.3651	0.5874
Madras	0.8529	0.8788	—	0.4338	0.4710	0.5017	0.5004	0.5138	—	0.0389
Kerala	0.8182	0.8636	—	—	—	—	0.4885	—	—	—
Gujarat	0.8898	0.8327	0.4155	0.4189	0.4560	0.4651	0.5529	0.5947	0.4816	0.4436
Maharashtra	0.8422	0.8567	0.4980	—	0.5911	0.6219	0.7314	0.5237	0.2147	0.3641
Mysore	0.8304	0.8623	0.4335	0.6043	0.5189	0.5772	0.6288	0.5877	—	—

For autumn season only sub-samples 1 and 2 were surveyed.

TABLE (17): RATIO OF DRY WEIGHT TO GREEN WEIGHT OF CEREAL CROPS OF WINTER SEASON

state	paddy			jowar			bajra		
	sub-sample 1	sub-sample 2	sub-sample 3	sub-sample 1	sub-sample 2	sub-sample 3	sub-sample 1	sub-sample 2	sub-sample 3
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Rajasthan	0.4969	—	—	0.5728	0.4636	0.3922	—	—	—
Jammu and Kashmir	—	—	—	—	—	—	—	—	—
Punjab	—	—	—	—	—	—	—	—	—
Delhi	—	—	—	—	—	—	—	—	—
Himachal Pradesh	—	—	—	—	—	—	—	—	—
Uttar Pradesh	0.8182	0.8708	0.8309	0.5207	0.4608	0.5388	—	0.5130	—
Madhya Pradesh	0.9063	0.8787	0.9226	0.6436	0.5456	0.5308	0.6876	0.4769	—
Bihar	0.8928	0.8916	0.8870	0.7090	0.7717	0.9486	—	—	—
Orissa	0.9205	0.8828	0.8705	0.7383	0.6994	—	—	0.5450	—
West Bengal	0.8882	0.8714	0.9055	—	—	—	—	—	—
Assam	0.9010	0.8913	0.8805	—	—	—	—	—	—
Manipur	0.9381	0.8990	0.9229	—	—	—	—	—	—
Tripura	0.8377	0.8628	0.8349	—	—	—	—	—	—
Andhra Pradesh	0.9515	0.8662	0.8666	0.7614	0.6271	0.6149	—	—	0.6000
Madras	0.8848	0.8910	0.8951	0.5083	0.5147	0.5245	0.6204	0.4682	0.4581
Kerala	0.9241	0.9136	0.9074	—	—	—	—	—	—
Gujarat	—	—	—	0.4617	0.5278	0.4976	—	—	—
Maharashtra	0.8621	0.8418	0.9125	0.6649	0.5358	0.5561	0.6527	0.8657	—
Mysore	0.8976	0.9047	0.8697	0.6096	0.6800	0.6962	0.5730	0.3879	0.4450

TABLE (17) (Contd.): RATIO OF DRY WEIGHT TO GREEN WEIGHT OF CEREAL CROPS OF WINTER SEASON

state	ragi			maize			wheat		
	sub-sample 1	sub-sample 2	sub-sample 3	sub-sample 1	sub-sample 2	sub-sample 3	sub-sample 1	sub-sample 2	sub-sample 3
(1)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)
Rajasthan	—	—	—	—	—	—	—	—	—
Jammu and Kashmir	—	—	—	—	—	—	—	—	—
Punjab	—	—	—	—	—	—	—	—	—
Delhi	—	—	—	—	—	—	—	—	—
Himachal Pradesh	—	—	—	—	—	—	—	—	—
Uttar Pradesh	—	—	—	—	—	—	—	—	—
Madhya Pradesh	0.8656	—	—	—	—	—	—	—	—
Bihar	0.8955	0.6933	—	—	—	—	—	—	—
Orissa	0.5646	0.6725	0.7292	—	—	—	—	—	—
West Bengal	—	—	—	—	—	—	—	—	—
Assam	—	—	—	—	—	—	—	—	—
Manipur	—	—	—	—	—	—	—	—	—
Tripura	—	—	—	—	—	—	—	—	—
Andhra Pradesh	0.5347	0.7075	0.7678	—	—	—	0.5432	—	—
Madras	0.4936	0.5163	0.5560	—	—	—	—	—	—
Kerala	—	—	—	—	—	—	—	—	—
Gujarat	—	—	—	—	—	—	—	—	—
Maharashtra	0.8176	—	—	—	—	—	—	—	—
Mysore	0.5934	0.5506	0.5951	—	—	—	0.3137	—	0.4683

TABLE (18): RATIO OF DRY WEIGHT TO GREEN WEIGHT OF CEREAL CROPS OF SPRING SEASON

state	paddy			jowar			bajra		
	sub-sample 1	sub-sample 2	sub-sample 3	sub-sample 1	sub-sample 2	sub-sample 3	sub-sample 1	sub-sample 2	sub-sample 3
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Rajasthan	—	—	—	—	—	—	—	—	—
Jammu and Kashmir	—	—	—	—	—	—	—	—	—
Punjab	—	—	—	—	—	—	—	—	—
Delhi	—	—	—	—	—	—	—	—	—
Himachal Pradesh	—	—	—	—	—	—	—	—	—
Uttar Pradesh	—	—	—	—	—	—	—	—	—
Madhya Pradesh	—	—	—	0.0000	—	—	—	—	—
Bihar	—	—	—	—	—	—	—	—	—
Orissa	—	—	—	—	—	—	—	—	—
West Bengal	—	—	—	—	—	—	—	—	—
Assam	—	—	—	—	—	—	—	—	—
Manipur	—	—	—	—	—	—	—	—	—
Tripura	—	—	—	—	—	—	—	—	—
Andhra Pradesh	0.8080	0.8601	0.8428	0.6093	0.5649	0.6755	—	—	—
Madras	0.9172	0.8971	0.8972	0.5558	0.6582	0.4474	0.5692	0.6427	—
Kerala	0.7681	0.9121	0.9224	—	—	—	—	—	—
Gujarat	—	—	—	0.4988	0.7399	—	—	—	—
Maharashtra	—	—	0.8573	0.5583	0.5659	0.5881	—	—	—
Mysore	—	—	0.8870	0.4763	0.6248	0.5899	—	—	—

TABLE (18)(Contd.): RATIO OF DRY WEIGHT TO GREEN WEIGHT OF CEREAL CROPS OF SPRING SEASON

state	ragi			maize			wheat			barley		
	sub-sample 1	sub-sample 2	sub-sample 3	sub-sample 1	sub-sample 2	sub-sample 3	sub-sample 1	sub-sample 2	sub-sample 3	sub-sample 1	sub-sample 2	sub-sample 3
(1)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)
Rajasthan	—	—	—	—	—	—	0.5539	0.5854	0.5728	0.7654	0.6479	0.6997
Jammu and Kashmir	—	—	—	—	—	—	0.6618	0.6550	0.6578	0.6313	0.6362	0.6262
Punjab	—	—	—	—	—	—	0.5730	0.6271	0.6064	0.6329	0.7322	0.8314
Delhi	—	—	—	—	—	—	0.6482	—	—	0.5919	—	—
Himachal Pradesh	—	—	—	—	—	—	—	0.7305	—	—	0.8087	—
Uttar Pradesh	—	—	—	—	—	—	0.6305	0.6606	0.6542	0.7289	0.7954	0.7543
Madhya Pradesh	—	—	—	—	—	—	0.6403	0.6152	0.6465	0.6938	0.7224	0.5599
Bihar	—	—	—	—	—	—	0.6257	0.6279	0.6515	0.7512	0.7547	0.7479
Orissa	—	—	—	—	—	—	—	—	—	—	—	—
West Bengal	—	—	—	—	—	—	—	0.5507	0.5086	0.5162	0.5861	0.5310
Assam	—	—	—	—	—	—	—	—	—	—	—	—
Manipur	—	—	—	—	—	—	—	—	—	—	—	—
Tripura	—	—	—	—	—	—	—	—	—	—	—	—
Andhra Pradesh	0.3945	0.6596	0.5327	0.3954	—	0.4770	0.6771	—	0.6763	—	—	—
Madras	0.4966	0.4700	0.5162	—	—	—	0.5274	—	—	—	—	—
Kerala	—	—	—	—	—	—	—	—	—	—	—	—
Gujarat	—	—	—	0.5770	—	—	0.5626	0.6234	0.5674	0.6514	—	0.4286
Maharashtra	—	—	—	—	—	—	0.5559	0.5973	0.6308	—	—	0.4000
Mysore	—	—	—	—	—	—	0.3593	0.7484	0.5790	—	—	—

Land Utilisation Survey and Crop-culting Experiments

TABLE (19): NUMBER OF SAMPLE VILLAGES PLANNED AND NUMBER SURVEYED FOR LAND UTILISATION SURVEY IN EACH SEASON BY STATE

state	number of sample villages planned per sub-sample per season	number of villages surveyed										
		autumn			winter				spring			
		sub-sample 1	sub-sample 2	total	sub-sample 1	sub-sample 2	sub-sample 3	total	sub-sample 1	sub-sample 2	sub-sample 3	total
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Rajasthan	54	54	53	107	54	53	52	159	54	53	45	152
Jammu & Kashmir	138	137	131	268	134	132	—	266	137	133	131	401
Punjab	48	48	47	95	47	48	45	140	48	42	46	136
Delhi and Himachal Pradesh	6	6	6	12	6	6	5	17	6	6	6	18
Uttar Pradesh	156	150	152	302	148	156	148	452	150	152	145	447
Madhya Pradesh	114	109	110	219	105	112	58	275	111	111	74	296
Bihar	120	120	119	239	120	120	117	357	120	119	117	356
Orissa	60	49	47	96	58	58	39	155	58	57	25	140
West Bengal	78	71	76	147	76	77	67	220	78	77	68	223
Assam	54	38	47	85	40	48	36	124	46	47	37	130
Manipur	—	5	6	11	6	6	5	17	5	6	5	16
Tripura	30	15	30	45	27	30	27	84	30	30	30	90
Andhra Pradesh	102	89	100	189	90	102	102	294	95	101	102	298
Madras	84	84	83	167	81	84	83	248	83	84	82	249
Kerala	48	47	47	94	48	48	48	144	48	48	48	144
Gujarat	48	45	46	91	47	47	36	130	48	47	43	138
Maharashtra	96	88	89	177	89	94	91	274	94	94	90	278
Mysore	60	60	68	118	69	60	53	172	60	60	53	173
total	1896	1815	1847	2462	1235	1279	1012	3526	1271	1267	1147	3685

Villages of sub-sample 3 were planned to be surveyed in winter and spring seasons only.

TABLE (20) : NUMBER OF SAMPLE VILLAGES PLANNED AND NUMBER SURVEYED FOR CROP-CUTTING EXPERIMENTS FOR EACH SEASON BY STATES

state	number of sample villages planned per sub-sample per season	number of villages surveyed										
		autumn			winter				spring			
		sub-sample 1	sub-sample 2	total	sub-sample 1	sub-sample 2	sub-sample 3	total	sub-sample 1	sub-sample 2	sub-sample 3	total
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Rajasthan	18	18	18	36	18	18	18	54	18	17	18	53
Jammu & Kashmir	46	46	44	90	46	45	—	91	46	44	43	133
Punjab	16	16	13	29	16	2	15	33	16	16	12	44
Delhi and Himachal Pradesh	2	2	2	4	2	—	2	4	2	2	2	6
Uttar Pradesh	52	51	51	102	50	50	46	146	50	46	49	145
Madhya Pradesh	38	37	34	71	36	35	22	95	36	37	32	107
Bihar	40	40	40	80	40	40	37	117	40	40	33	113
Orissa	20	20	17	37	20	19	17	56	19	19	6	44
West Bengal	26	23	22	45	26	25	22	74	26	25	24	75
Assam	18	13	13	26	15	16	12	43	14	15	14	43
Manipur	—	2	2	4	2	2	2	6	2	2	2	6
Tripura	10	6	—	6	9	9	10	28	10	5	10	25
Andhra Pradesh	34	32	34	66	30	33	32	95	32	34	25	91
Madras	28	28	28	56	28	28	26	82	28	28	26	82
Kerala	16	15	15	30	14	16	16	46	16	16	16	48
Gujarat	16	15	16	31	16	12	11	39	16	15	14	45
Maharashtra	32	32	30	62	32	28	24	84	32	30	28	90
Mysore	20	20	17	37	20	20	20	60	20	15	19	54
total	432	416	396	812	422	399	332	1153	425	406	373	1204

Villages of sub-samples 3 were planned to be surveyed in winter and spring seasons only.



