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Fertiliser use in agricultural hold



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FERTILISER USE IN AGRICULTURAL HOLDINGS :  
ALL INDIA RURAL SECTOR

(NSS TWENTYSIXTH ROUNDS : JULY 1971 - SEPTEMBER 1972)

265/6

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THE NATIONAL SAMPLE SURVEY  
T. EMYSIXTH ROUND : JULY 1971 - SEPTEMBER 1972

FERTILISER USE IN AGRICULTURAL HOLDINGS

CHAPTER ONE

INTRODUCTION

1.1 The National Sample Survey Organisation (NSS) undertook a survey on land-holdings in 1971-72 as part of the 26th round of the NSS. The enquiry into land-holdings in the 26th round was the third extensive survey of land-holdings carried out by National Sample Survey Organisation, the first being from July 1964-June 1965 as part of the 8th round and the second from July 1960 - June 1962 as part of the 16th and 17th rounds of the NSS. As the survey on land-holdings and the debt and investment survey had many items of information in common, the two surveys were integrated. In all 6 schedules were canvassed namely, schedules 18.1(R), 18.2(R), 18.3(R), 18.1(U), 18.2(U), and 18.3(U). Data on land-holdings were collected in schedules 18.1(R) and 18.1(U) during the first visit to the sample households between July 1971 to December 1971. In schedule 18.1 particulars of area owned and details of operational holdings were recorded for each operational holding possessed individually or jointly with other households by the sample households. Each plot coming under the purview of the agricultural holding and possessed for the major part of the agricultural year 1970-71 was enumerated and details regarding tenancy, land utilisation, irrigation, etc. were recorded. For the first time in the survey unlike previous enquiries of land-holdings carried out in the 8th, 16th and 17th rounds, detailed information on use of chemical fertiliser separately by irrigated and un-irrigated crops were collected in rural sector only. Data on use of fertiliser presented in this report were collected in blocks 14.1 and 14.2 of schedule 18.1(R).

1.2 The survey was carried out in the whole of India excluding Union Territories of Andaman and Nicobar Islands, Laccadweep, Dadra and Nagar Haveli and Ladakh district of Jammu & Kashmir and some portions of a few districts of Madhya Pradesh, Maharashtra and Tripura.

1.3 All the states except West Bengal, Nagaland and Himachal Pradesh participated in the land-holdings survey in the 26th round on an equal matching basis in another sample called the state sample.

1.4 In this report data pertaining to use of chemical fertilisers on irrigated and unirrigated crops are presented. The results presented are based on the data collected in the central sample in the rural sector only. -3/

a/ Some results relating to individual states have been released earlier in the form of mimeographed reports.

## CHAPTER TWO

### CONCEPTS, DEFINITIONS AND SAMPLING DESIGN

Some of the relevant concepts and definitions adopted in the survey are given in the following paragraph.

2.1 Household : A group of persons who normally lived together and took food from common kitchen constituted a household. Any person who satisfied this criterion and was considered by the head of the household to be its member was taken as a member of the household.

2.2 Operational Holding : An operational holding was **all land which was** used wholly or partly for agricultural production and was operated by one person, alone or with the assistance of others, without regard to title, size or location. The holding might consist of one or more parcels of land provided they were located within the country and these as a whole formed part of the same 'technical unit'.

'Technical unit' was understood in the context of agricultural operations, as a unit with more or less independent technical resources etc. covering items like land, implements, livestock etc. Thus an operational holding was considered (among other things) as one (a) operated by a "person" and (b) constituting one 'technical unit'. A "person" in the definition, for the purpose of this survey, was either a single household or more than one household operating jointly. Since an investigator had to get hold of the operational holdings through the sample households, it was necessary for him to identify the "person" who operated and the "technical units" under each "person". The distinctiveness of the technical unit and existence of the distinct management were probed in order to arrive at the number of operational holdings.

The following holdings were excluded from the scope of the survey (a) land put to non-agricultural use only, such as house site, factory etc. (b) cooperative farm.

2.3 Agricultural Production : Included the growing of field crops, fruits, grapes, nuts, tree nurseries (except those of forest trees), bulbs, vegetables and flowers both in open and under glass, production of coffee, tea, cocoa, rubber, the forest production in any land which formed part of the enumeration holding and the production of livestock and livestock products, poultry and poultry products, honey, rabbits, fur-bearing animals silk-worm cocoons etc. on land forming part of the enumeration holding.

- 2.4 Irrigation : For purposes of this survey irrigation was considered to denote the practice of purposively providing land with water other than rain by artificial means for crop production. Such crops which were grown on irrigated land during the agricultural year 1970-71 were termed as irrigated crops.
- 2.5 Gross Area under Irrigated Crop : If an irrigated plot growing a particular crops was sown in more than one season, area of the plot was counted in the aggregation of gross area under the irrigated crop as many times as it was cropped.
- 2.6 Area treated with chemical fertilisers : Information on the area under different crops treated with chemical fertilisers like ammonium sulphate, super phosphate, and urea were collected for the irrigated and unirrigated crops grown in the holding. If in case more than one fertiliser were used on the same crop during the reference period, the crop area was counted against each of the fertiliser used.
- 2.7 Reference Period : The reference period was the agricultural year 1970-71.
- 2.8 Sample Design : A stratified two stage design was adopted for the survey, the first stage units being villages and the second stage units the households. The list of villages obtained from the 1961 population census was taken as the sampling frame except in Delhi Union Territory, where the 1971 census list of villages was used. The country was divided into 66 agricultural regions by grouping within each state or Union Territory, districts having similar population density and crop pattern. Within each region strata were formed by grouping tehsils which are contiguous, having similar crop pattern, population density and altitude and having good transport and communication facilities among them. The total number of rural strata was 379. The allocation of the total sample size of 4548 villages to each state/union territory was based on a joint consideration of its rural population, area under cereal crops and available investigator strength. Two independent sub-samples of 6 villages each were selected circular systematically with equal probability in each stratum. All the households in a sample village were divided into 4 sub strata on the basis of area of land possessed. The households not possessing any land or possessing land wholly put to non-agricultural uses formed the first sub stratum. The out-off points between sub stratum 2, 3 and 4 were arrived at before hand for each region separately by roughly equalising the area operated in these three sub-/strata. On an average two to three households were sampled from each sub stratum in a sample village. Sampling of households in each sub stratum was done independently and linear systematically with interval and random starts specified

before hand so as to make the design self-weighting at the regional level for each sub stratum. Number of sample villages and household surveyed and analysed were as under:

Number of sample villages and households surveyed and analysed 26th Round; NS3

s t a t e s		no. of sample villa- ges	no. of sample house- holds	s t a t e s		no. of sample villa- ges	no. of sample house- holds
(1)	(2)	(3)	(1)	(2)	(3)	(2)	(3)
1. Andhra Pradesh	336	3285	13. Meghalaya	96	1129		
2. Assam	180	1375	14. Orissa	180	1529		
3. Bihar	334	2849	15. Punjab	180	874		
4. Gujarat	130	1426	16. Rajasthan	180	1004		
5. Haryana	178	945	17. Tamil Nadu	310	2701		
6. Himachal Pradesh	94	595	18. Tripura	95	735		
7. Jammu & Kashmir	178	1143	19. Uttar Pradesh	528	3819		
8. Karnataka	130	1432	20. West Bengal	275	2352		
9. Kerala	173	1755	21. Delhi	12	106		
10. Madhya Pradesh	360	3125	22. Goa, Daman & Diu	12	122		
11. Maharashtra	310	2573	23. Pondicherry	12	133		
12. Manipur	96	786	All India	4529	35793		

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## Chapter 3

## Area under crops and use of fertiliser

3.1 In the survey for each sample operational holding data on area under each crop grown during 1970-71 were collected. Such crops which were grown on irrigated plots were termed "irrigated crops". For each irrigated crop total area under the crop together with the area treated with fertilisers like urea, ammonium sulphate, super-phosphate, mixed fertiliser and other chemical fertilisers together with quantity and value of the fertilisers applied were collected. Similarly such data were collected for each "unirrigated crop" grown in plots without irrigation in a season. Number of holdings reporting different crops, area under different crops, number of holdings reporting different fertilisers and area under different fertiliser separately by irrigated and unirrigated crops are presented in Appendix Tables 1.1 and 2.1. It is seen from table 1.1 that of 26.1 million holdings which grew irrigated crops only 10.6, 3.4, 1.7, 2.4 and 1.8 million holdings used respectively urea, ammonium sulphate, super phosphate, mixed fertiliser and other chemical fertilisers. In percentage terms 22.6 p.c. of the holdings used urea and 7.2, 3.7, 5.2 and 3.9 p.c. of the holdings used respectively ammonium sulphate, super phosphate and mixed fertiliser and other chemical fertilisers. With regard to unirrigated crops out of 46.9 million holdings 4.3, 1.6, 0.9, 1.3 and 0.7 million holdings used respectively urea, ammonium sulphate, super phosphate, mixed fertiliser and other chemical fertilisers. In percentage terms only 9.2 p.c. of the holdings used urea and 3.4, 1.8, 2.8, 1.5 p.c. of the holdings used respectively ammonium sulphate, super phosphate, mixed fertiliser and other chemical fertilisers. With regard to area under the crops while 36.5 million hectares were under irrigated crops 12.2, 3.8, 2.0, 2.9 and 2.8 million hectares were treated respectively with urea, ammonium sulphate, super phosphate, mixed fertiliser and other chemical fertilisers. In physical terms therefore about 23.6 million hectares of gross irrigated cropped area was treated with fertiliser. In percentage terms 33.4 p.c. of the irrigated cropped area was treated with urea and 10.3, 5.5, 8.3, 7.6 p.c. of the area were treated respectively with ammonium sulphate, super phosphate, mixed fertiliser and other chemical fertilisers.

Addition up the percentage figures about 65 p.c. of ~~the total~~ gross irrigated cropped area was treated with fertilisers. With regard to unirrigated crops of gross cropped area of 95.5 million hectares, 4.6, 1.9, 1.7, 1.7, 1.0 million hectares were treated respectively with urea, ammonium sulphate, super phosphate, mixed fertiliser and other chemical fertilisers or about 10.8 million hectares of gross unirrigated cropped area was treated with fertilisers. In percentage terms only 4.8 p.c. of the area was treated with urea and 2.0, 1.7, 1.8 and 1.0 p.c. of the area were treated respectively with ammonium sulphate, super phosphate, mixed fertiliser and other chemical fertiliser. Adding up the percentage figures about 11 p.c. of ~~the total~~ gross cropped unirrigated area was treated with chemical fertiliser.

3.2 Appendix Tables 1.2 and 2.2 give quantity and value of fertiliser applied on different crops. Table 1 below gives value of fertiliser applied and application rate of fertiliser. From the table below it is seen that fertilisers worth 2441 million rupees were applied on irrigated crops. Similarly fertiliser worth 808 million rupees were applied on unirrigated crops during the year. Of the total amount of 2441 million rupees, 1219, 324, 181, 429 and 288 million rupees were spent respectively on urea, ammonium sulphate, super phosphate, mixed fertiliser and other chemical fertilisers. With regard unirrigated crops out of 808 million rupees, 308, 136, 117, 161 and 85 million rupees respectively were spent on urea, ammonium sulphate, super phosphate, mixed fertiliser and other chemical fertilisers. The application rate (Rs./ha.) for all fertilisers combined was 103 and 75 respectively for irrigated and unirrigated crops. For irrigated crops the application rate was 100, 86, 91, 149 and 104 respectively for urea, ammonium sulphate, super phosphate, mixed fertiliser and other chemical fertilisers. For unirrigated crops the corresponding rates were 67, 73, 71, 93 and 85.

Table 1 : Number of holdings (in million) and area (in million ha.) under and value (in million rupees) of fertiliser applied

fertiliser	holding		area		value of fertiliser	application rate (Rs./ha.)
	no.	pc. <sup>a/</sup>	ha.	pc. <sup>b/</sup>		
(1)	(2)	(3)	(4)	(5)	(6)	(7)
<u>irrigated crops</u>						
1. urea	10.6	22.6	12.2	33.4	1219	100
2. ammonium sulphate	3.4	7.2	3.3	10.3	324	86
3. super phosphate	1.7	3.7	2.0	5.5	181	91
4. mixed fertiliser	2.4	5.2	2.9	8.3	429	149
5. other chemical fertilisers	1.8	3.9	2.3	7.6	288	104
6. all crops	x	x	23.6	65.1	2441	103
<u>unirrigated crops</u>						
1. urea	4.3	9.2	4.6	4.8	308	67
2. ammonium sulphate	1.6	3.4	1.9	2.0	136	73
3. super phosphate	0.9	1.8	1.7	1.7	117	71
4. mixed fertiliser	1.3	2.8	1.7	1.8	161	93
5. other chemical fertilisers	0.7	1.5	1.0	1.0	85	85
6. all crops	x	x	10.8	11.4	808	75

a/percentages are to total number of holdings growing irrigated/unirrigated crops.

b/percentages are to gross irrigated/unirrigated area under all crops.



3.3 Appendix tables 1.1 and 1.2 give number of holdings reporting different fertilisers and area under different fertilisers. It is seen from the tables that while 13.9 million holdings reported growing irrigated rice only about 40 p.c. of such holdings used urea and less than 15 p.c. of the holdings used ammonium sulphate. Similarly for wheat it is seen that of 13.6 million holdings growing irrigated wheat about 40 p.c. of the holdings used urea and less than 8 p.c. of the holdings used ammonium sulphate, mixed fertilisers and other fertilisers. For sugarcane it is seen that of 3.8 million holdings growing irrigated sugarcane about 30 p.c. of the holdings were using urea. With regard to unirrigated crop it is seen that of 21.7 million holdings growing unirrigated rice about 13 p.c. of the holdings used urea and less than 5 p.c. of the holdings used ammonium sulphate. Similarly for wheat it is seen that of 7.4 million holdings growing wheat only about 6 p.c. of the holdings used urea and less than 2 of the holdings used ammonium sulphate. Table 2 below gives percentage of total crop area under selected crops treated with fertiliser. [Since the same area treated under a crop for two fertilisers might have been reported against both the fertilisers there is some possibility of this rate being slightly over-estimated.] From the table it is seen that for irrigated crops about 89, 75, 67, 76 and 53 percent of gross area under rice, wheat, foodgrains, sugarcane and non-foodgrains were treated with fertilisers. Similarly for unirrigated crops about 20, 13, 10, 26 and 14 percent of gross area were under respectively rice, wheat, foodgrains, sugarcane and non-foodgrains.

Table 2 : Area (percentage) treated with fertiliser

c r o p	percentage of gross crop area treated with fertiliser	
	irrigated	unirrigated
	crop (2)	crop (3)
1. rice	89	20
2. jowar	29	6
3. bajra	33	8
4. mize	47	17
5. ragi	54	13
6. wheat	75	13
7. barley	29	6
8. gram	11	1
9. tur	19	4
10. foodgrains	67	10
11. sugarcane	76	26
12. groundnut	41	31
13. cotton	67	13
14. non-foodgrains	53	14
15. all crops	65	11

3.4 We shall now consider consumption of fertilisers by different crops. Table 3 below gives quantity in tonnes of urea and ammonium sulphate applied on different irrigated and unirrigated crops. From the table it is seen that for irrigated crops about 81 p.c. of urea and 80 p.c. of ammonium sulphate were applied on foodgrains. For unirrigated crops it is seen that 74 p.c. of urea and 66 p.c. of ammonium sulphate were applied on these crops. For irrigated crops it is also seen that of 1226 thousands tonnes of urea applied on all crops, ~~on rice~~ 34 p.c. of the same were applied rice and 38 p.c. of wheat. Similarly for ammonium sulphate it is seen that of 393 thousands tonnes of ammonium sulphate about 54 p.c. and 21 p.c. of the same were applied respectively on rice and wheat. Sugarcane it appears consumed 7 p.c. of urea and 8 p.c. of ammonium sulphate. Columns 6 and 7 of the table gives value of all fertilisers applied on the crops. It is seen from the table that of fertilisers worth Rs.244 crores applied on irrigated crops about 37 p.c. of the same were applied on rice, 34 p.c. on wheat, 80 p.c. on foodgrains and 20 p.c. on all non-foodgrains. Similarly it is seen that of fertiliser worth Rs.81 crores applied on unirrigated crops, 29 p.c. were applied on rice, 58 p.c. on foodgrains and 42 on non-foodgrains.