TABLE (21.1): NUMBER OF CROP-CUTTING EXPERIMENTS CONDUCTED ON PADDY GROWN PURE AND IN MIXTURE WITH OTHER CROPS BY SEASONS AND STATES

sub-sample 1

state	autumn			winter			spring			total of 3 seasons		
	pure	mixed	total	pure	mixed	total	pure	mixed	total	pure	mixed	total
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Rajasthan	4	—	4	4	—	4	—	—	—	8	—	8
Jammu & Kashmir	137	—	137	—	—	—	—	—	—	137	—	137
Punjab	23	—	23	—	—	—	—	—	—	23	—	23
Delhi	—	—	—	—	—	—	—	—	—	—	—	—
Himachal Pradesh	—	—	—	—	—	—	—	—	—	—	—	—
Uttar Pradesh	132	21	153	97	2	99	—	—	—	229	23	252
Madhya Pradesh	71	11	82	69	—	69	—	—	—	140	11	151
Bihar	33	4	37	190	15	205	—	—	—	223	19	242
Orissa	23	3	26	106	—	106	5	—	5	134	3	137
West Bengal	34	—	34	118	3	121	—	—	—	152	3	155
Assam	18	—	18	70	—	70	—	—	—	88	—	88
Manipur	—	—	—	8	—	8	—	—	—	8	—	8
Tripura	8	—	8	29	—	29	—	—	—	37	—	37
Andhra Pradesh	36	6	42	118	—	118	43	—	43	197	6	203
Madras	80	—	80	83	—	83	104	1	105	267	1	268
Kerala	49	4	53	77	—	77	12	—	12	138	4	142
Gujarat	21	10	31	—	—	—	—	—	—	21	10	31
Maharashtra	102	7	109	26	1	27	—	—	—	128	8	136
Mysore	15	2	17	33	3	36	—	—	—	48	5	53
total	786	68	854	1028	24	1052	164	1	165	1978	93	2071

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TABLE (21.2): NUMBER OF CROP-CUTTING EXPERIMENTS CONDUCTED ON PADDY GROWN PURE AND IN MIXTURE WITH OTHER CROPS BY SEASONS AND STATES

sub-sample 2

state	autumn			winter			spring			total of 3 seasons		
	pure	mixed	total	pure	mixed	total	pure	mixed	total	pure	mixed	total
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Rajasthan	1	—	1	—	—	—	—	—	—	1	—	1
Jammu & Kashmir	105	—	105	—	—	—	—	—	—	105	—	105
Punjab	11	—	11	—	—	—	—	—	—	11	—	11
Delhi	—	—	—	—	—	—	—	—	—	—	—	—
Himachal Pradesh	—	—	—	—	—	—	—	—	—	—	—	—
Uttar Pradesh	137	24	161	150	3	153	—	—	—	287	27	314
Madhya Pradesh	66	1	67	70	—	70	—	—	—	136	1	137
Bihar	27	8	35	187	20	207	—	—	—	214	28	242
Orissa	39	—	39	100	—	100	—	—	—	139	—	139
West Bengal	31	1	32	131	0	131	—	—	—	162	1	163
Assam	13	—	13	89	1	90	—	—	—	102	1	103
Manipur	12	—	12	8	0	8	—	—	—	20	0	20
Tripura	—	—	—	49	0	49	—	—	—	49	0	49
Andhra Pradesh	37	1	38	137	0	137	51	0	51	225	1	226
Madras	61	—	61	85	0	85	106	0	106	252	0	252
Kerala	68	8	76	71	1	72	27	—	27	166	9	175
Gujarat	9	12	21	—	—	—	—	—	—	9	12	21
Maharashtra	97	10	107	17	—	17	—	—	—	114	10	124
Mysore	41	1	42	49	1	50	—	—	—	90	2	92
total	755	68	821	1143	26	1169	184	0	184	2082	92	2174

Land Utilisation Survey and Crop-cutting Experiments

TABLE (21.3): NUMBER OF CROP-CUTTING EXPERIMENTS CONDUCTED ON PADDY GROWN PURE AND IN MIXTURE WITH OTHER CROPS BY SEASONS AND STATES

sub-sample 3

state	winter			spring			total of 2 seasons		
	pure	mixed	total	pure	mixed	total	pure	mixed	total
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Rajasthan	—	—	—	—	—	—	—	—	—
Jammu & Kashmir	—	—	—	—	—	—	—	—	—
Punjab	—	—	—	—	—	—	—	—	—
Delhi	—	—	—	—	—	—	—	—	—
Himachal Pradesh	—	—	—	—	—	—	—	—	—
Uttar Pradesh	88	5	93	—	—	—	88	5	93
Madhya Pradesh	12	5	17	—	—	—	12	5	17
Bihar	193	4	197	—	—	—	193	4	197
Orissa	32	—	32	—	—	—	32	—	32
West Bengal	56	—	56	—	—	—	56	—	56
Assam	60	—	60	—	—	—	60	—	60
Manipur	6	—	6	—	—	—	6	—	6
Tripura	43	—	43	—	—	—	43	—	43
Andhra Pradesh	118	—	118	45	—	45	163	—	163
Madras	76	—	76	102	5	107	178	5	183
Kerala	69	—	69	12	—	12	81	—	81
Gujarat	—	—	—	—	—	—	—	—	—
Maharashtra	12	0	12	6	0	6	18	0	18
Mysore	32	—	32	8	—	8	40	—	40
total	797	14	811	173	5	178	970	19	989

Villages of sub-sample 3 were not planned to be surveyed in autumn season.

TABLE (21.4): NUMBER OF CROP-CUTTING EXPERIMENTS CONDUCTED ON PADDY GROWN PURE AND IN MIXTURE WITH OTHER CROPS BY SEASONS AND STATES

sub-samples 1, 2 and 3 combined

state	autumn			winter			spring			total of 3 seasons		
	pure	mixed	total	pure	mixed	total	pure	mixed	total	pure	mixed	total
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Rajasthan	5	—	5	4	—	4	—	—	—	9	—	9
Jammu & Kashmir	242	—	242	—	—	—	—	—	—	242	—	242
Punjab	34	—	34	—	—	—	—	—	—	34	—	34
Delhi	—	—	—	—	—	—	—	—	—	—	—	—
Himachal Pradesh	—	—	—	—	—	—	—	—	—	—	—	—
Uttar Pradesh	269	45	314	336	10	346	—	—	—	604	55	659
Madhya Pradesh	137	12	149	151	5	156	—	—	—	288	17	305
Bihar	60	12	72	570	39	609	—	—	—	630	51	681
Orissa	62	3	65	239	—	239	5	—	5	305	3	308
West Bengal	65	1	66	305	3	308	—	—	—	370	4	374
Assam	31	—	31	219	1	220	—	—	—	250	1	251
Manipur	12	—	12	22	—	22	—	—	—	34	—	34
Tripura	8	—	8	121	—	121	—	—	—	129	—	129
Andhra Pradesh	73	7	80	373	—	373	139	—	139	585	7	592
Madras	141	—	141	244	—	244	312	6	318	697	6	703
Kerala	117	12	129	217	1	218	51	—	51	385	13	398
Gujarat	30	22	52	—	—	—	—	—	—	30	22	52
Maharashtra	199	17	216	55	1	56	6	—	6	260	18	278
Mysore	56	3	59	114	4	118	8	—	8	176	7	183
total	1641	134	1875	2966	64	3032	521	6	527	5030	204	5234

Villages of sub-samples 3 were not planned to be surveyed in autumn season.

TABLE (22.1): NUMBER OF CROP-CUTTING EXPERIMENTS CONDUCTED ON JOWAR GROWN PURE AND IN MIXTURE WITH OTHER CROPS BY SEASONS AND STATES

sub-sample 1

state	autumn			winter			spring			total of 3 seasons		
	pure	mized	total	pure	mized	total	pure	mized	total	pure	mized	total
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Rajasthan	6	4	10	20	8	28	—	—	—	26	12	38
Jammu and Kashmir	—	—	—	—	—	—	—	—	—	—	—	—
Punjab	2	4	6	—	—	—	—	—	—	2	4	6
Delhi	—	—	—	—	—	—	—	—	—	—	—	—
Himachal Pradesh	—	—	—	—	—	—	—	—	—	—	—	—
Uttar Pradesh	—	—	—	2	140	142	—	—	—	2	140	142
Madhya Pradesh	2	6	8	3	145	148	—	4	4	5	155	160
Bihar	—	4	4	4	6	10	—	—	—	4	10	14
Orissa	—	—	—	—	10	10	—	—	—	—	10	10
West Bengal	—	—	—	—	—	—	—	—	—	—	—	—
Assam	—	—	—	—	—	—	—	—	—	—	—	—
Manipur	—	—	—	—	—	—	—	—	—	—	—	—
Tripura	—	—	—	—	—	—	—	—	—	—	—	—
Andhra Pradesh	10	46	56	36	17	53	16	40	56	62	103	165
Madras	—	—	—	8	44	50	2	—	2	8	44	52
Kerala	—	—	—	—	—	—	—	—	—	—	—	—
Gujarat	—	4	4	—	12	12	24	9	33	24	25	49
Maharashtra	2	6	8	24	136	160	62	46	108	88	188	276
Mysore	—	17	17	—	30	30	10	38	48	10	85	95
total	22	91	113	95	548	643	114	137	251	231	776	1007

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TABLE (22.2): NUMBER OF CROP-CUTTING EXPERIMENTS CONDUCTED ON JOWAR GROWN PURE AND IN MIXTURE WITH OTHER CROPS BY SEASONS AND STATES

sub-sample 2

state	autumn			winter			spring			total of 3 seasons		
	pure	mixed	total	pure	mixed	total	pure	mixed	total	pure	mixed	total
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Rajasthan	2	4	6	10	12	22	—	—	—	12	16	28
Jammu and Kashmir	—	—	—	—	—	—	—	—	—	—	—	—
Punjab	—	—	—	—	—	—	—	—	—	—	—	—
Delhi	—	—	—	—	—	—	—	—	—	—	—	—
Himachal Pradesh	—	—	—	—	—	—	—	—	—	—	—	—
Uttar Pradesh	—	2	2	—	107	107	—	—	—	—	109	109
Madhya Pradesh	—	1	1	2	156	158	—	—	—	2	157	159
Bihar	—	4	4	10	6	16	—	—	—	10	10	20
Orissa	—	—	—	—	6	6	—	—	—	—	6	6
West Bengal	—	—	—	—	—	—	—	—	—	—	—	—
Assam	—	—	—	—	—	—	—	—	—	—	—	—
Manipur	—	—	—	—	—	—	—	—	—	—	—	—
Tripura	—	—	—	—	—	—	—	—	—	—	—	—
Andhra Pradesh	22	49	71	6	60	66	10	6	16	38	116	153
Madras	10	—	10	10	42	52	10	0	10	30	42	72
Kerala	—	—	—	—	—	—	—	—	—	—	—	—
Gujarat	16	6	22	8	12	20	36	—	36	60	18	78
Maharashtra	—	—	—	4	117	121	48	71	119	52	188	240
Mysore	6	2	8	—	44	44	12	12	24	18	58	76
total	56	68	124	50	562	612	110	89	205	222	719	941

Land Utilisation Survey and Crop-cutting Experiments

TABLE (22.3): NUMBER OF CROP-CUTTING EXPERIMENTS CONDUCTED ON JOWAR GROWN PURE AND IN MIXTURE WITH OTHER CROPS BY SEASONS AND STATES

sub-sample 3

state	winter			spring			total of 2 seasons		
	pure	mixed	total	pure	mixed	total	pure	mixed	total
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Rajasthan	2	12	14	—	—	—	2	12	14
Jammu and Kashmir	—	—	—	—	—	—	—	—	—
Punjab	—	—	—	—	—	—	—	—	—
Delhi	—	—	—	—	—	—	—	—	—
Himachal Pradesh	—	—	—	—	—	—	—	—	—
Uttar Pradesh	4	101	105	—	—	—	4	101	105
Madhya Pradesh	10	89	99	—	—	—	10	89	99
Bihar	4	—	4	—	—	—	4	—	4
Orissa	—	—	—	—	—	—	—	—	—
West Bengal	—	—	—	—	—	—	—	—	—
Assam	—	—	—	—	—	—	—	—	—
Manipur	—	—	—	—	—	—	—	—	—
Tripura	—	—	—	—	—	—	—	—	—
Andhra Pradesh	35	40	75	14	36	50	49	76	125
Madras	16	30	46	12	—	12	28	30	58
Kerala	—	—	—	—	—	—	—	—	—
Gujarat	12	—	12	—	—	—	12	—	12
Maharashtra	24	75	99	58	43	101	82	118	200
Mysore	2	29	31	15	21	36	17	50	67
total	109	375	485	99	100	199	208	476	684

Villages of sub-sample 3 were not planned to be surveyed in autumn season.