Table 3 : Consumption of urea and ammonium sulphate by crops.

c r o p	urea		ammonium sulphate		value of all fer- tilisers applied	
	(000 tonnes)	p.c.	(000 tonnes)	p.c.	(Lakh Rs.)	p.c.
(1)	(2)	(3)	(4)	(5)	(6)	(7)
<u>Irrigated crops</u>						
1. rice	421.8	34.4	210.7	54.3	9078	37.2
2. jowar	11.1	0.9	2.5	0.6	483	2.0
3. bajra	15.3	1.2	3.6	0.9	257	1.1
4. maize	44.7	3.6	12.6	3.2	842	3.4
5. ragi	6.0	0.5	1.1	0.3	114	0.5
6. wheat	462.2	37.7	80.5	20.5	8182	33.5
7. barley	16.0	1.3	1.1	0.3	213	0.9
8. gram	6.3	0.5	0.4	0.1	79	0.3
9. tur	0.5	0.0	0.2	0.1	11	0.0
10. foodgrains	990.4	80.8	316.1	80.4	19347	79.3
11. sugarcane	86.0	7.0	31.5	8.0	1916	7.8
12. groundnut	8.3	0.7	8.7	2.2	400	1.6
13. cotton	52.8	4.3	7.4	1.9	894	3.7
14. non-foodgrains	235.2	19.2	77.3	19.6	5065	20.7
15. all crops	1225.6	100.0	393.4	100.0	24412	100.0
<u>unirrigated crops</u>						
1. rice	121.2	39.1	54.4	36.0	2344	29.0
2. jowar	13.3	4.3	13.5	8.9	501	6.2
3. bajra	20.2	6.5	7.6	5.0	411	5.1
4. maize	33.1	10.7	9.2	6.1	504	6.2
5. ragi	4.3	1.4	3.0	2.0	236	2.9
6. wheat	28.4	9.2	8.2	5.4	446	5.5
7. barley	1.8	0.6	0.4	0.3	34	0.4
8. gram	1.7	0.5	0.3	0.2	25	0.3
9. tur	2.2	0.7	0.8	0.5	68	0.8
10. foodgrains	230.3	74.2	99.0	65.5	4697	58.1
11. sugarcane	6.0	1.9	2.1	1.4	107	1.3
12. groundnut	33.5	10.8	17.5	11.6	1468	18.2
13. cotton	19.2	6.2	9.4	6.2	549	6.8
14. non-foodgrains	80.0	25.8	52.2	34.5	3381	41.9
15. all crops	310.3	100.0	151.2	100.0	8078	100.0
<u>Irrigated &amp; unirrigated crops</u>						
1. rice	543.0	35.4	265.1	49.2	11422	35.3
2. jowar	24.4	1.6	16.0	2.9	984	3.0
3. bajra	35.5	2.3	11.2	2.1	668	2.1
4. maize	77.8	5.1	21.8	4.0	1346	4.1
5. ragi	10.3	0.7	4.1	0.7	350	1.1
6. wheat	90.6	5.9	88.7	16.3	8628	26.7
7. barley	17.8	1.2	1.5	0.3	247	0.8
8. gram	8.0	0.5	0.7	0.1	104	0.3
9. tur	2.7	0.2	1.0	0.2	79	0.2
10. foodgrains	1220.7	79.5	115.1	21.1	24044	74.3
11. sugarcane	94.0	6.1	33.6	6.2	2023	6.2
12. groundnut	41.8	2.7	26.2	4.8	1868	5.7
13. cotton	72.0	4.7	16.8	3.1	1528	4.7
14. non-foodgrains	315.2	20.5	129.5	23.8	8446	25.7
15. all crops	1535.9	100.0	544.6	100.0	32490	100.0

3.5 We shall now consider application rates of fertilisers by crops. The table below gives application rate (kg/ha.) of urea and ammonium sulphate for selected irrigated and unirrigated crops. It is seen that at all-India level taking all crops together <sup>for urea</sup> the application rates were 100 and 68 respectively for irrigated and unirrigated crops. The application rate for irrigated rice, wheat, all foodgrains and non-foodgrains were respectively 90, 101, 95 and 135. Similarly for unirrigated rice, wheat, foodgrains and non-foodgrains the application rates were respectively 58, 77, 63 and 89. With regard to ammonium sulphate it is seen that the application rate for all irrigated crops were 105 the corresponding rate for unirrigated crops being 81. It is seen from the table that in general the application rate for irrigated crops were higher than those for unirrigated crops. Columns 6 & 7 of the table gives application rate (Rs./ha.) for all fertilisers together. [For working out the rates total area treated under different fertilisers have been added up which has been used in the denominator for dividing the value figures of all fertilisers] It is seen from the table for all crops at all-India level the application rates were 103, 75 respectively for irrigated and unirrigated crops. For irrigated rice, wheat, all foodgrains, sugarcane and all non-foodgrains the application rates were respectively 91, 104, 96, 199 and 100. Similarly for unirrigated rice, wheat, foodgrains, sugarcane and all non-foodgrains the application rates were 59, 69, 62, 110 and 103.

Table 4 : Application rate of urea and ammonium sulphate and all fertilisers applied on irrigated and unirrigated crops

c r o p	urea : kg/ha		ammonium sul- phate : kg/ha		all fertili- sers : Rs./ha.	
	I	U	I	U	I	U
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1. rice	90	58	100	78	91	59
2. jowar	82	48	104	63	164	55
3. bajra	92	64	67	88	78	64
4. maize	116	77	118	78	115	70
5. ragi	107	67	100	62	86	75
6. wheat	101	77	97	79	104	69
7. barley	62	94	31	133	58	69
8. gram	72	130	100	150	69	96
9. tur	45	71	100	62	58	90
10. foodgrains	95	63	98	76	96	62
11. sugarcane	161	115	297	150	199	110
12. groundnut	89	94	119	62	168	925
13. cotton	149	74	107	64	131	83
14. non-foodgrains	135	89	142	91	143	103
15. all crops	100	68	105	81	103	

3.6 We shall now consider application rates of fertilisers separately by size class of holdings. Appendix tables 3.1 to 3.9 give by size-class of holdings number of holdings, area under, quantity and value of different fertilisers applied on 9 selected irrigated crops namely, rice, jowar, bajra, maize, wheat, barley, sugarcane, cotton and all irrigated crops. Similar data for 6 selected unirrigated crops namely, rice, jowar, bajra, maize and wheat, and all unirrigated crops are given in appendix tables 4.1 to 4.6. Table 5 presents area under different fertilisers separately by 6 size class of holdings namely upto 0.5 ha., 0.51 to 1.0 ha., 1.01 to 2.02 ha., 2.03 to 4.04 ha., 4.05 to 10.12 ha., 10.13 ha. and above<sup>for irrigated rice</sup>. From the table it is seen that in size class upto 0.5 ha. of 597 thousands ha. treated with fertilisers 287, 118, 55, 88 and 49 thousands ha. were treated respectively with urea, ammonium sulphate, super phosphate, mixed fertilisers and other chemical fertilisers. Similarly in holdings of size class 4.05 to 10.12 ha. out of 2523 thousands ha. treated with fertilisers 1201, 478, 286, 268 and 290 thousands ha. were treated respectively with urea, ammonium sulphate, super phosphate, mixed fertilisers and other chemical fertilisers. Considering the area under different fertilisers in the different size-class of holdings it appears that in all the size-classes urea was used to a large extent and the use of other fertilisers was small. The same trend is corroborated when one considers the value figures of fertilisers as a percentage of the total value of all the fertilisers within each size-class. Considering the application rates of fertiliser i.e. the quantity of a particular fertiliser applied per ha. of gross area treated with the fertiliser, it is seen from the table that for urea the application rate (kg/ha.) was 107, 94, 78, 85, 97 & 89 respectively in the six size-classes. Similarly the application rate (kg/ha.) of ammonium sulphate was 112, 99, 108, 90, 96 & 100 respectively in the six size-classes. In general there was not much variation in the rates between size classes for urea and ammonium sulphate.