TABLE (22.4): NUMBER OF CROP-CUTTING EXPERIMENTS CONDUCTED ON JOWAR GROWN PURE AND IN MIXTURE WITH OTHER CROPS BY SEASONS AND STATES

sub-samples 1, 2 and 3 combined

state	autumn			winter			spring			total of 3 seasons		
	pure	mized	total	pure	mized	total	pure	mized	total	pure	mized	total
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Rajasthan	8	8	16	32	32	64	—	—	—	40	40	80
Jammu and Kashmir	—	—	—	—	—	—	—	—	—	—	—	—
Punjab	2	4	6	—	—	—	—	—	—	2	4	6
Delhi	—	—	—	—	—	—	—	—	—	—	—	—
Himachal Pradesh	—	—	—	—	—	—	—	—	—	—	—	—
Uttar Pradesh	—	2	2	6	348	354	—	—	—	6	350	356
Madhya Pradesh	2	7	9	15	390	405	—	4	4	17	401	418
Bihar	—	8	8	18	12	30	—	—	—	18	20	38
Orissa	—	—	—	—	16	16	—	—	—	—	16	16
West Bengal	—	—	—	—	—	—	—	—	—	—	—	—
Assam	—	—	—	—	—	—	—	—	—	—	—	—
Manipur	—	—	—	—	—	—	—	—	—	—	—	—
Tripura	—	—	—	—	—	—	—	—	—	—	—	—
Andhra Pradesh	32	95	127	77	117	194	40	82	122	149	294	443
Madras	10	—	10	32	116	148	24	—	24	66	116	182
Kerala	—	—	—	—	—	—	—	—	—	—	—	—
Gujarat	16	10	26	20	24	44	60	9	69	96	43	139
Maharashtra	2	6	8	52	328	380	168	160	328	222	494	716
Mysore	6	19	25	2	103	105	37	71	108	45	193	238
total	78	159	237	254	1486	1740	329	326	655	661	1971	2632

Villages of sub-sample 3 were not planned to be surveyed in autumn season.



TABLE (23.1): NUMBER OF CROP-CUTTING EXPERIMENTS CONDUCTED ON BAJRA GROWN PURE AND IN MIXTURE WITH OTHER CROPS BY SEASONS AND STATES

sub-sample 1

state	autumn			winter			spring			total of 3 seasons		
	pure	mixed	total	pure	mixed	total	pure	mixed	total	pure	mixed	total
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Rajasthan	26	88	114	—	—	—	—	—	—	28	88	114
Jammu and Kashmir	14	6	20	—	—	—	—	—	—	14	6	20
Punjab	13	8	21	—	—	—	—	—	—	13	8	21
Delhi	8	4	12	—	—	—	—	—	—	8	4	12
Himachal Pradesh	—	—	—	—	—	—	—	—	—	—	67	67
Uttar Pradesh	—	59	59	—	8	8	—	—	—	2	34	36
Madhya Pradesh	—	32	34	—	2	2	—	—	—	—	—	—
Bihar	—	—	—	—	—	—	—	—	—	—	—	—
Orissa	—	—	—	—	—	—	—	—	—	—	—	—
West Bengal	—	—	—	—	—	—	—	—	—	—	—	—
Assam	—	—	—	—	—	—	—	—	—	—	—	—
Manipur	—	—	—	—	—	—	—	—	—	—	—	—
Tripura	—	—	—	—	—	—	—	—	—	56	57	113
Andhra Pradesh	56	57	113	—	—	—	—	—	—	—	—	—
Madras	18	12	30	2	12	14	8	—	8	28	24	52
Kerala	—	—	—	—	—	—	—	—	—	—	—	—
Gujarat	32	40	72	—	—	—	—	—	—	32	40	72
Maharashtra	2	78	80	8	12	20	—	—	—	10	90	100
Mysore	—	27	27	2	3	5	—	—	—	2	30	32
total	171	411	582	12	37	49	8	—	8	191	448	639

National Sample Survey

TABLE (23.2) : NUMBER OF CROP-CUTTING EXPERIMENTS CONDUCTED ON BAJRA GROWN PURE AND IN MIXTURE WITH OTHER CROPS BY SEASONS AND STATES

sub-sample 2

state	autumn			winter			spring			total of 3 seasons		
	pure	mixed	total	pure	mixed	total	pure	mixed	total	pure	mixed	total
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Rajasthan	36	92	128	—	—	—	—	—	—	36	92	128
Jammu & Kashmir	28	20	48	—	—	—	—	—	—	28	20	48
Punjab	2	36	38	—	—	—	—	—	—	2	36	38
Delhi	—	—	—	—	—	—	—	—	—	—	—	—
Himochal Pradesh	—	—	—	—	—	—	—	—	—	—	—	—
Uttar Pradesh	2	40	42	—	39	39	—	—	—	2	79	81
Madhya Pradesh	—	12	12	4	2	6	—	—	—	4	14	18
Bihar	—	13	13	—	—	—	—	—	—	—	13	13
Orissa	—	—	—	—	2	2	—	—	—	—	2	2
West Bengal	—	—	—	—	—	—	—	—	—	—	—	—
Assam	—	—	—	—	—	—	—	—	—	—	—	—
Manipur	—	—	—	—	—	—	—	—	—	—	—	—
Tripura	—	—	—	—	—	—	—	—	—	—	—	—
Andhra Pradesh	39	54	92	—	—	—	—	—	—	39	54	92
Madras	22	20	42	13	18	31	2	2	4	37	40	77
Kerala	—	—	—	—	—	—	—	—	—	—	—	—
Gujarat	36	48	84	—	—	—	—	—	—	36	48	84
Maharashtra	10	45	55	—	30	30	—	—	—	10	75	85
Mysore	—	8	8	6	10	16	—	—	—	6	18	24
all-India total	174	388	562	23	101	124	2	2	4	199	491	690

Land Utilisation Survey and Crop-cutting Experiments

TABLE (23.3): NUMBER OF CROP-CUTTING EXPERIMENTS CONDUCTED ON BAJRA GROWN PURE AND IN MIXTURE WITH OTHER CROPS BY SEASONS AND STATES

sub-sample 3

state	winter			spring			total of 2 seasons		
	pure	mixed	total	pure	mixed	total	pure	mixed	total
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Rajasthan	—	—	—	—	—	—	—	—	—
Jammu and Kashmir	—	—	—	—	—	—	—	—	—
Punjab	—	—	—	—	—	—	—	—	—
Delhi	—	—	—	—	—	—	—	—	—
Himachal Pradesh	—	—	—	—	—	—	—	—	—
Uttar Pradesh	—	3	3	—	—	—	—	3	3
Madhya Pradesh	—	—	—	—	—	—	—	—	—
Bihar	—	—	—	—	—	—	—	—	—
Orissa	—	—	—	—	—	—	—	—	—
West Bengal	—	—	—	—	—	—	—	—	—
Assam	—	—	—	—	—	—	—	—	—
Manipur	—	—	—	—	—	—	—	—	—
Tripura	—	—	—	—	—	—	—	—	—
Andhra Pradesh	—	2	2	—	—	—	—	2	2
Madras	4	14	18	2	—	2	6	14	20
Kerala	—	—	—	—	—	—	—	—	—
Gujarat	—	—	—	—	—	—	—	—	—
Maharashtra	—	—	—	—	—	—	—	—	—
Mysore	—	7	7	—	—	—	—	7	7
total	4	26	30	2	—	2	6	26	32

Villages of sub-sample 3 were not planned to be surveyed in autumn season.

TABLE (23.4): NUMBER OF CROP-CUTTING EXPERIMENTS CONDUCTED ON BAJRA GROWN PURE AND IN MIXTURE WITH OTHER CROPS BY SEASONS AND STATES

sub-samples 1, 2 and 3 combined

state	autumn			winter			spring			total of 3 seasons		
	pure	mixed	total	pure	mixed	total	pure	mixed	total	pure	mixed	total
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Rajasthan	62	180	242	—	—	—	—	—	—	62	180	242
Jammu and Kashmir	42	26	68	—	—	—	—	—	—	42	26	68
Punjab	15	44	59	—	—	—	—	—	—	15	44	59
Delhi	8	4	12	—	—	—	—	—	—	8	4	12
Himachal Pradesh	—	—	—	—	—	—	—	—	—	—	—	—
Uttar Pradesh	2	99	101	—	60	60	—	—	—	2	149	151
Madhya Pradesh	2	44	46	4	4	8	—	—	—	6	48	54
Bihar	—	13	13	—	—	—	—	—	—	—	13	13
Orissa	—	—	—	—	2	2	—	—	—	—	2	2
West Bengal	—	—	—	—	—	—	—	—	—	—	—	—
Assam	—	—	—	—	—	—	—	—	—	—	—	—
Manipur	—	—	—	—	—	—	—	—	—	—	—	—
Tripura	—	—	—	—	—	—	—	—	—	—	—	—
Andhra Pradesh	94	111	205	—	2	2	—	—	—	94	113	207
Madras	40	32	72	19	44	63	12	2	14	71	78	149
Kerala	—	—	—	—	—	—	—	—	—	—	—	—
Gujarat	68	88	156	—	—	—	—	—	—	68	88	156
Maharashtra	12	123	135	8	42	50	—	—	—	20	165	185
Mysore	—	35	35	8	20	28	—	—	—	8	55	63
total	345	799	1144	39	164	203	12	2	14	396	965	1361

Villages of sub-sample 3 were not planned to be surveyed in autumn season.

TABLE (24.1): NUMBER OF CROP-CUTTING EXPERIMENTS CONDUCTED ON RAGI GROWN PURE AND IN MIXTURE WITH OTHER CROPS BY SEASONS AND STATES

sub-sample 1

state	autumn			winter			spring			total of 3 seasons		
	pure	mixed	total	pure	mixed	total	pure	mixed	total	pure	mixed	total
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Rajasthan	—	—	—	—	—	—	—	—	—	—	—	—
Jammu and Kashmir	—	—	—	—	—	—	—	—	—	—	—	—
Punjab	—	—	—	—	—	—	—	—	—	—	—	—
Delhi	—	—	—	—	—	—	—	—	—	—	—	—
Himachal Pradesh	—	—	—	—	—	—	—	—	—	1	6	7
Uttar Pradesh	1	6	7	—	—	—	—	—	—	1	1	2
Madhya Pradesh	—	—	—	1	1	2	—	—	—	27	4	31
Bihar	26	4	30	1	—	1	—	—	—	—	—	—
Orissa	5	4	9	3	—	3	—	—	—	8	4	12
West Bengal	—	—	—	—	—	—	—	—	—	—	—	—
Assam	—	—	—	—	—	—	—	—	—	—	—	—
Manipur	—	—	—	—	—	—	—	—	—	—	—	—
Tripura	—	—	—	—	—	—	—	—	—	—	—	—
Andhra Pradesh	23	2	25	6	—	6	17	6	23	46	8	54
Madras	21	—	21	23	6	29	31	1	32	75	7	82
Kerala	4	—	4	—	—	—	—	—	—	4	—	4
Gujarat	1	—	1	—	—	—	—	—	—	1	—	1
Maharashtra	8	—	8	2	—	2	—	—	—	10	—	10
Mysore	10	5	15	3	24	27	—	—	—	13	29	42
total	99	21	120	39	31	70	48	7	55	186	59	245

National Sample Survey

TABLE (24.2): NUMBER OF CROP-CUTTING EXPERIMENTS CONDUCTED ON RAGI GROWN PURE AND IN MIXTURE WITH OTHER CROPS BY SEASONS AND STATES

sub-sample 2

state	autumn			winter			spring			total of 3 seasons		
	pure	mixed	total	pure	mixed	total	pure	mixed	total	pure	mixed	total
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Rajasthan	—	—	—	—	—	—	—	—	—	—	—	—
Jammu and Kashmir	—	—	—	—	—	—	—	—	—	—	—	—
Punjab	—	—	—	—	—	—	—	—	—	—	—	—
Delhi	—	—	—	—	—	—	—	—	—	—	—	—
Himachal Pradesh	—	—	—	—	—	—	—	—	—	—	—	—
Uttar Pradesh	2	14	16	—	—	—	—	—	—	2	14	16
Madhya Pradesh	—	—	—	—	—	—	—	—	—	—	—	—
Bihar	20	10	30	1	0	1	—	—	—	21	10	31
Orissa	—	—	—	1	9	10	—	—	—	1	9	10
West Bengal	—	—	—	—	—	—	—	—	—	—	—	—
Assam	—	—	—	—	—	—	—	—	—	—	—	—
Manipur	—	—	—	—	—	—	—	—	—	—	—	—
Tripura	—	—	—	—	—	—	—	—	—	—	—	—
Andhra Pradesh	36	—	36	1	5	6	26	1	27	63	6	69
Madras	34	—	34	4	10	14	26	1	27	64	11	75
Kerala	—	—	—	—	—	—	—	—	—	—	—	—
Gujarat	2	1	3	—	—	—	—	—	—	2	1	3
Maharashtra	3	—	3	—	—	—	—	—	—	3	—	3
Mysore	17	6	23	3	24	27	—	—	—	20	30	50
total	114	31	145	10	48	58	52	2	54	176	61	237

TABLE (24.3): NUMBER OF CROP-CUTTING EXPERIMENTS CONDUCTED ON RAGI GROWN PURE AND IN MIXTURE WITH OTHER CROPS BY SEASONS AND STATES

sub-sample 3

state	winter			spring			total of 2 seasons		
	pure	mixed	total	pure	mixed	total	pure	mixed	total
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Rajasthan	—	—	—	—	—	—	—	—	—
Jammu and Kashmir	—	—	—	—	—	—	—	—	—
Punjab	—	—	—	—	—	—	—	—	—
Delhi	—	—	—	—	—	—	—	—	—
Himachal Pradesh	—	—	—	—	—	—	—	—	—
Uttar Pradesh	—	—	—	—	—	—	—	—	—
Madhya Pradesh	—	—	—	—	—	—	—	—	—
Bihar	—	—	—	—	—	—	—	—	—
Orissa	2	—	2	—	—	—	2	—	2
West Bengal	—	—	—	—	—	—	—	—	—
Assam	—	—	—	—	—	—	—	—	—
Manipur	—	—	—	—	—	—	—	—	—
Tripura	—	—	—	—	—	—	—	—	—
Andhra Pradesh	5	2	7	19	1	20	24	3	27
Madras	18	7	25	22	1	23	40	8	48
Kerala	—	—	—	—	—	—	—	—	—
Gujarat	—	—	—	—	—	—	—	—	—
Maharashtra	—	—	—	—	—	—	—	—	—
Mysore	2	13	15	—	—	—	2	13	15
total	27	22	49	41	2	43	68	24	92

Villages of sub-sample 3 were not planned to be surveyed in autumn season.

TABLE (24.4): NUMBER OF CROP-CUTTING EXPERIMENTS CONDUCTED ON RAGI GROWN PURE AND IN MIXTURE WITH OTHER CROPS BY SEASONS AND STATES

sub-samples 1, 2 and 3 combined

state	autumn			winter			spring			total of 3 seasons		
	pure	mixed	total	pure	mixed	total	pure	mixed	total	pure	mixed	total
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Rajasthan	—	—	—	—	—	—	—	—	—	—	—	—
Jammu and Kashmir	—	—	—	—	—	—	—	—	—	—	—	—
Punjab	—	—	—	—	—	—	—	—	—	—	—	—
Delhi	—	—	—	—	—	—	—	—	—	—	—	—
Himachal Pradesh	—	—	—	—	—	—	—	—	—	—	—	—
Uttar Pradesh	3	20	23	—	—	—	—	—	—	3	20	23
Madhya Pradesh	—	—	—	1	1	2	—	—	—	1	1	2
Bihar	46	14	60	2	0	2	—	—	—	48	14	62
Orissa	5	4	9	6	9	15	—	—	—	11	13	24
West Bengal	—	—	—	—	—	—	—	—	—	—	—	—
Assam	—	—	—	—	—	—	—	—	—	—	—	—
Manipur	—	—	—	—	—	—	—	—	—	—	—	—
Tripura	—	—	—	—	—	—	—	—	—	—	—	—
Andhra Pradesh	59	2	61	12	7	19	62	8	70	133	17	150
Madras	55	—	55	45	23	68	79	3	82	179	26	205
Kerala	4	—	4	—	—	—	—	—	—	4	—	4
Gujarat	3	1	4	—	—	—	—	—	—	3	1	4
Maharashtra	11	—	11	2	—	2	—	—	—	13	—	13
Mysore	27	11	38	8	61	69	—	—	—	35	72	107
total	213	52	265	76	101	177	141	11	152	430	164	594

Villages of sub-sample 3 were not planned to be surveyed in autumn season.



TABLE (25.1): NUMBER OF CROP-CUTTING EXPERIMENTS CONDUCTED ON MAIZE GROWN PURE AND IN MIXTURE WITH OTHER CROPS BY SEASONS AND STATES

sub-sample 1

state	autumn			winter			spring			total of 3 seasons		
	pure	mixed	total	pure	mixed	total	pure	mixed	total	pure	mixed	total
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Rajasthan	42	8	50	—	—	—	—	—	—	42	8	50
Jammu and Kashmir	197	22	219	—	—	—	—	—	—	197	22	219
Punjab	24	20	44	—	—	—	—	—	—	24	20	44
Delhi	—	—	—	—	—	—	—	—	—	—	—	—
Himachal Pradesh	—	—	—	—	—	—	—	—	—	—	—	—
Uttar Pradesh	26	124	150	—	—	—	—	—	—	26	124	150
Madhya Pradesh	18	53	71	—	—	—	—	—	—	18	53	71
Bihar	72	126	198	—	—	—	—	—	—	72	126	198
Orissa	6	2	8	—	—	—	—	—	—	6	2	8
West Bengal	—	—	—	—	—	—	—	—	—	—	—	—
Assam	—	—	—	—	—	—	—	—	—	—	—	—
Manipur	—	—	—	—	—	—	—	—	—	—	—	—
Tripura	—	—	—	—	—	—	—	—	—	—	—	—
Andhra Pradesh	18	28	46	4	—	4	6	—	6	28	28	56
Madras	—	—	—	—	—	—	—	—	—	—	—	—
Kerala	—	—	—	—	—	—	—	—	—	—	—	—
Gujarat	6	14	20	—	—	—	2	—	2	8	14	22
Maharashtra	10	—	10	—	—	—	2	—	2	12	—	12
Mysore	—	—	—	—	—	—	—	—	—	—	—	—
total	419	397	816	4	—	4	10	—	10	433	397	830

National Sample Survey

TABLE (25.2): NUMBER OF CROP-CUTTING EXPERIMENTS CONDUCTED ON MAIZE GROWN PURE AND IN MIXTURE WITH OTHER CROPS BY SEASONS AND STATES

sub-sample 2

state	autumn			winter			spring			total of 3 seasons		
	pure	mixed	total	pure	mixed	total	pure	mixed	total	pure	mixed	total
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Rajasthan	56	24	80	—	—	—	—	—	—	56	24	80
Jammu and Kashmir	222	14	236	—	—	—	—	—	—	222	14	236
Punjab	44	12	56	—	—	—	—	—	—	44	12	56
Delhi	—	—	—	—	—	—	—	—	—	—	—	—
Himochal Pradesh	8	4	12	—	—	—	—	—	—	8	4	12
Uttar Pradesh	14	108	122	—	—	—	—	—	—	14	108	122
Madhya Pradesh	50	44	94	—	—	—	—	—	—	50	44	94
Bihar	58	131	189	—	—	—	—	—	—	58	131	189
Orissa	2	—	2	—	—	—	—	—	—	2	—	2
West Bengal	—	—	—	—	—	—	—	—	—	—	—	—
Assam	10	2	12	—	—	—	—	—	—	10	2	12
Manipur	—	—	—	—	—	—	—	—	—	—	—	—
Tripura	—	—	—	—	—	—	—	—	—	—	—	—
Andhra Pradesh	21	8	29	2	0	2	—	—	—	23	8	31
Madras	2	—	2	—	—	—	—	2	2	2	2	4
Kerala	—	—	—	—	—	—	—	—	—	—	—	—
Gujarat	4	4	8	—	—	—	—	—	—	4	4	8
Maharashtra	4	14	18	—	—	—	—	—	—	4	14	18
Mysore	—	—	—	—	—	—	—	—	—	—	—	—
total	495	365	860	2	0	2	—	2	2	497	367	864

Land Utilization Survey and Crop-cutting Experiments

TABLE (25.3): NUMBER OF CROP-CUTTING EXPERIMENTS CONDUCTED ON MAIZE GROWN PURE AND IN MIXTURE WITH OTHER CROPS BY SEASONS AND STATES

sub-sample 3

state	winter			spring			total of 2 seasons		
	pure	mixed	total	pure	mixed	total	pure	mixed	total
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Rajasthan	—	—	—	—	—	—	—	—	—
Jammu and Kashmir	—	—	—	—	—	—	—	—	—
Punjab	—	—	—	—	—	—	—	—	—
Delhi	—	—	—	—	—	—	—	—	—
Himachal Pradesh	—	—	—	—	—	—	—	—	—
Uttar Pradesh	—	—	—	—	—	—	—	—	—
Madhya Pradesh	—	—	—	—	—	—	—	—	—
Bihar	—	—	—	—	—	—	—	—	—
Orissa	—	—	—	—	—	—	—	—	—
West Bengal	—	—	—	—	—	—	—	—	—
Assam	—	—	—	—	—	—	—	—	—
Manipur	—	—	—	—	—	—	—	—	—
Tripura	—	—	—	—	—	—	—	—	—
Andhra Pradesh	—	—	—	6	—	6	6	—	6
Madras	—	—	—	—	—	—	—	—	—
Kerala	—	—	—	—	—	—	—	—	—
Gujarat	—	—	—	—	—	—	—	—	—
Maharashtra	—	—	—	—	—	—	—	—	—
Mysore	—	—	—	—	—	—	—	—	—
total	—	—	—	6	—	6	6	—	6

National Sample Survey

42

Villages of sub-sample 3 were not planned to be surveyed in autumn season.

TABLE (25.4): NUMBER OF CROP-CUTTING EXPERIMENTS CONDUCTED ON MAIZE GROWN PURE AND IN MIXTURE WITH OTHER CROPS BY SEASONS AND STATES

sub-samples 1, 2 and 3 combined

state	autumn			winter			spring			total of 3 seasons		
	pure	mixed	total	pure	mixed	total	pure	mixed	total	pure	mixed	total
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Rajasthan	98	32	130	—	—	—	—	—	—	98	32	130
Jammu and Kashmir	419	36	455	—	—	—	—	—	—	419	36	455
Punjab	68	32	100	—	—	—	—	—	—	68	32	100
Delhi	—	—	—	—	—	—	—	—	—	—	—	—
Himachal Pradesh	8	4	12	—	—	—	—	—	—	8	4	12
Uttar Pradesh	40	232	272	—	—	—	—	—	—	40	232	272
Madhya Pradesh	68	97	165	—	—	—	—	—	—	68	97	165
Bihar	130	257	387	—	—	—	—	—	—	130	257	387
Orissa	8	2	10	—	—	—	—	—	—	8	2	10
West Bengal	—	—	—	—	—	—	—	—	—	—	—	—
Assam	10	2	12	—	—	—	—	—	—	10	2	12
Manipur	—	—	—	—	—	—	—	—	—	—	—	—
Tripura	—	—	—	—	—	—	—	—	—	—	—	—
Andhra Pradesh	39	36	75	6	0	6	12	—	12	57	36	93
Madras	2	—	2	—	—	—	—	2	2	2	2	4
Kerala	—	—	—	—	—	—	—	—	—	—	—	—
Gujarat	10	18	28	—	—	—	2	—	2	12	18	30
Maharashtra	14	14	28	—	—	—	2	—	2	16	14	30
Mysore	—	—	—	—	—	—	—	—	—	—	—	—
<b>total</b>	<b>914</b>	<b>762</b>	<b>1676</b>	<b>6</b>	<b>0</b>	<b>6</b>	<b>16</b>	<b>2</b>	<b>18</b>	<b>936</b>	<b>764</b>	<b>1700</b>

Villages of sub-sample 3 were not planned to be surveyed in autumn season.