Table 5 : Area under and quantity and value of fertiliser applied on irrigated rice by size class of holdings.

item/fertiliser	size class in hectares						
	upto 0.5	0.51- 1.00	1.01- 2.02	2.03- 4.04	4.05- 10.12	10.13 & above	all sizes
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
<b>1. area (000 ha.)</b>							
urea	287	595	1016	1275	1201	354	4728
ammonium sulphate	118	218	503	619	478	201	2137
super phosphate	55	131	165	269	286	120	1026
mixed	88	156	267	268	268	120	1167
others	49	85	235	256	290	73	988
<b>total</b>	<b>597</b>	<b>1185</b>	<b>2186</b>	<b>2687</b>	<b>2523</b>	<b>868</b>	<b>10048</b>
<b>2. Qty. of fertiliser (00 tonnes)</b>							
urea	308	557	790	1081	1167	315	4218
ammonium sulphate	132	215	543	559	457	202	2107
super phosphate	79	136	293	331	268	97	1204
mixed	161	217	351	367	297	166	1560
others	84	100	227	248	277	36	973
<b>3. value of fertiliser (in lakh Rs.)</b>							
urea	347	630	785	1088	1063	327	4239
ammonium sulphate	120	165	412	469	385	160	1711
super phosphate	57	108	196	227	196	54	838
mixed	135	236	298	307	276	192	1444
others	55	79	185	229	246	53	846
<b>total</b>	<b>714</b>	<b>1218</b>	<b>1875</b>	<b>2320</b>	<b>2166</b>	<b>785</b>	<b>9078</b>
<b>4. application rate (kg/ha.)</b>							
urea	107	94	78	85	97	89	89
ammonium sulphate	112	99	108	90	96	100	99
super phosphate	144	106	177	123	94	81	117
mixed	182	139	132	137	111	138	134
others	172	118	96	97	96	50	98
<b>5. application rate (Rs./ha.)</b>							
urea	121	106	77	86	88	92	90
ammonium sulphate	102	76	82	76	81	79	80
super phosphate	104	83	119	84	68	45	82
mixed	154	151	111	115	103	160	124
others	112	93	79	89	85	72	86
<b>total</b>	<b>123</b>	<b>103</b>	<b>86</b>	<b>86</b>	<b>86</b>	<b>90</b>	<b>91</b>

3.7 Table 6 presents similar data relating to irrigated wheat. It is seen that for urea the marginal application rate was 101 kg. per ha. and the rate in the different size classes were respectively 113, 92, 88, 101, 106 and 117. In monetary term the application rates in the different size classes were 106, 90, 119, 95, 102 and 113. For ammonium sulphate while the marginal rate was 97 the rate in the different size classes were respectively 193, 122, 97, 88, 89 and 111. No definite association of the rate with size-class appears to exist. Further comparing the figures of table 5 with table 6 it is seen that the application rate of urea for irrigated wheat was generally higher than the corresponding rate for rice in the different size classes.

Table 6 : Area under and quantity and value of fertiliser applied on irrigated wheat by size class of holdings.

item/fertiliser	size class in hectares						
	upto 0.5	0.51- 1.00	1.01- 2.02	2.03- 4.04	4.05- 10.12	10.13 & above	all sizes
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
<b>1. area (000 ha.)</b>							
urea	138	371	839	1195	1574	442	4559
ammonium sulphate	22	37	187	214	279	89	828
super phosphate	7	42	75	116	170	68	478
mixed	20	33	134	215	350	119	851
others	12	37	160	231	406	222	1068
<b>total</b>	<b>199</b>	<b>520</b>	<b>1395</b>	<b>1971</b>	<b>2758</b>	<b>940</b>	<b>7784</b>
<b>2. Quantity of fertiliser (00 tonnes)</b>							
urea	156	340	740	1209	1660	516	4622
ammonium sulphate	42	45	181	189	248	99	805
super phosphate	9	47	77	128	262	107	629
mixed	15	38	159	285	478	251	1226
others	24	46	125	256	455	258	1164
<b>3. value of fertiliser (in lakh Rs.)</b>							
urea	147	334	1000	1141	1612	499	4732
ammonium sulphate	22	30	152	148	224	79	655
super phosphate	7	35	52	101	187	69	453
mixed	29	39	231	275	505	178	1257
others	18	40	120	241	416	251	1085
<b>total</b>	<b>222</b>	<b>477</b>	<b>1555</b>	<b>1905</b>	<b>2946</b>	<b>1077</b>	<b>8182</b>
<b>4. application rate (kg/ha)</b>							
urea	113	92	88	101	106	117	101
ammonium sulphate	193	122	97	88	89	111	97
super phosphate	122	112	102	110	154	157	132
mixed	74	115	119	132	145	211	144
others	202	124	78	111	112	116	109
<b>5. application rate (Rs./ha.)</b>							
urea	106	90	119	95	102	113	104
ammonium sulphate	101	80	81	69	80	89	79
super phosphate	104	83	69	87	111	102	95
mixed	144	118	172	128	153	150	147
others	147	107	75	104	102	113	102

3.8 Table 7 gives area treated with and application rates (kg/ha.) of different fertilisers for unirrigated rice and wheat separately by 6 size classes. It is seen that the marginal application rates for all the fertilisers excepting ammonium sulphate and mixed fertilisers were higher for wheat than for rice. For rice it is seen that the application rates of urea in the different size classes above 1.0 ha. were more or less equal. For ammonium sulphate there appears no systematic trend in the rates in size classes above 1.0 ha. For wheat it is seen that in general in large holdings the application rate of urea was higher. For ammonium sulphate there appears to be no systematic trend.

Table 7 : Application rate (kg/ha.) of different fertilisers for unirrigated rice and wheat by size class of holdings

item/fertiliser	size class in hectares						
	upto 0.5	0.51- 1.00	1.01- 2.02	2.03- 4.04	4.05- 10.12	10.13 & above	all sizes
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1. <u>area (in 100 hectares)</u>		<u>rice</u>					
urea	1204	2527	6015	4978	5281	1075	21080
ammonium sulphate	377	661	1325	2010	1795	793	6961
super phosphate	2	117	646	1322	858	682	3627
mixed fertiliser	276	352	1873	1608	825	262	5196
other fertiliser	121	299	567	662	859	163	2671
2. <u>application rate (kg/ha.)</u>		<u>rice</u>					
urea	87	66	55	52	54	62	58
ammonium sulphate	133	100	89	66	74	56	78
super phosphate	60	72	79	59	57	72	65
mixed fertiliser	203	94	82	90	84	70	91
other fertiliser	79	98	67	83	62	98	75
3. <u>area (in 100 hectares)</u>		<u>wheat</u>					
urea	51	186	1030	1035	1041	318	3661
ammonium sulphate	71	82	237	155	225	276	1046
super phosphate	14	22	178	122	122	139	597
mixed fertiliser	14	63	96	148	269	123	713
other fertiliser	24	-	10	93	210	85	422
4. <u>application rate (kg/ha.)</u>		<u>wheat</u>					
urea	64	54	66	81	81	110	78
ammonium sulphate	216	77	57	85	99	40	78
super phosphate	169	112	82	86	138	65	93
mixed fertiliser	59	116	50	65	85	46	72
other fertiliser	131	-	331	88	70	161	102



3.9 Table 8 gives application rates for all crops separately by irrigated and unirrigated crops. It is seen <sup>that</sup> in general the application rate for irrigated crops was about 20% higher than corresponding rate for unirrigated crops in the different size classes.

Table 8 : Application rate (kg/ha.) of different fertilisers on all crops separately by irrigated and unirrigated crops by size class of holdings.

fertiliser	I/U	size class in hectares						
		upto 0.5	0.51- 1.00	1.01- 2.02	2.03- 4.04	4.05- 10.12	10.13 & above	all sizes
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
urea	I	112	96	91	98	108	107	101
	U	96	74	63	74	96	60	73
ammonium sulphate	I	140	110	114	96	96	109	106
	U	143	104	93	83	77	58	81
super phosphate	I	143	108	150	121	122	116	116
	U	188	79	85	80	115	87	97
mixed	I	194	164	176	150	141	177	159
	U	210	180	105	123	123	77	118
others	I	218	131	130	115	123	104	123
	U	231	148	93	115	92	115	108

I = irrigated; U = unirrigated.

## Chapter 4

## Use of fertiliser by states

4.1 We shall now consider the use of fertiliser by the different states. For this purpose we shall restrict the discussion to 17 states namely, Andhra Pradesh, Assam, Bihar, Gujarat, Haryana, Himachal Pradesh, Jammu & Kashmir, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Orissa, Punjab, Rajasthan, Tamil Nadu, and West Bengal which together covered more than 99 percent of area treated with fertiliser in 1970-71. Appendix Tables 5 & 6 give area treated with fertiliser, quantity of fertiliser and value of fertiliser for all crops by states respectively for irrigated and unirrigated crops. Table 9 gives gross area treated with :-

Table (9) : Area treated with fertiliser and value of fertiliser.

srl. no.	state	Area in thousand ha.		Value in lakh Rs.		
		area	value	appli- cation rate	share of irri- gated crop	
		(ha.) 000	(Rs.) (lakh)	Rs./ha.	area	value
(1)		(2)	(3)	(4)	(5)	(6)
1.	Andhra Pradesh	3209	3599	112	74.4	75.7
2.	Assam	21	22	106	0.0	0.0
3.	Bihar	2784	1371	49	59.9	62.5
4.	Gujarat	3252	3330	102	32.6	38.7
5.	Haryana	803	926	115	88.5	90.4
6.	Himachal Pradesh	119	74	62	13.4	33.4
7.	Jammu & Kashmir	175	123	70	92.6	91.8
8.	Karnataka	1776	1710	96	46.2	63.5
9.	Kerala	814	776	95	66.1	58.5
10.	Madhya Pradesh	1949	1186	61	54.2	65.2
11.	Maharashtra	2580	2931	114	43.8	66.8
12.	Orissa	480	312	65	62.1	70.8
13.	Punjab	3216	3998	124	92.1	95.7
14.	Rajasthan	781	504	65	84.1	86.1
15.	Tamil Nadu	3189	3243	102	92.8	88.9
16.	Uttar Pradesh	7583	7120	94	80.5	85.2
17.	West Bengal	1618	1126	70	63.9	68.6
all States & UTS		34458	32490	94	68.5	75.1

~~given gross area treated with~~ all fertilisers like urea, ammonium sulphate, super phosphate, mixed fertiliser and other chemical fertilisers and value of fertilisers applied for all irrigated and unirrigated crops taking together. It is seen from the table that out of 34458 thousands ha. of area treated with fertiliser the share of Uttar Pradesh was the highest being 7583 thousands ha. followed by Gujarat, Punjab, Andhra, Bihar and Maharashtra with 3252, 3216, <sup>2784</sup>3209 and 2580 thousand ha. respectively. Of total fertilisers worth Rs.324.9 crores applied the share of Uttar Pradesh again was the highest being 71.2 cores followed by Punjab with 40.0 crores, Andhra 36.0 and Gujarat 33.3 crores. Column 4 of the table gives application rate of fertiliser i.e. value of fertiliser applied per ha. treated with fertiliser. It is seen from the table that while the all India rate was Rs.94 per ha., the rate was the highest in Punjab being 124 followed by Haryana (115), Maharashtra (114) and Andhra (112). The rate of Bihar was the lowest being Rs.49 per ha. Column 5 of the table expresses gross irrigated area treated with fertiliser as a percentage of gross area (both irrigated and unirrigated) treated with fertiliser separately by states. It is seen from the table that in general in most of the states more fertilisers were applied on irrigated crops than an unirrigated crops. In /<sup>the</sup> six states viz. Haryana, Jammu & Kashmir, Punjab, Rajasthan, Tamil Nadu & Uttar Pradesh more than 80 percent of area treated with fertiliser was irrigated. The relevant share in six other states viz. Andhra, Bihar, Kerala, Madhya Pradesh, Orissa & West Bengal was between 50 to 75 percent. In Assam, Gujarat, Himachal Pradesh & Maharashtra it appears that more fertilisers were applied on unirrigated crops than on irrigated crops. Column 6 of the table expresses value of fertiliser applied on irrigated crops as a percentage of total value of fertiliser applied on all crops. This also corroborates the fact that in general more fertiliser was applied on irrigated crops.

4.2 We shall now consider the use of fertiliser by irrigated and unirrigated crops. For this purpose again we shall restrict the discussion to those 17 states. Table 10 below gives gross area treated with fertiliser and total value of fertiliser applied separately by irrigated and unirrigated crops. It is seen from the table that out of 23620 thousands ha. of irrigated area treated with fertiliser the share of Uttar Pradesh was the highest being 6101, followed by Punjab and Tamil Nadu with respectively 2962 and 2958 thousands ha. . Considering the value of fertiliser used on irrigated crops it is seen that of fertiliser worth of Rs.244 crores applied, the share of Uttar Pradesh was about 25% followed by Punjab with 16% and Tamil Nadu with 12%. These three states, therefore, consumed about half of the

Table(10) : Area treated with fertiliser and value of fertiliser applied by states.

Area in thousand ha.

Value of fertiliser in Rs. lakh.

S. No.	state	irrigated crops				unirrigated crops				rate Rs./ha.	
		area		value		area		value		I	U
		ha.	pc.	Rs.	pc.	ha.	pc.	Rs.	pc.		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	
1.	Andhra Pradesh	2387	10.1	2726	11.2	822	7.6	873	10.8	114	106
2.	Assam	-	-	-	-	21	0.2	22	0.3	-	106
3.	Bihar	1668	7.1	856	3.5	1116	10.3	515	6.4	51	46
4.	Gujarat	1059	4.5	1288	5.3	2193	20.2	2042	25.3	122	93
5.	Haryana	711	3.0	837	3.4	92	0.8	89	1.1	118	96
6.	Himachal Pradesh	16	0.1	25	0.1	103	1.0	49	0.6	154	48
7.	Jammu & Kashmir	162	0.7	113	0.5	13	0.1	10	0.1	70	77
8.	Karnataka	821	3.5	1086	4.4	955	8.3	624	7.7	133	65
9.	Kerala	538	2.3	454	1.9	276	2.5	322	4.0	84	117
10.	Madhya Pradesh	1056	4.5	781	3.2	893	8.2	405	5.0	74	45
11.	Maharashtra	1131	4.8	1958	8.0	1449	15.4	973	12.0	173	67
12.	Orissa	298	1.3	225	0.9	182	1.7	87	1.1	76	48
13.	Punjab	2962	12.5	3828	15.7	254	2.3	170	2.1	129	67
14.	Rajasthan	661	2.8	438	1.8	120	1.1	66	0.8	66	55
15.	Tamil Nadu	2958	12.5	2881	11.8	231	2.1	362	4.5	97	157
16.	Uttar Pradesh	6101	25.8	6063	24.8	1482	13.7	1057	13.1	99	71
17.	West Bengal	1033	4.4	773	3.2	585	5.4	353	4.4	75	60
all states/UTs.		23620	100	24412	100	10838	100	8072	100	103	75

total fertiliser applied in all the states.