TABLE (26.1): NUMBER OF CROP-CUTTING EXPERIMENTS CONDUCTED ON WHEAT GROWN PURE AND IN MIXTURE WITH OTHER CROPS BY SEASONS AND STATES

sub-sample 1

state	autumn			winter			spring			total of 3 seasons		
	pure	mixed	total	pure	mixed	total	pure	mixed	total	pure	mixed	total
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Rajasthan	—	—	—	—	—	—	28	72	100	28	72	100
Jammu and Kashmir	—	—	—	—	—	—	61	12	73	61	12	73
Punjab	—	—	—	—	—	—	37	82	119	37	82	119
Delhi	—	—	—	—	—	—	1	4	5	1	4	5
Himachal Pradesh	—	—	—	—	—	—	—	—	—	—	—	—
Uttar Pradesh	—	—	—	—	—	—	30	403	433	30	403	433
Madhya Pradesh	—	—	—	—	—	—	56	83	139	56	83	139
Bihar	—	—	—	—	—	—	26	154	180	26	154	180
Orissa	—	—	—	—	—	—	—	—	—	—	—	—
West Bengal	—	—	—	—	—	—	—	—	—	—	—	—
Assam	—	—	—	—	—	—	—	—	—	—	—	—
Manipur	—	—	—	—	—	—	—	—	—	—	—	—
Tripura	—	—	—	—	—	—	—	—	—	—	—	—
Andhra Pradesh	—	—	—	1	—	1	2	2	4	3	2	5
Madras	—	—	—	—	—	—	1	—	1	1	—	1
Kerala	—	—	—	—	—	—	—	—	—	—	—	—
Gujarat	—	—	—	—	—	—	44	9	53	44	9	53
Maharashtra	—	—	—	—	—	—	64	10	74	64	10	74
Mysore	—	—	—	—	12	12	2	20	22	2	32	34
total	—	—	—	1	12	13	252	851	1203	253	853	1216

TABLE (26.2): NUMBER OF CROP-CUTTING EXPERIMENTS CONDUCTED ON WHEAT GROWN PURE AND IN MIXTURE WITH OTHER CROPS BY SEASONS AND STATES

sub-sample 2

state	autumn			winter			spring			total of 3 seasons		
	pure	mixed	total	pure	mixed	total	pure	mixed	total	pure	mixed	total
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Rajasthan	—	—	—	—	—	—	33	51	84	33	51	84
Jammu and Kashmir	—	—	—	—	—	—	45	32	77	45	32	77
Punjab	—	—	—	—	—	—	42	82	124	42	82	124
Delhi	—	—	—	—	—	—	—	—	—	—	—	—
Himachal Pradesh	—	—	—	—	—	—	9	—	9	9	—	9
Uttar Pradesh	—	—	—	—	—	—	21	363	384	21	363	384
Madhya Pradesh	—	—	—	—	—	—	75	118	193	75	118	193
Bihar	—	—	—	—	—	—	28	187	215	28	187	215
Orissa	—	—	—	—	—	—	—	—	—	—	—	—
West Bengal	—	—	—	—	—	—	7	6	13	7	6	13
Assam	—	—	—	—	—	—	—	—	—	—	—	—
Manipur	—	—	—	—	—	—	—	—	—	—	—	—
Tripura	—	—	—	—	—	—	—	—	—	—	—	—
Andhra Pradesh	—	—	—	—	—	—	—	—	—	—	—	—
Madras	—	—	—	—	—	—	—	—	—	—	—	—
Kerala	—	—	—	—	—	—	—	—	—	—	—	—
Gujarat	—	—	—	—	—	—	36	6	42	36	6	42
Maharashtra	—	—	—	—	—	—	47	25	72	47	25	72
Mysore	—	—	—	—	—	—	—	10	10	—	10	10
total	—	—	—	—	—	—	343	880	1223	343	880	1223

Land Utilisation Survey and Crop-cutting Experiments

TABLE (26.3): NUMBER OF CROP-CUTTING EXPERIMENTS CONDUCTED ON WHEAT GROWN PURE AND IN MIXTURE WITH OTHER CROPS BY SEASONS AND STATES

sub-sample 3

state	winter			spring			total of 2 seasons		
	pure	mixed	total	pure	mixed	total	pure	mixed	total
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Rajaathan	—	—	—	26	52	78	26	52	78
Jammu and Kashmir	—	—	—	42	14	56	42	14	56
Punjab	—	—	—	44	70	114	44	70	114
Delhi	—	—	—	—	—	—	—	—	—
Himachal Pradesh	—	—	—	5	—	5	5	—	5
Uttar Pradesh	—	—	—	35	376	414	35	376	414
Madhya Pradesh	—	—	—	76	64	140	76	64	140
Bihar	—	—	—	31	129	160	31	129	160
Orissa	—	—	—	—	—	—	—	—	—
West Bengal	—	—	—	2	5	7	2	5	7
Assam	—	—	—	—	—	—	—	—	—
Manipur	—	—	—	—	—	—	—	—	—
Tripura	—	—	—	—	—	—	—	—	—
Andhra Pradesh	—	—	—	2	—	2	2	—	2
Madras	—	—	—	—	—	—	—	—	—
Kerala	—	—	—	—	—	—	—	—	—
Gujarat	—	—	—	34	8	42	34	8	42
Maharashtra	—	—	—	44	32	76	44	32	76
Mysore	—	8	8	11	—	11	11	8	19
total	—	8	8	355	750	1105	355	758	1113

National Sample Survey

Villages of sub-sample 3 were not planned to be surveyed in autumn season.

TABLE (26.4): NUMBER OF CROP-CUTTING EXPERIMENTS CONDUCTED ON WHEAT GROWN PURE AND IN MIXTURE WITH OTHER CROPS BY SEASONS AND STATES

sub-samples 1, 2 and 3 combined

state	autumn			winter			spring			total of 3 seasons		
	pure	mixed	total	pure	mixed	total	pure	mixed	total	pure	mixed	total
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Rajasthan	—	—	—	—	—	—	87	175	262	87	175	262
Jammu and Kashmir	—	—	—	—	—	—	148	58	206	148	58	206
Punjab	—	—	—	—	—	—	123	234	357	123	234	357
Delhi	—	—	—	—	—	—	1	4	5	1	4	5
Himachal Pradesh	—	—	—	—	—	—	14	—	14	14	—	14
Uttar Pradesh	—	—	—	—	—	—	89	1142	1231	89	1142	1231
Madhya Pradesh	—	—	—	—	—	—	207	265	472	207	265	472
Bihar	—	—	—	—	—	—	85	470	555	85	470	555
Orissa	—	—	—	—	—	—	—	—	—	—	—	—
West Bengal	—	—	—	—	—	—	9	11	20	9	11	20
Assam	—	—	—	—	—	—	—	—	—	—	—	—
Manipur	—	—	—	—	—	—	—	—	—	—	—	—
Tripura	—	—	—	—	—	—	—	—	—	—	—	—
Andhra Pradesh	—	—	—	1	—	1	4	2	6	5	2	7
Madras	—	—	—	—	—	—	1	—	1	1	—	1
Kerala	—	—	—	—	—	—	—	—	—	—	—	—
Gujarat	—	—	—	—	—	—	114	23	137	114	23	137
Maharashtra	—	—	—	—	—	—	155	67	222	155	67	222
Mysore	—	—	—	—	20	20	13	30	43	13	50	63
total	—	—	—	1	20	21	1050	2481	3531	1051	2501	3552

Villages of sub-sample 3 were not planned to be surveyed in autumn season.



TABLE (27.1): NUMBER OF CROP-CUTTING EXPERIMENTS CONDUCTED ON BARLEY GROWN PURE AND IN MIXTURE WITH OTHER CROPS BY SEASONS AND STATES

sub-sample 1

state	autumn			winter			spring			total of 3 seasons		
	pure	mixed	total	pure	mixed	total	pure	mixed	total	pure	mixed	total
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Rajasthan	—	—	—	—	—	—	7	64	71	7	64	71
Jammu and Kashmir	—	—	—	—	—	—	2	6	8	2	6	8
Punjab	—	—	—	—	—	—	4	2	6	4	2	6
Delhi	—	—	—	—	—	—	1	4	5	1	4	5
Himachal Pradesh	—	—	—	—	—	—	—	—	—	—	—	—
Uttar Pradesh	—	—	—	—	—	—	—	251	251	—	251	251
Madhya Pradesh	—	—	—	—	—	—	5	26	31	5	26	31
Bihar	—	—	—	—	—	—	8	181	189	8	181	189
Orissa	—	—	—	—	—	—	—	—	—	—	—	—
West Bengal	—	—	—	—	—	—	10	4	14	10	4	14
Assam	—	—	—	—	—	—	—	—	—	—	—	—
Manipur	—	—	—	—	—	—	—	—	—	—	—	—
Tripura	—	—	—	—	—	—	—	—	—	—	—	—
Andhra Pradesh	—	—	—	—	—	—	1	—	1	1	—	1
Madras	—	—	—	—	—	—	—	—	—	—	—	—
Kerala	—	—	—	—	—	—	—	—	—	—	—	—
Gujarat	—	—	—	—	—	—	1	4	5	1	4	5
Maharashtra	—	—	—	—	—	—	1	—	1	1	—	1
Mysore	—	—	—	—	—	—	—	—	—	—	—	—
total	—	—	—	—	—	—	40	542	582	40	542	582

National Sample Survey

TABLE (27.2) : NUMBER OF CROP-CUTTING EXPERIMENTS CONDUCTED ON BARLEY GROWN PURE AND IN MIXTURE WITH OTHER CROPS BY SEASONS AND STATES

sub-sample 2

state	autumn			winter			spring			total of 3 seasons		
	pure	mixed	total	pure	mixed	total	pure	mixed	total	pure	mixed	total
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Rajasthan	—	—	—	—	—	—	13	59	72	13	59	72
Jammu and Kashmir	—	—	—	—	—	—	2	10	12	2	10	12
Punjab	—	—	—	—	—	—	8	12	20	8	12	20
Delhi	—	—	—	—	—	—	—	—	—	—	—	—
Himachal Pradesh	—	—	—	—	—	—	1	—	1	1	—	1
Uttar Pradesh	—	—	—	—	—	—	3	271	274	3	271	274
Madhya Pradesh	—	—	—	—	—	—	10	18	28	10	18	28
Bihar	—	—	—	—	—	—	11	139	150	11	139	150
Orissa	—	—	—	—	—	—	—	—	—	—	—	—
West Bengal	—	—	—	—	—	—	2	10	12	2	10	12
Assam	—	—	—	—	—	—	—	—	—	—	—	—
Manipur	—	—	—	—	—	—	—	—	—	—	—	—
Tripura	—	—	—	—	—	—	—	—	—	—	—	—
Andhra Pradesh	—	—	—	—	—	—	—	—	—	—	—	—
Madras	—	—	—	—	—	—	—	—	—	—	—	—
Kerala	—	—	—	—	—	—	—	—	—	—	—	—
Gujarat	—	—	—	—	—	—	—	—	—	—	—	—
Maharashtra	—	—	—	—	—	—	—	—	—	—	—	—
Mysore	—	—	—	—	—	—	—	—	—	—	—	—
total	—	—	—	—	—	—	50	519	569	50	519	569

TABLE (27.3): NUMBER OF CROP-CUTTING EXPERIMENTS CONDUCTED ON BARLEY GROWN PURE AND IN MIXTURE WITH OTHER CROPS BY SEASONS AND STATES

sub-sample 3

state	winter			spring			total of 2 seasons		
	pure	mixed	total	pure	mixed	total	pure	mixed	total
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Rajasthan	—	—	—	13	44	57	13	44	57
Jammu and Kashmir	—	—	—	5	4	9	5	4	9
Punjab	—	—	—	3	6	9	3	6	9
Delhi	—	—	—	—	—	—	—	—	—
Himachal Pradesh	—	—	—	1	—	1	1	—	1
Uttar Pradesh	—	—	—	10	323	333	10	323	333
Madhya Pradesh	—	—	—	8	15	23	8	15	23
Bihar	—	—	—	7	120	127	7	120	127
Orissa	—	—	—	—	—	—	—	—	—
West Bengal	—	—	—	1	—	1	1	—	1
Assam	—	—	—	—	—	—	—	—	—
Manipur	—	—	—	—	—	—	—	—	—
Tripura	—	—	—	—	—	—	—	—	—
Andhra Pradesh	—	—	—	—	—	—	—	—	—
Madras	—	—	—	—	—	—	—	—	—
Kerala	—	—	—	—	—	—	—	—	—
Gujarat	—	—	—	—	2	2	—	2	2
Maharashtra	—	—	—	1	0	1	1	0	1
Mysore	—	—	—	—	—	—	—	—	—
total	—	—	—	49	514	563	49	514	563

Villages of sub-sample 3 were not planned to be surveyed in autumn season.

TABLE (27.4): NUMBER OF CROP-CUTTING EXPERIMENTS CONDUCTED ON BARLEY GROWN PURE AND IN MIXTURE WITH OTHER CROPS BY SEASONS AND STATES

sub-samples 1, 2 and 3 combined

state	autumn			winter			spring			total of 3 seasons		
	pure	mixed	total	pure	mixed	total	pure	mixed	total	pure	mixed	total
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Rajasthan	—	—	—	—	—	—	33	167	200	33	167	200
Jammu and Kashmir	—	—	—	—	—	—	9	20	29	9	20	29
Punjab	—	—	—	—	—	—	15	20	35	15	20	35
Delhi	—	—	—	—	—	—	1	4	5	1	4	5
Himachal Pradesh	—	—	—	—	—	—	2	—	2	2	—	2
Uttar Pradesh	—	—	—	—	—	—	13	845	858	13	845	858
Madhya Pradesh	—	—	—	—	—	—	23	59	82	23	59	82
Bihar	—	—	—	—	—	—	26	440	466	26	440	466
Orissa	—	—	—	—	—	—	—	—	—	—	—	—
West Bengal	—	—	—	—	—	—	13	14	27	13	14	27
Assam	—	—	—	—	—	—	—	—	—	—	—	—
Manipur	—	—	—	—	—	—	—	—	—	—	—	—
Tripura	—	—	—	—	—	—	—	—	—	—	—	—
Andhra Pradesh	—	—	—	—	—	—	1	—	1	1	—	1
Madras	—	—	—	—	—	—	—	—	—	—	—	—
Kerala	—	—	—	—	—	—	—	—	—	—	—	—
Gujarat	—	—	—	—	—	—	1	6	7	1	6	7
Maharashtra	—	—	—	—	—	—	2	0	2	2	0	2
Mysore	—	—	—	—	—	—	—	—	—	—	—	—
total	—	—	—	—	—	—	139	1575	1714	139	1575	1714

Villages of sub-sample 3 were not planned to be surveyed in autumn season.