4.3 With regard to unirrigated crops it is seen that out of total area of 10838 ha. treated with fertiliser, the share of Gujarat was highest, being 2193, followed by Uttar Pradesh (1482), Maharashtra (1449), Bihar (1116), Karnataka (955) and Madhya Pradesh (893) and Andhra Pradesh (822). With regard to value figures it is seen that <sup>of</sup> total fertiliser worth Rs.80,8 crores applied on unirrigated crops, Gujarat claimed 25% of the same followed by Uttar Pradesh and Maharashtra claiming respectively 13 and 12 percent.

~~9 & 10 & 11~~

4.4 Columns of the table gives application rates (Rs./ha.) of fertiliser applied. It is seen that while at all-India level the application rate for irrigated crops was Rs.103 the rate was the highest for Maharashtra being 173 followed by Himachal Pradesh, Karnatakam, Punjab and Andhra where the rates were 154, 133, 129 and 114. For unirrigated crops while the all India rate was Rs.75 per ha., the observed rate for Tamil Nadu was highest being 157, followed by Kerala, Andhra Pradesh and Assam and the rates being respectively 117, 106 & 106. From the table it is seen that in general in all the states except Kerala and Tamil Nadu the application rate of fertiliser for irrigated crops was 20 to 30 percent higher than the corresponding rate for unirrigated crops.

4.5 We shall now consider the consumption of different types of fertilisers. Appendix tables 5 and 6 give area, quantity and value of fertilisers like ammonium sulphate, urea, super phosphate, mixed fertiliser and other chemical fertilisers applied respectively on irrigated and unirrigated crops. It is seen from table 5 that at all level of 393 thousand tonnes of ammonium sulphate were applied on irrigated crops. Consumption of this fertiliser in Andhra Pradesh was highest being 69 thousand tonnes which was followed by Uttar Pradesh with 51 thousand tonnes and Tamil Nadu with 50 thousand tonnes. With regard to urea it is seen that out of total all India consumption of 1226 thousand tonnes the consumption in Uttar Pradesh was the highest being 397 thousand tonnes which was followed by Punjab with 203 thousand tonnes and Tamil Nadu and Andhra Pradesh with 114 thousand tonnes each. With regard the unirrigated crops it is seen from table 6 that out of all India consumption 151 thousand tonnes of ammonium sulphate the consumption in Maharashtra was the highest being 30 thousand tonnes which was followed by Gujarat with 26 thousand tonnes. With regard to urea it is seen that out of 310 thousand tonnes of all India consumption, the consumption in Karnataka was the highest being 106 thousand tonnes which was

followed by Uttar Pradesh with 79 thousand tonnes and Gujarat with 73 thousand tonnes. Table 11 below gives consumption of urea and ammonium sulphate for irrigated and unirrigated crops taken together. It is seen from the table that out of 1536 thousand tonnes of urea at all-India level the consumption in Uttar Pradesh was the highest being 476, which was followed by Punjab with 215 and Andhra and Gujarat with 139 and 138 respectively. Similarly for ammonium sulphate it is seen that out of total consumption of 545 thousand tonnes the consumption in Andhra Pradesh was the highest being 92 thousand which was followed by Uttar Pradesh and Maharashtra with 66 and 62 thousand tonnes respectively. From column (6) it is seen that the application rate of nitrogen (kg./ha.) was the highest in Punjab (57), which was followed by Haryana (55), Karnataka (49) and Andhra (40).

Table 11 : Quantity in (000) tonnes of urea and ammonium sulphate applied on irrigated and unirrigated crops.

states	area <sup>1/</sup> (000) ha.	urea (000) tonnes	ammoni- um sul- phate (000) tonnes	Nitro- gen equi- valent (000) tonnes <sup>2/</sup>	applica- tion rate of Nitro- gen(kg./ha.)
(1)	(2)	(3)	(4)	(5)	(6)
1. Andhra Pradesh	2073	139	92	83	40
2. Assam	12	1	-	-	38
3. Bihar	2286	68	57	43	19
4. Gujarat	1857	138	46	73	39
5. Haryana	582	66	8	32	55
6. Himachal Pradesh	36	1	3	1	28
7. Jammu & Kashmir	144	7	4	4	28
8. Karnataka	710	54	47	35	49
9. Kerala	319	17	8	9	28
10. Madhya Pradesh	1213	70	17	36	30
11. Maharashtra	1364	77	62	48	35
12. Orissa	173	1	8	2	12
13. Punjab	1853	215	29	105	57
14. Rajasthan	668	40	5	19	28
15. Tamil Nadu	1994	120	53	66	33
16. Uttar Pradesh	5999	476	66	233	39
17. West Bengal	1078	43	37	27	25
all states & U.Ts.	22426	1536	545	819	37

<sup>1/</sup> Area under urea and ammonium sulphate.

<sup>2/</sup> 46% of urea and 20.6% of ammonium sulphate.

4.6 We shall now consider application rates of different fertilisers by states. Appendix Table 8 gives application rates of different fertilisers by states. It is seen from the table that while at all-India level 33 p.c. of irrigated crop area <sup>was</sup> treated with urea, of the 17 states on which we are concentrating about 50 percentage of area in Tamil Nadu, Punjab and Kerala was treated with urea.

With regard to application rate while at all-India level 100 kg. of urea was applied per ha., it is seen that in Karnataka the application rate was 180 kg. per ha. followed by Maharashtra and Punjab with 154 and 137 kg/ha. respectively. Considering now application of urea on unirrigated crops it is seen while at all-India level only 5 p.c. of gross unirrigated area was treated with urea, in Punjab 15 per cent of area was treated with urea followed by Gujarat with 12 percent and Uttar Pradesh 10 per cent of area under urea. With regard to application rate of urea it is seen while at all-India the rate was 68 kg/ha. the application rate in Haryana, Gujarat,

Punjab

~~Rajasthan~~ and Tamil Nadu was about 90 kg/ha. (The application rate in Assam was very high but that was applied only 0.3 percent of irrigated crop area.) Considering now ammonium sulphate it is seen while at all-India

level only 10 percent of irrigated crop area was treated with ammonium sulphate in West Bengal about 30 percent of irrigated area was treated with that fertiliser followed by Tamil Nadu and Andhra with about 20 percent area under that fertiliser. With regard to application rate of the ferti-

liser the all-India rate was <sup>105</sup> 86 kg/ha. The application rate in Himachal Pradesh was very high which was followed by Karnataka with (215),

Andhra (134), <sup>Haryana (130) and</sup> Punjab (129). and ~~Maharashtra (118)~~. With regard to use of ammonium sulphate on unirrigated crops it is seen from the table that while

at all-India level only 2 percent of unirrigated crop area was treated with ammonium sulphate in Gujarat about 5 percent of area was treated with the fertiliser. With regard application rate it appears that in Andhra Pradesh about 150 kg. of ammonium sulphate was applied followed by Himachal Pradesh (128), Haryana (115), Jammu & Kashmir (108), Tamil Nadu (106) and Uttar Pradesh (106). With regard to application of mixed fertilisers it is

seen that while at all-India level only 8 percent of irrigated area was treated with mixed fertiliser, in Kerala about 32 percent of area was under that fertiliser followed by Tamil Nadu with 28 p.c. With regard to application rate it is seen that Maharashtra with 278 was

followed by Punjab (222), Orissa (185), Madhya Pradesh (170), Tamil Nadu (169), West Bengal (161) and Haryana (162). With regard to use of fertiliser on unirrigated crops it is seen that in Kerala about 14 percent crop area was treated with mixed fertiliser followed by Himachal Pradesh (6) and Tamil Nadu (4) and Karnataka (4). The application rate was highest in Tamil Nadu (334) followed by Kerala (250) and Gujarat (140) and Andhra (138).

## Chapter 5

## Use of manure and pesticide

5.1 In the survey for all crops grown during the agricultural year details about area treated with, quantity and value of farm yard manure, oil cake and other varieties organic manures applied were collected for those crops on which only organic manures were applied. Organic manures which might have been used for a preliminary soil dressing followed by application of other chemical fertilisers were excluded. Data on area treated with pesticide ( or fungicide) for plant protection and the value of pesticides applied were collected for all irrigated and unirrigated crops. Table 10 below gives area under farm yard manure during the year 1970-71 by states.