TABLE (28.1): NUMBER OF CROP-CUTTING EXPERIMENTS CONDUCTED ON ALL MAJOR CEREAL CROPS GROWN PURE AND IN MIXTURE WITH OTHER CROPS BY SEASONS AND STATES

sub-sample 1

state	autumn			winter			spring			total of 3 seasons		
	pure	mized	total	pure	mized	total	pure	mized	total	pure	mized	total
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Rajasthan	78	100	178	24	8	32	35	136	171	137	244	381
Jammu and Kashmir	348	28	376	—	—	—	63	18	81	411	46	457
Punjab	62	32	94	—	—	—	41	84	125	103	116	219
Delhi	8	4	12	—	—	—	2	8	10	10	12	22
Himachal Pradesh	—	—	—	—	—	—	—	—	—	—	—	—
Uttar Pradesh	169	210	369	99	150	249	30	654	684	288	1014	1302
Madhya Pradesh	93	102	195	73	148	221	61	113	174	227	363	590
Bihar	131	138	269	195	21	216	34	335	369	360	494	854
Orissa	34	—	34	109	10	119	5	—	5	148	19	167
West Bengal	34	—	34	118	3	121	10	4	14	162	7	169
Assam	18	—	18	70	—	70	—	—	—	88	—	88
Manipur	—	—	—	8	—	8	—	—	—	8	—	8
Tripura	8	—	8	29	—	29	—	—	—	37	—	37
Andhra Pradesh	143	139	282	165	17	182	85	48	133	393	204	597
Madras	119	12	131	114	62	176	146	2	148	379	76	455
Kerala	63	4	67	77	—	77	12	—	12	142	4	146
Gujarat	60	68	128	—	12	12	71	22	93	131	102	233
Maharashtra	124	91	215	60	149	209	129	56	185	313	296	609
Mysore	25	51	76	38	72	110	12	58	70	75	181	256
total	1497	938	2435	1179	652	1831	739	1538	2274	3412	3178	6590

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National Sample Survey

TABLE (28.2): NUMBER OF CROP-CUTTING EXPERIMENTS CONDUCTED ON ALL MAJOR CEREAL CROPS GROWN PURE AND IN MIXTURE WITH OTHER CROPS BY SEASONS AND STATES

sub-sample 2

state	autumn			winter			spring			total of 3 seasons		
	pure	mixed	total	pure	mixed	total	pure	mixed	total	pure	mixed	total
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Rajasthan	95	120	215	10	12	22	46	110	156	151	242	393
Jammu and Kashmir	355	24	389	—	—	—	47	42	89	402	76	478
Punjab	57	48	105	—	—	—	50	84	144	107	142	249
Delhi	—	—	—	—	—	—	—	—	—	—	—	—
Himachal Pradesh	8	4	12	—	—	—	10	—	10	18	4	22
Uttar Pradesh	155	188	343	150	149	299	24	634	658	329	971	1300
Madhya Pradesh	118	58	174	76	158	234	85	136	221	277	352	629
Bihar	103	166	271	198	26	224	39	326	365	342	518	860
Orissa	41	—	41	101	17	118	—	—	—	142	17	159
West Bengal	31	1	32	131	0	131	9	16	25	171	17	188
Assam	23	2	25	89	1	90	—	—	—	112	3	115
Manipur	12	—	12	8	0	8	—	—	—	20	0	20
Tripura	—	—	—	49	0	49	—	—	—	49	0	49
Andhra Pradesh	154	112	266	146	65	211	87	7	94	387	184	571
Madras	129	20	149	112	70	182	144	5	149	385	95	480
Kerala	68	8	76	71	1	72	27	—	27	166	9	175
Gujarat	67	71	138	8	12	20	72	6	78	147	89	236
Maharashtra	114	69	183	21	147	168	95	95	191	230	312	542
Mysore	64	17	81	58	79	137	12	22	34	134	118	252
total	1594	918	2512	1228	737	1965	747	1494	2241	3569	2149	6718

Land Utilization Survey and Crop-cutting Experiments

TABLE (28.3) : NUMBER OF CROP-CUTTING EXPERIMENTS CONDUCTED ON ALL MAJOR CEREAL CROPS GROWN PURE AND IN MIXTURE WITH OTHER CROPS BY SEASONS AND STATES

sub-sample 3

state	winter			spring			total of 2 seasons		
	pure	mixed	total	pure	mixed	total	pure	mixed	total
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Rajasthan	2	12	14	39	96	135	41	106	149
Jammu and Kashmir	—	—	—	47	18	65	47	18	65
Punjab	—	—	—	47	76	123	47	76	123
Delhi	—	—	—	—	—	—	—	—	—
Himachal Pradesh	—	—	—	6	—	6	6	—	6
Uttar Pradesh	92	109	201	48	699	747	140	808	948
Madhya Pradesh	22	94	116	84	79	163	106	173	279
Bihar	197	4	201	38	249	287	235	253	488
Orissa	34	—	34	—	—	—	34	—	34
West Bengal	56	—	56	3	5	8	59	5	64
Assam	60	—	60	—	—	—	60	—	60
Manipur	6	—	6	—	—	—	6	—	6
Tripura	43	—	43	—	—	—	43	—	43
Andhra Pradesh	158	44	202	86	37	123	244	81	325
Madras	114	51	165	138	6	144	252	57	309
Kerala	69	—	69	12	—	12	81	—	81
Gujarat	12	—	12	34	10	44	46	10	56
Maharashtra	36	75	111	109	75	184	145	150	295
Mysore	36	67	93	34	21	55	70	78	148
total	937	446	1383	725	1371	2096	1662	1817	3479

National Sample Survey

Villages of sub-sample 3 were not planned to be surveyed in autumn season.

TABLE (28.4) : NUMBER OF CROP-CUTTING EXPERIMENTS CONDUCTED ON ALL MAJOR CEREAL CROPS GROWN PURE AND IN MIXTURE WITH OTHER CROPS BY SEASONS AND STATES

sub-samples 1, 2 and 3 combined

state	autumn			winter			spring			total of 3 seasons		
	pure	mixed	total	pure	mixed	total	pure	mixed	total	pure	mixed	total
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Rajaasthan	173	220	393	36	32	68	120	342	462	329	594	923
Jammu and Kashmir	708	62	765	—	—	—	157	78	235	860	140	1000
Punjab	119	80	199	—	—	—	138	254	392	257	334	591
Delhi	8	4	12	—	—	—	2	8	10	10	12	22
Himachal Pradesh	8	4	12	—	—	—	16	—	16	24	4	28
Uttar Pradesh	314	398	712	341	408	749	102	1987	2089	757	2793	3550
Madhya Pradesh	209	180	369	171	400	571	230	328	558	610	888	1498
Bihar	236	304	540	590	51	641	111	910	1021	937	1265	2302
Orissa	75	9	84	244	27	271	5	—	5	324	36	360
West Bengal	65	1	66	305	3	308	22	25	47	392	29	421
Assam	41	2	43	219	1	220	—	—	—	260	3	263
Manipur	12	—	12	22	—	22	—	—	—	34	—	34
Tripura	8	—	8	121	—	121	—	—	—	129	—	129
Andhra Pradesh	297	251	548	489	126	595	258	92	350	1024	469	1493
Madras	248	32	280	340	183	523	423	13	441	1016	228	1244
Kerala	121	12	133	217	1	218	51	—	51	389	13	402
Gujarat	127	139	266	20	24	44	177	38	215	324	201	525
Maharashtra	238	160	398	117	371	488	333	227	560	688	758	1446
Mysore	89	68	157	132	208	340	58	101	159	279	377	656
total	3091	1906	4997	3344	1835	5179	2208	4403	6611	8643	8144	16787

Villages of sub-sample 3 were not planned to be surveyed in autumn season.



## APPENDIX I

### ESTIMATION PROCEDURE

1. A stratified two-stage sampling design was adopted for the land utilisation survey with villages selected with equal probability as the first-stage units and clusters of plots selected systematically with equal probability as the second-stage units. In a village when a suitable frame of plots was not available, a sample of households was selected with equal probability from a list of all the households in the village and all the plots possessed by each of the sample households were surveyed. For crop-cutting experiments, the villages and clusters of plots selected for land utilisation were the first- and second-stage units and sub-plots growing the specified crops (selected with probability proportional to gross area) and circular area of radius 4' located at random in the selected sub-plot were the third- and fourth-stage units. The method of estimation of area and production of a crop for a season is given below.

#### 2. Estimate of area under a crop.

2.1. Except in the case of a few strata in hilly and forest areas, an estimate of area under a crop ( $X_i$ ) for the  $i$ -th stratum (gross or pure area as the case may be) was obtained as

$$X_i = A_i \frac{\sum_{j=1}^{n_i} a_{ij} p_{ij}}{\sum_{j=1}^{n_i} a_{ij}} \quad \text{where}$$

$A_i$  = geographical area of the  $i$ -th stratum,

$a_{ij}$  = geographical area of the  $j$ -th sample village surveyed in  $i$ -th stratum,

$p_{ij}$  = proportion of area under the crop (gross or pure as the case may be) in the  $j$ -th sample village surveyed in the  $i$ -th stratum,

$n_i$  = number of villages surveyed in the  $i$ -th stratum.

2.2. An estimate of proportion ( $p_{ij}$ ) of area under the crop for the  $i$ -th sample village in the  $i$ -th stratum was given by

$$p_{ij} = \frac{\sum_{k=1}^{n_{ij}} a_{ijk} p_{ijk}}{\sum_{k=1}^{n_{ij}} a_{ijk}} \quad \text{where}$$

$a_{ijk}$  = geographical area of the  $k$ -th sample plot in the  $j$ -th sample village in the  $i$ -th stratum,

*Land Utilisation Survey and Crop-cutting Experiments*

- $p_{ijk}$  = proportion of area under the crop (gross, or pure as the case may be) in the  $k$ -th sample plot in the  $j$ -th sample village in the  $i$ -th stratum,  
 $n_{ij}$  = number of plots surveyed in the  $j$ -th sample village in the  $i$ -th stratum.

2.3. In hilly and forest areas as the basic materials required for estimating the area under crops as per the above procedure were not satisfactory, an alternate estimation procedure was adopted as follows. An estimate of area under a crop ( $X_i$ ) for the  $i$ -th stratum was obtained as

$$X_i = \frac{N_i}{n_i} \sum_{j=1}^{n_i} h_{ij} \frac{N_{ij}}{n_{ij}} \sum_{k=1}^{n_{ij}} x_{ijk} \quad \text{where}$$

- $x_{ijk}$  = area under the crop in the  $k$ -th sample plot/or in all plots possessed by  $k$ -th sample household,  
 $n_{ij}$  = number of plots/households surveyed in the  $j$ -th sample village in the stratum  $i$ ,  
 $h_{ij}$  = number of revenue villages comprising the census village or number of hamlet groups formed in the revenue village or reciprocal of the number of census villages constituting the revenue village,  
= 1 when the revenue village and census village are identical,  
 $N_{ij}$  = highest survey number/sampling serial number/total number of households in the  $j$ -th sample village in stratum  $i$ ,  
 $N_i$  = number of villages in the stratum  $i$ ,  
 $n_i$  = number of villages surveyed in the stratum  $i$ .

2.4. The estimate of area under a crop was obtained from each of the sub-samples. The estimate based on all the sub-samples was obtained as the arithmetic mean of the sub-sample estimates.

3. *Estimate of production of a crop :*

3.1. An estimate of production of a specified cereal crop of a season for any stratum was obtained as the product of the estimated gross area under the crop and the estimated gross yield rate of the crop in the stratum. The estimates of gross yield rate and production were obtained separately for

- i) crop grown singly (pure)
- ii) crop grown mixed with other crops.

The total production of the crop was obtained as the sum of the production of the crop grown pure and of the crop grown in mixture.

*National Sample Survey*

3.2. An estimate of the yield rate of a crop for the  $i$ -th stratum ( $y_i$ ) was taken as the simple average of the yield rates obtained from the sample cuts taken for the crop in the  $i$ -th stratum, viz.

$$y_i = \frac{\sum_{j,k} y_{ijk}}{r_i}$$

where  $y_{ijk}$  is the yield rate (gross) of the crop from the  $k$ -th sample cut in the  $j$ -th sample village in the  $i$ -th stratum, and  $\Sigma$  indicates summation over all cuts taken for the crop in all the sample villages in the stratum and ' $r_i$ ' is the number of cuts taken for the crop in the stratum. This was obtained separately for crop grown pure and mixed.

3.3. The estimate of production  $P_{i(p)}$  of the crop grown pure for the  $i$ -th stratum was given by

$$P_{i(p)} = A_{i(p)} \times y_{i(p)} \text{ where}$$

$A_{i(p)}$  = estimated area under crop grown pure for the  $i$ -th stratum,

$y_{i(p)}$  = yield rate of crop grown pure for the  $i$ -th stratum.

Similarly the estimate of production  $P_{i(m)}$  of the crop grown mixed for the  $i$ -th stratum was obtained as

$$P_{i(m)} = A_{i(m)} \times y_{i(m)} \text{ where}$$

$A_{i(m)}$  = estimated gross area under the crop grown mixed, for the  $i$ -th stratum,

$y_{i(m)}$  = gross yield rate of crop grown mixed.

3.4. If crop-cutting experiments were not reported in all strata where an estimate of area under a crop was obtained, the final estimate of production for the state ( $P$ ) was obtained as

$$P = \frac{\sum' P_{i(p)}}{\sum' A_{i(p)}} \times \Sigma A_{i(p)} + \frac{\sum' P_{i(m)}}{\sum' A_{i(m)}} \times \Sigma A_{i(m)}$$

where  $\Sigma'$  indicates summation over all strata reporting crop-cutting experiments and  $\Sigma$  indicates summation over all strata in the state. The estimate of production  $P$  for the state was obtained separately for the two sub-samples.

3.5. Each crop-cutting experiment consisted of taking two concentric circular sample cuts, one of radius 2'3" and the other of radius 4'. The data from the circular cuts of radius 4' were used, for getting the estimates of yield rates, while the data from the smaller circle were used to obtain the drriage factor (ratio of dry weight to green weight of crop). The adjustment for obtaining the dry weight from the green weight was done at the state level. If  $d_{ic}$  and  $g_{ic}$  are the dry weight and

*Land Utilisation Survey and Crop-cutting Experiments*

green weight respectively of the crop from c-th sample out of radius 2'3" for the crop in the i-th stratum in a state, the conversion factor (driage factor) was obtained as

$$\frac{\sum_{i,c} d_{ic}}{\sum_{i,c} g_{ic}}$$

$\Sigma$  indicating summation over all cuts taken for the crop in all strata in the state.

The driage factors were obtained separately for each season and sub-sample which were used to obtain the estimates of production of the crop corresponding dry crop.

4. The estimate of production of dry crop for all the sub-samples combined was obtained as the arithmetic mean of the corresponding sub-sample estimates.

5. The estimates of area and production of crops were obtained separately for each of the three seasons. The sum of the estimates for the three seasons was taken to be the estimate for the year (excluding summer crops).

7. *Estimate of any character at State or All-India level* : The state or all-India estimates of any character were obtained by summing the corresponding strata estimates over the State or all-India.

APPENDIX II

FACSIMILE OF THE SCHEDULE OF INVESTIGATION

CENTRAL\*  
STATE

ORIGINAL\*  
DUPLICATE

GOVERNMENT OF INDIA NATIONAL SAMPLE SURVEY 1961-62

Schedule 5.0 : Land Utilisation

AUTUMN

(Seventeenth Round)

RURAL

[1] identification particulars of village															
1. serial number	11. <i>tseli/takul/shana</i> *														
2. zone-state-region	12. village (name)														
3. stratum	13. village cadastrally surveyed: yes-1, no-2														
4. sub-round	14. village map exists: yes-1, no-2														
5. sub-sample	15. village map availed: yes-1, no-2														
6. sample village	16. number of schedules 5.01 attached														
7. C.F.A. classification*	17. village area (0.00 acres)														
8. method code	18. highest survey number/sampling serial number (method 1/2)														
9. state	19. total number of households (method 3)														
10. district	20. number of plots or households surveyed														
	21. date of completion of the village crop records by Patwari														
[2] investigation particulars															
1. investigator: name	roll no. .... date: (i) survey .....														
	(ii) despatch .....														
2. inspector: name	date: (i) inspection .....														
	(ii) scrutiny .....														
	(iii) despatch .....														
3. scrutiniser: name	date: (i) receipt .....														
	(ii) scrutiny .....														
	(iii) despatch .....														
[3] selection of revenue village/hamlet*				[4] particulars of census villages constituting revenue village											
sr. no.	names of revenue villages/hamlets	percent- tage area	random number	sr. no.	names of census villages/hamlets	percent- tage area	random number	sr. no.	names of census villages						
(1)	(2)	(3)	(4)	(1)	(2)	(3)	(4)	(1)	(2)						
[5] selection of basic plots/households*															
1. interval (I) .....					2. random start (R) .....										
3. basic plots/households selected:															
cluster number	1	2	3	4	5	6	7	8							
	R	R+I	R+2I	R+3I	R+4I	R+5I	R+6I	R+7I							
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)							
survey of number of basic plot/sampling serial number of basic plot or household															
[6] village summary block†															
cluster no. or s.h. no.	total geogra- phical area (0.00 acres)	total gross area (0.00 acres)						total pure area (0.00 acres)							
		paddy	jowar	bajra	ragi	maize	wheat	barley	paddy	jowar	bajra	ragi	maize	wheat	barley
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
total															

\*delete whichever is inapplicable.  
†not in C.F.A.-0; in C.F.A. stage 1-1, stage 2-2; in continuity development block-3  
This block is not to be filled in by the investigator.

Land Utilisation Survey and Crop-cutting Experiments

Sch. 5.0-2

[7] utilisation particulars of plots

1. cluster/household number

2. plots in the cluster (method 1/2)

(a) sampling serial number

(b) survey/sub-survey number

3. (a) sampling serial number of household (method 3).....

(b) name of the head of the household.....

serial number	survey/sub-survey number	geographical area (0.00 acres)	sub-plot number	area of sub-plot in sq. ft. or area in aca. (2)	if crop utilisation, type: pure-1, mixed-2	crops of autumn season and their mixtures			other utilisations		gross area (0.00 acres) under					
						name of crops	crop code*	season code**	name	season code**	(12)	(13)	(14)	(15)	(16)	(17)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
1																
2																
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25																
26																
27																
28																
29	total		x	x	x	x	x	x	x	x						
30	total (pure)		x	x	x	x	x	x	x	x						
crop combination						gross area (0.00 acres)		crop combination						gross area (0.00 acres)		

\* paddy-1, jowar-2, bajra-3, ragi-4, maize-5, wheat-6, barley-7. (Codes are to be given only for the specified cereal crops of the reference season.)

\*\* autumn-1, winter-2, spring-3, summer-4.

**[8] particulars of crops and seasons in the village**  
name of informant with designation if any.....

serial number	season		crops			sowing				harvesting				remarks
	local name	code*	name of crops	crop code**	mixed crop-code**	commencing week		ending week		commencing week		ending week		
						normal year	current year	normal year	current year	normal year	current year	normal year	current year	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)

\*season codes for different months of harvesting of crops in the normal year; August to October, autumn-1; November to January, winter-2; February to April, spring-3; May and June, summer-4; July will be included in summer or autumn depending on crop and region.  
\*\*not to be filled in by the investigator.

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National Sample Survey

CENTRAL\*  
STATE

ORIGINAL\*  
DUPLICATE

GOVERNMENT OF INDIA NATIONAL SAMPLE SURVEY: 1961-62  
Schedule 5.01: List of Plots

RURAL

(Seventeenth Round)

[1] identification particulars of village											
1. serial number	5. sub-sample	9. state.....									
2. zone-state-region	6. sample village	10. district.....									
3. stratum	7. C.P.A. classification**	11. tehsil/taluk/thana*									
4. sub-round	8. method code	12. village.....									
		13. village area (0.00 acres).....									
[2] investigation particulars											
1. investigator: name.....			roll no.....	date (i) survey.....		(ii) despatch.....		signature.....			
2. inspector: name.....			date (i) inspection.....	(ii) scrutiny.....		(iii) despatch.....		signature.....			
3. scrutiniser: name.....			date (i) receipt.....	(ii) scrutiny.....		(iii) despatch.....		signature.....			
[3] list of plots											
sheet/block number	survey numbers/sub-survey numbers of plots	sampling serial numbers	sheet/block number	survey numbers/sub-survey numbers of plots	sampling serial numbers	sheet/block number	survey numbers/sub-survey numbers of plots	sampling serial numbers	sheet/block number	survey numbers/sub-survey numbers of plots	sampling serial numbers
(1)	(2)	(3)	(1)	(2)	(3)	(1)	(2)	(3)	(1)	(2)	(3)

\*delete whichever is inapplicable.  
\*\*not in C.P.A.-0; C.P.A. stage 1-1, stage 2 2; in community development block-3.

Land Utilisation Survey and Crop-cutting Experiments

CENTRAL\*  
STATE

ORIGINAL\*  
DUPLICATE

GOVERNMENT OF INDIA NATIONAL SAMPLE SURVEY : 1961-62  
Schedule 5.1 : Crop-cutting Experiments

RURAL

AUTUMN  
(Seventeenth Round)

[5] allocation of number of sub-plots to each crop									
name of crop	total area (0.00 acres)	no. of sub-plots allotted	interval (I)	random start (R)	R+I	R+2I	R+3I	R+4I	R+5I
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
total									

\*delete whichever is inapplicable.  
\*\*not in C.P.A.-0; in C.P.A. stage 1-1, stage 2-2; in community development block-3.

[6] listing and selection of sub-plots for crop-cutting experiments

name of crop		survey/sub-survey number		sub-plot number and utilization type		gross area (0.00 acres)		cumulative gross area (0.00 acres)		order of selection		cause of rejection*	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)

[7] probable time of harvest of the crops in sub-plots selected for crop-cutting

order of selection	survey/sub-survey number of plot	sub-plot number	name of crop	name of sub-plotter with address	date of erecting the sub-plot for permission	probable time of harvesting	cultivator's attitude**	total area (0.00 acres)	
								possessed	cultivated
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)

\*harvested-1, not permitted by cultivator-2, others-3  
 \*\*co-operative-1, indifferent-2, hostile-3.

[8] results of crop-cutting experiments

order of selection (1)	survey/sub-survey number (2)	sub-plot number (3)	name of crop (4)	cut number (5)	utilization type pure-P, mixed-M (6)	irrigation code (e) (7)	type of manure used (b) (8)	variety of seed used (c) (9)	sowing type (d) (10)	condition of crop (e) (11)	density of plants (f) (12)	length of sides (steps)		length of axes (steps)		random numbers (17)	date of taking green weight (19)	weight of green crop (0.0 tolas) (20)			partial cut percentage of area (27)	number of plants (28)				date of taking dry weight** (33)	total (0) (0) **Abelian dry weight** (34)									
												east-west (13)	north-south (14)	X (15)	Y (16)			border (20)	others (21)	total (22)		2'3''* (23)		4'-2'3''* (24)				wholly inside (28)	2'3''* (29)		4''* (30)					
																						border (23)	others (24)	total** (26)	2'3''* (28)				4''* (27)	inside border (B <sub>1</sub> ) (29)	outside border (B <sub>2</sub> ) (30)	inside border (B <sub>1</sub> ) (31)	outside border (B <sub>2</sub> ) (32)			

(a) not irrigated-0; irrigated: canal-1, tank-2, well-3, others-4  
 (b) no manure-0; organic: farmyard-1, town compost-2; inorganic-3, green manure-4, others-5  
 (c) improved variety from:(i) agricultural department-1, (ii) market-2; (iii) local variety-3  
 (d) broadcasting-1, transplanting-2, drilling-3, others-4  
 (e) very good-1, good-2, average-3, poor-4, very poor-5  
 (f) very thick-1, thick-2, average-3, thin-4, very thin-5  
 \* indicates radius of circle. \*\*not to be filled in by the investigator.

CENTRAL\*  
STATE

ORIGINAL\*  
DUPLICATE

GOVERNMENT OF INDIA NATIONAL SAMPLE SURVEY : 1961-62  
Schedule 5.2 : Driage Experiments

RURAL

AUTUMN  
(Seventeenth Round)

[1] identification particulars of village		
1. serial number	6. sample village	11. state.....
2. zone-state-region	7. C.P.A. classification**	12. district.....
3. stratum	8. method code	13. tehsil/taluk/thana <sup>6</sup> .....
4. sub-round	9. date of area survey	14. name of village.....
5. sub-sample	10. total number of sample cuts	15. village area (0.00 acres).....

[2] investigation particulars		
1. investigator : name.....	roll no.....	date (i) completion of driage experiments.....
(ii) despatch.....	signature.....	
2. inspector : name.....	date (i) inspection.....	(ii) scrutiny.....
(iii) despatch.....	signature.....	
3. scrutiner : name.....	date (i) receipt.....	(ii) scrutiny.....
(iii) despatch.....	signature.....	