Table 10 : Area treated with farm yard manure by states

All India

All figures are in lakhs

s t a t e	farm yard manure			
	irrigated		unirrigated	
	area (Ha.)	value (Rs.)	area (Ha.)	value (Rs.)
(1)	(2)	(3)	(4)	(5)
1. Andhra Pradesh	8	979	38	2248
2. Assam	-	-	1	49
3. Bihar	9	323	23	1158
4. Gujarat	2	100	17	1072
5. Haryana	3	153	3	121
6. Himachal Pradesh	1	140	4	587
7. Jammu & Kashmir	1	167	3	367
8. Karnataka	5	1153	34	2731
9. Kerala	1	124	3	423
10. Madhya Pradesh	8	817	33	2372
11. Maharashtra	7	755	37	2351
12. Manipur	..	..	..	..
13. Meghalaya	..	3	..	5
14. Orissa	3	227	17	1132
15. Punjab	2	213	1	55
16. Rajasthan	7	1242	18	1091
17. Tamil Nadu	13	1223	13	1166
18. Tripura	..	1	..	16
19. Uttar Pradesh	36	3475	30	2504
20. West Bengal	8	693	16	933
21. Delhi	..	10	..	5
22. Goa, Daman & Diu	..	12	..	10
23. Pondicherry	..	5	..	1
all states	115	11847	293	20382



From the table it is seen that farmyard manure worth Rs.118.5 crores was applied on 115 lakh hectares of irrigated crop area at all-India level. In Uttar Pradesh 36 lakh hectares were treated with farmyard manure followed by Tamil Nadu with 13 lakh hectares, Bihar 9 lakh hectares and Madhya Pradesh with 8 lakh hectares. Similarly farmyard manure worth Rs. 203.8 crores was applied on 293 lakh hectares of unirrigated crop area at all-India level. In Andhra Pradesh 38 lakh hectares, Maharashtra 37 lakhs, Karnataka 34 lakh hectares, Madhya Pradesh 34 lakh hectares and Uttar Pradesh 30 lakh hectares were treated with farmyard manure. Table 13 below gives area under different crops treated with farmyard manure at all-India level. It is seen from the table that out of farmyard manure worth Rs.118.5 crores, manure worth Rs.42.6 crores was applied on rice followed by Rs.24.4 crores on wheat. Similarly for unirrigated crops out of Rs.203.8 crores, manure worth Rs.49.2 crores was applied on rice followed by Rs.23.3 crores on jowar and 19.5 crores of maize. Area under selected crops treated with manure and value of manure applied by states are given in appendix table 9.1 and 9.2 .

Use of oil cake and other organic manures in comparison with farmyard manure was very insignificant. At all-India level oil cake worth Rs.6.2 and 3.3 crores were applied respectively on irrigated and unirrigated crops. Similarly at all-India level other organic/manure worth Rs.8.6 and 14.59 crores were applied respectively on irrigated and unirrigated crops. The breakup of these figures by states is given in appendix table: 10 . . .

5.2 In the survey data on use of pesticide and area treated with pesticide were collected. Table 14 below gives area treated with pesticide and value of pesticide applied separately irrigated and unirrigated crops. It is seen from the table that pesticides worth Rs.10.4 crores was applied on 23 lakh hectares irrigated crop area. In Tamil Nadu it appears that 8 lakh hectares were treated with pesticide followed by Andhra Pradesh with 3 lakh hectares under pesticide. With regard to unirrigated crops it is seen that pesticide worth Rs.4.2 crores was applied on 13 lakh hectares unirrigated crop area. Andhra Pradesh topped the list with 26 lakh hectares under pesticide followed by Tamil Nadu with 23 hectares and Maharashtra with 22 lakh hectares.

Table 13 : Area under and value of farmyard/manure applied on selected crops

All India

all figures are in lakhs

c r o p s		farm yard manure			
		irrigated		unirrigated	
		area (Ha.)	value (Rs.)	area (Ha.)	value (Rs.)
(1)	(2)	(3)	(4)	(5)	
1.	rice	46	4260	80	4920
2.	jowar	4	469	41	2320
3.	bajra	4	322	24	1586
4.	maize	6	723	20	1948
5.	ragi	1	201	15	1313
6.	wheat	25	2444	17	1334
7.	barley	5	530	2	166
8.	other cereals	1	59	7	476
9.	gram	2	215	4	209
10.	tur	..	34	5	276
11.	other pulses	3	224	12	576
12.	sugar cane	4	475	1	101
13.	cotton	3	269	17	1512
14.	jute	..	26	2	131
15.	rape & mustard	1	86	1	53
16.	groundnut	2	251	17	1431
17.	sesamum	..	1	1	68
18.	tobacco	..	15	1	79
19.	spices and condiment	1	186	1	122
20.	all crops	115	11847	293	20382

sp/

Table 14 : Area treated with pesticide and value of pesticide applied

all figures are in lakh

s t a t e	irrigated		unirrigated		total	
	area (Ha)	value (Rs.)	area (Ha)	value (Rs.)	area (Ha)	value (Rs.)
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1. Andhra Pradesh	3	136	3	140	6	276
2. Assam	-	-	..	1	..	1
3. Bihar	..	8	..	4	1	..
4. Gujarat	1	63	1	44	2	108
5. Haryana	..	16	..	14	..	30
6. Himachal Pradesh	-	-	-	-	-	-
7. Jammu & Kashmir	..	1	..	6	..	7
8. Karnataka	1	25	2	19	2	45
9. Kerala	2	53	1	33	3	86
10. Madhya Pradesh	..	13	..	8	1	20
11. Maharashtra	1	116	2	86	3	202
12. Manipur	-	-	..	..	..	..
13. Meghalaya	-	-	-	-	-	-
14. Orissa	..	5	..	5	1	10
15. Punjab	2	82	..	3	2	85
16. Rajasthan	2	266	-	-	2	266
17. Tamil Nadu	9	190	2	21	11	211
18. Tripura	..	..	..	..	..	..
19. Uttar Pradesh	1	22	..	10	2	32
20. West Bengal	1	46	1	23	2	68
21. Delhi	-	-	-	-	-	-
22. Goa, Daman & Diu	-	-	-	-	-	-
23. Pondicherry	..	2	-	-	..	2
24. all states & UTs.	24	1043	13	417	37	1460

Appendix - 1

Nett and gross area treated with fertilisers

At the data collection stage for each crop grown during the agricultural year data on (i) area under the crop, (ii) area not treated with fertiliser and (iii) area treated with fertilisers like urea, ammonium sulphate, super phosphate, mixed fertiliser, and other fertilisers were collected. For area under the same crop treated with two fertilisers, say, urea & super phosphate, the area was to be shown under both the fertilisers. Therefore total area under the different fertilisers when added up gives gross area treated with fertilisers. By subtracting area not at all treated with fertilisers from total area under the crop nett area treated was derived. Table A.1 below gives nett and gross area treated with fertilisers for all irrigated crops for 16 states.

Table (A.1) : Nett and gross area under fertilisers :  
all irrigated crops.

(area figures in 000 ha.)

	state	area under crops	area not treated	nett area treated	gross area treated
	(1)	(2)	(3)	(4)	(5)
1.	Andhra Pradesh	2630	660	1970	2387
2.	Assam	28	28	-	-
3.	Bihar	3208	1358	1850	1668
4.	Gujarat	1310	490	820	1059
5.	Haryana	1512	876	636	711
6.	Himachal Pradesh	86	70	16	16
7.	Jammu & Kashmir	248	124	124	162
8.	Karnataka	910	489	421	821
9.	Kerala	379	110	269	538
10.	Madhya Pradesh	2550	1749	801	1056
11.	Maharashtra	2174	1285	889	1131
12.	Orissa	447	267	180	298
13.	Punjab	3043	846	2197	2962
14.	Tamil Nadu	2702	877	1825	2958
15.	Uttar Pradesh	12070	6711	5359	6101
16.	West Bengal	1224	518	706	1033
17.	total of 16 states	34521	16957	17564	22901

It is seen from the table that in Karnataka and Kerala gross area was nearly two times nett area treated with fertiliser. In Orissa and Tamil Nadu it exceeded nett area by about 60 percent and in West Bengal and Punjab respectively by about 45 and 35 percent. In other states considered in the table excepting Jharkhand it exceeded nett area by about 10 to 30 percent. At all India level, based on the states considered, gross area exceeded nett area by about 30 percent. Similar data for all unirrigated crops for six states namely, Bihar, Karnataka, Kerala, Punjab, Uttar Pradesh and West Bengal are given in table (A.2). It is seen that in Kerala gross area exceeded nett area by about 40 percent, in Punjab by about 30 percent and in Bihar and Karnataka by about 20 percent.