[3] remarks by investigator

\*Delete whichever is inapplicable.  
\*\*not in C.P.A.-0; in C.P.A. stage 1-1, stage 2-2; in community development block-3.  
Sch. 5.2-2

[4] particulars of weightment of dry grains from circle of radius 2'3" including whole of border																	
order of selection	name of crop	cut no.	date of taking weight of green crop	weight of green crop (0.0 tolas)	weightments of bag with dry grains										date of taking first dry weight	weight of dry grains only (0.0 tolas)	
					1st		2nd		3rd		4th		5th				
					date	weight (0.0 tolas)	date	weight (0.0 tolas)	date	weight (0.0 tolas)	date	weight (0.0 tolas)	date	weight (0.0 tolas)			
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	

## NATIONAL SAMPLE SURVEY REPORTS ALREADY PUBLISHED

- |       |  |
|-------|--|
| No. 1 | General Report No. 1 on the First Round (October 1950-March 1951)  |
| 2     | Tables with Notes on the Second Round (April-June 1951)  |
| 3     | Tables with Notes on the Third Round (August-November 1951)  |
| 4     | Special Report on the Survey of Persons in the "Live-Register" of Delhi Employment Exchange (August-September 1951)                              |
| 5     | Technical Paper on Some Aspects of the Development of the Sample Design  |
| 6     | Survey of Faridabad Township (March-April 1954)  |
| 7     | Couple Fertility (Second Round, April-June, 1951 and Fourth Round, April-September 1952)   |
| 8     | Report on Preliminary Survey of Urban Employment (September 1953)  |
| 9     | Report on the Sample Survey of Displaced Persons in the Urban Areas of the Bombay State (July-September 1953)                                    |
| 10    | First Report on Land Holdings, Rural Sector (Eighth Round : July 1954-March 1955)  |
| 11    | Report on Sample Survey of Manufacturing Industries, 1949-50   |
| 12    | A Technical Note on Age Grouping   |
| 13    | Report on Household Transport Operations (Seventh Round : October 1953-March 1954)   |
| 14    | Report on Some Characteristics of the Economically Active Population (Fourth to Seventh Round : April 1952-March 1954)                           |
| 15    | Report on Sample Survey of Manufacturing Industries, 1951  |
| 16    | Report on Employment and Unemployment (Ninth Round : Preliminary, May-November 1955)   |
| 17    | Report on Sample Survey of Employment in Calcutta (September 1953)   |
| 18    | Tables with Notes on Consumer Expenditure (Fourth Round : April-September 1952)  |
| 19    | Report on Small Scale Manufacture : Household Enterprises smaller than Registered Factories (Seventh round : October 1953-March 1954)            |
| 20    | Report on Pattern of Consumer Expenditure (Second to Seventh Round : April 1951-March 1954)  |
| 21    | Household Small Scale Manufacturing Establishments (Ninth Round : May-November 1955)   |
| 22    | Report on Sample Survey of Manufacturing Industries, 1952  |
| 23    | Report on Sample Survey of Manufacturing Industries, 1953  |
| 24    | Report on Household Retail Trade (Seventh to Ninth Round : October 1953-September 1955)  |
| 25    | Sample Verification of Livestock Census : 1956   |
| 26    | A Preliminary Report on Housing Condition (Seventh Round : October 1953-March 1954)  |
| 27    | Technical Records of Sample Design, Instructions to Field Workers and List of Sample Villages and Urban Blocks (Ninth Round : May-November 1955) |
| 28    | Report on Sample Survey of Manufacturing Industries, 1954(1)   |
| 29    | Notes on Some Results of the Land Utilisation Survey (Tenth Round : December 1955-May 1956)  |
| 30    | Report on Land Holdings (2) : Operational Holdings in Rural India (Eighth Round : July 1954-April 1955)  |
| 31    | Tables with Notes on Household Transport Operations (Eighth to Tenth Round : July 1954-May 1956)   |
| 32(I) | Some Aspects of Costs of Cultivation of Paddy, Wheat, Jowar and Bajra (Fifth to Seventh Round : October 1952-March 1954)                         |

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- No. 32(II) Some Aspects of Costs of Cultivation of Barley, Maize, Ragi, Gram, Small Millets, Groundnut, Cotton and Jute (Fifth to Seventh Round : October 1952-March 1954)
- 32(III) Some Aspects of Costs of Cultivation of Minor Cereals, Pulses, Sugarcane, Oil Seeds, Potato, Spices and Tobacco (Fifth to Seventh Round : October 1952-March 1954)
- 33 Tables with Notes on Wages, Employment, Income and Indebtedness of Agricultural Labour Households in Rural Areas (Eleventh and Twelfth Rounds: August 1956-August 1957)
- 34 Tables with Notes on Employment and Unemployment (Tenth Round : December 1955-May 1956)
- 35 Tables with Notes on Livestock Products (Fifth to Seventh Round : April 1952-March 1954)
- 36 Report on Land Holdings (3): Some Aspects of Ownership Holdings (Eighth Round : July 1954-April 1955)
- 37 Survey of Book Reader's Preference in India (Thirteenth Round : September 1957-May 1958)
- 38 Some Results of the Land Utilisation Survey and Crop-cutting Experiments: (Thirteenth Round : September 1957-May 1958)
- 39 Tables with Notes on Consumer Expenditure (Eighth Round : July 1954-March 1955)
- 40 Tables with Notes on Consumer Expenditure (Ninth Round : May-November 1955)
- 41 Household Retail Trade (Tenth Round : December 1955-May 1956)
- 42 Report on Small Scale Manufacture: Household Enterprises smaller than Registered Factories (Seventh to Eighth Round : October 1953-April 1955)
- 43 Tables with Notes on Small Scale Manufacture: Household Enterprises smaller than Registered Factories (Ninth and Tenth Rounds : May 1955-May 1956)
- 44 A Note on Profession and Services (Fourth to Eighth Round : April 1952-April 1955)
- 45 Report on Indian Villages : A Study of Some Social and Economic Aspects (Tenth to Twelfth Round : December 1955-August 1957)
- 46 Tables with Notes on Consumer Expenditure of Agricultural Labour Households in Rural Areas (Eleventh and Twelfth Rounds : August 1956-August 1957)
- 47 Tables with Notes on Consumer Expenditure (Tenth Round : December 1955-May 1956)
- 48 Preliminary Estimates of Birth and Death Rates and of the Rate of Growth of Population (Fourteenth Round : July 1958-July 1959)
- 49 Report On Morbidity (Thirteenth Round : September 1957-May 1958)
- 50 Tables with Notes on Housing Condition (Tenth Round : December 1955-May 1956)
- 51 Tables with Notes on Housing Condition (Eleventh Round : August 1956-January 1957)
- 52 Tables with Notes on Employment and Unemployment (Eleventh and Twelfth Rounds : August 1956-August 1957)
- 53 Tables with Notes on Internal Migration (Ninth, Eleventh, Twelfth and Thirteenth Rounds : May 1955-May 1958)
- 54 Vital Rates (Seventh Round : October 1953-March 1954)
- 55 Report on Sample Survey of Manufacturing Industries, 1954(2) : Exploratory Survey of Scheduled Industries

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- 57 Report on Sample Survey of Manufacturing Industries, 1955(2)
- 58 Report on Sample Survey of Manufacturing Industries, 1956 (1): Survey of Scheduled Industries
- 59 Tables with Notes on Pattern of Household Ownership and Possession of Land in Rural Area, 1950-51 to 1953-54 (Eighth Round: July 1954-April 1955)
- 60 Tables with Notes on Farming Condition and Practices in Rural Areas 1953-54 (Eighth Round: July 1954-April 1955)
- 61 Notes on the Results of the Land Utilisation Survey and Crop-cutting Experiments: (Eleventh Round: August 1956-February 1957)
- 62 Report on Employment and Unemployment (Ninth Round: Supplementary: May-November 1955)
- 63 Tables with Notes on Employment and Unemployment in Urban Areas (Thirteenth Round: September 1957-May 1958)
- 64 Indian Villages: A Study of Some Social and Economic Aspects (Thirteenth Round: September 1957-May 1958)
- 65 Tables with Notes on Animal Husbandry (Eleventh round: August 1956-January 1957)
- 66 Report on Land Holdings (4): Rural Sector, States (Eighth Round: July 1954-April 1955)
- 67 Tables with Notes on Housing Condition (Twelfth Round: March-August 1957)
- 68 Tables with Notes on Rural Indebtedness (Eighth Round: July 1954-April 1955)
- 69 Notes on the Results of the Land Utilisation Survey and Crop-cutting Experiments (Twelfth Round: March-August 1957)
- 70 Technical Paper on Sample Design (Fourteenth Round: July 1958-June 1959)
- 71 Consumer Expenditure by Levels of Household Expenditure (Thirteenth Round: September 1957-May 1958)
- 72 Tables with Notes on Milk Production (Twelfth Round: March-August 1957)
- 73 Some Results of the Land Utilisation Survey and Crop-cutting Experiments (Fourteenth Round: July 1958-June 1959)
- 74 Report on Land Holdings (5), Rural Sector (Some Aspects of Operational Holdings—Population Zones and All India): Eighth Round, July 1954—April 1955
- 75 Report on Sample Survey of Manufacturing Industries: 1956 (2)
- 76 Fertility and Mortality Rates in India (Fourteenth Round: July 1958-June 1959)
- 77 Tables with Notes on Consumer Expenditure (Eleventh Round: August 1956-February 1957)
- 78 Tables with Notes on Consumer Expenditure (Twelfth Round: March—August 1957)
- 79 Some Results of the Land Utilisation Survey and Crop-cutting Experiments (Fifteenth Round: July 1959-June 1960)
- 80 Tables with Notes on Consumer Expenditure (Thirteenth Round: September 1957—May 1958)
- 81 Report on Land Holdings: Urban Sector (Eighth Round, July 1954—April 1955)
- 82 Tables with Notes on Some Aspects of Cost of Cultivation of Paddy, Wheat, Barley, Maize, Millets, Pulses, Oil Seeds and Vegetables, Urban India (Fifth to Seventh Round, 1951—1953)



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| No. 83 | Report on Sample Survey of Manufacturing Industries, 1957 (1)  |
| 84     | Tables with Notes on Sample Survey of Manufacturing Industries : Survey of Scheduled Industries 1957   |
| 85     | Tables with Notes on Employment and Unemployment in Urban Areas, (Fourteenth Round : July 1958—June 1959)                                    |
| 86     | Tables with Notes on Sample Survey of Manufacturing Industries, 1957 (2)   |
| 87     | Tables with Notes on Average Budget of Agricultural Labour Households in Rural Areas (Eleventh and Twelfth Rounds : August 1956—August 1957) |
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| 89     | Tables with Notes on Dwelling Habits of Occupants of the Two-room Government Residences in New Delhi, July 1960                              |
| 90     | Tables with Notes on Survey of Scheduled Industries, 1958 : Sample Survey of Manufacturing Industries, 1958                                  |
| 91     | Tables with Notes on the Annual Survey of Industries, 1959 : Sample Sector : Summary Results.  |
| 92     | Some Results of Land Utilisation Survey and Crop-Cutting Experiments (Sixteenth Round : July 1960—June 1961)                                 |
| 93     | Tables with Notes on Sample Survey of Manufacturing Industries 1958, Factory Establishments : Summary Results                                |
| 94     | Tables with Notes on Small Scale Manufacture : Rural and Urban (Fourteenth Round, July 1958—June 1959)                                       |
| 95     | Tables with Notes on Household Indebtedness (Sixteenth Round, July 1960—June 1961)   |
| 96     | The Annual Survey of Industries, 1960 : Sample Sector, Summary Results   |
| 97     | Tables with Notes on Capital Formation (Fifteenth Round—Rural : July 1959—June 1960)   |
| 98     | Tables with Notes on Consumer Expenditure (Preliminary): Fifteenth Round, July 1959—June 1960  |
| 99     | Tables with Notes on Household Non-Registered Trade (Fifteenth Round : July 1959—June 1960)  |
| 100    | Tables with Notes on Rural Employment and Unemployment (Fourteenth Round : July 1958—June 1959)  |
| 101    | Tables with Notes on Consumer Expenditure (Preliminary) : Sixteenth Round, July 1960—August 1961   |
| 102    | Tables with Notes on Consumer Expenditure : Fourteenth Round, July 1958—June 1959  |
| 103    | Tables with Notes on Urban Labour Force : Sixteenth Round, July 1960—June 1961   |
| 104    | Tables with Notes on Consumer Expenditure : Fifteenth Round, July 1959—June 1960   |
| 105    | Tables with Notes on Household Non-Mechanised Transport and Utilization of Working Animals : Fifteenth Round, July 1959—June 1960            |
| 106    | Tables with Notes on Land Utilisation Survey and Crop-Cutting Experiments : Seventeenth Round, July 1961—June 1962                           |
| 107    | Tables with Notes on Consumer Expenditure : Eleventh and Twelfth Round, August 1956—August 1957  |
| 108    | Report on the Type Study on Consumption and Disposal of Cereals and Capital Formation by Households : 1959-60                                |
| 109    | Tables with Notes on Indian Villages : Fourteenth Round, July 1958—June 1959   |