Table (A.2) : Nett and gross area under fertilisers :  
all unirrigated crops.

(area figures in 000 ha.)

state	area under crops	area not treated	nett area treated	gross area treated
(1)	(2)	(3)	(4)	(5)
1. Bihar	7907	6990	917	1116
2. Karnataka	7578	6795	783	955
3. Kerala	337	639	198	276
4. Punjab	823	630	193	254
5. Uttar Pradesh	10868	9396	1472	1482
6. West Bengal	3545	3017	528	585
7. total of 6 states	31558	27467	4091	4668

Appendix 2  
Estimation Procedure

Let  $\hat{Y}_r$  denote the estimate of total for the characteristic  $y$  from a sub-sample for the region  $r$  within a state. Then  $\hat{Y}_r$  was estimated as

$$\hat{Y}_r = \sum_{t=1}^4 M_t \sum_{s=1}^k \sum_{i=1}^{n_s} \sum_{j=1}^{h_{sit}} y_{sitj}$$

where  $y_{sitj}$  was the value of the characteristic for the  $j$ th household <sup>1/</sup> of  $t$ -th sub-stratum in  $i$ -th village of the  $s$ -th stratum,  $M_t$  was the constant multiplier for the  $t$ -th sub-stratum, the multiplier being the same for all rural strata within the region,  $n_s$  was the number of sample villages in a sub-sample of the  $s$ th stratum and  $k$  was the number of strata within the region.

The state estimate of the characteristic was then given by

$$Y = \sum_{r=1}^c \hat{Y}_r, \text{ there being } c \text{ regions within a state.}$$

Since the Central sample had only two sub-samples in each stratum, if  $y_i$  ( $i = 1, 2$ ) be the estimates of the state total of a characteristic based on the  $i$ -th sample, the combined estimate was given by

$$y_0 = 1/2 (y_1 + y_2)$$

In order to retain the self-weighting nature of the design in cases of casualty villages and households, adjustments were done for each sub-sample at regional level by the following formula;

$$M = \frac{n}{m} \cdot \frac{P}{Q} \cdot M \text{ (original multiplier),}$$

$P$  being the number of expected households based on  $m$  surveyed villages in a sub-stratum,  $Q$  the number of households surveyed in the substratum,  $n$  the number of villages selected and  $m$  the number of villages surveyed.

<sup>1/</sup> In case of a character relating to an operational holding,  $y_{sitj}$  corresponded to the sum of the values of the character for the different operational holdings of the  $j$ th household, in  $t$ -th sub-stratum in  $i$ th village of the  $s$ -th stratum. For a joint operational holding the value of the characteristic was divided by the number of households participating in the joint holding before taking the sum.

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Table (1.1) : Estimated number of holdings and area under selected crops and fertilisers

All India

Irrigated crops  
All figures in (000)

crop	number of holdings reporting the crop	number of holdings reporting fertiliser				
		urea	ammo-nium sulphate	super phosphate	mixed fertiliser	other fertiliser
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1. rice	13895	5324	2169	953	1258	806
2. jowar	1321	157	52	26	86	18
3. bajra	1328	221	65	38	47	37
4. maize	2868	615	217	76	85	120
5. ragi	718	134	37	12	42	25
6. wheat	13562	5517	971	548	775	756
7. barley	3717	761	67	41	73	39
8. other cereals	806	74	2	-	4	7
9. gram	2772	270	20	18	26	24
10. tur	377	17	2	3	2	3
11. other pulses	4257	340	40	26	30	21
12. sugar cane	3847	1103	271	94	211	182
13. rape & mustard	1494	511	84	27	25	54
14. ground nut	804	122	107	85	77	35
15. sesamum	121	4	5	1	-	-
16. cotton	1146	312	36	75	56	82
17. jute	235	94	47	28	28	7
18. tobacco	133	36	9	10	10	8
19. spices & condiments	1000	223	94	62	63	44
all crops	26072	10630	3351	1741	2437	1820

Table (1.1)Contd. : Estimated number of holdings and area under selected crops and fertilisers.

All India

irrigated crops  
all figures in (000) hectare

crop	estimated area under the crop	estimated area under fertiliser				
		urea	ammo-nium sulphate	super phosphate	mixed fertiliser	other fertiliser
(1)	(8)	(9)	(10)	(11)	(12)	(13)
1. rice	11314	4728	2137	1026	1167	988
2. jowar	1032	136	24	27	89	19
3. bajra	1004	167	54	22	40	47
4. maize	1559	384	107	57	81	103
5. ragi	248	56	11	7	48	11
6. wheat	10583	4559	828	478	851	1068
7. barley	1243	259	35	25	29	18
8. other cereals	411	32	1	-	-	4
9. gram	1059	88	4	5	5	12
10. tur	101	11	2	1	4	1
11. other pulses	1395	61	8	22	5	7
12. sugar cane	1298	535	106	36	166	118
13. rape & mustard	342	102	25	12	7	12
14. ground nut	573	93	73	80	109	48
15. sesamum	40	1	2	-	-	-
16. cotton	1121	473	69	75	61	128
17. jute	82	36	19	13	7	3
18. tobacco	20	7	2	3	4	2
19. spices & condiments	255	75	34	19	29	13
all crops	36546	12224	3754	1985	2869	2788

Table (1.2) : Estimated quantity and value of different fertilisers applied on selected crops

All India		Irrigated crops all figures are in lakh Kg/Rs.				
crops	urea		ammonium sulphate		super phosphate	
	Q	V	Q	V	Q	V
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1. rice	4218	4239	2107	1711	1204	838
2. jowar	111	133	25	21	20	17
3. bajra	153	143	36	31	25	18
4. maize	447	423	126	108	71	58
5. ragi	60	55	11	24	8	7
6. wheat	4622	4732	805	655	629	403
7. barley	160	154	11	9	14	12
8. other cereals	27	27	-	-	-	-
9. gram	63	61	4	2	7	5
10. tur	5	5	2	2	1	1
11. other pulses	38	37	4	3	11	6
12. sugar cane	860	828	315	257	91	76
13. rape & mustard	92	88	32	19	16	9
14. ground nut	83	74	87	81	116	88
15. sesamum	1	1	1	1	-	-
16. cotton	618	581	74	79	89	82
17. jute	22	22	11	7	6	3
18. tobacco	11	12	8	8	7	5
19. spices & condiments	101	102	50	34	27	24
20. all crops	12256	12186	3934	3243	2487	1811

  

crops	mixed fertilisers		other fertilisers		all fertilisers total value in lakh Rs.
	Q	V	Q	V	
(1)	(8)	(9)	(10)	(11)	(12)
1. rice	1603	1479	973	846	9113
2. jowar	227	306	9	6	483
3. bajra	49	36	40	29	257
4. maize	146	140	152	113	842
5. ragi	27	21	10	7	114
6. wheat	1226	1257	1164	1085	8132
7. barley	25	24	14	14	213
8. other cereals	-	-	9	7	34
9. gram	6	5	8	6	79
10. tur	2	3	-	-	11
11. other pulses	4	3	7	5	54
12. sugar cane	601	539	279	216	1916
13. rape & mustard	7	7	11	12	135
14. ground nut	132	102	53	55	400
15. sesamum	-	-	-	-	2
16. cotton	86	69	186	168	979
17. jute	18	16	1	1	49
18. tobacco	13	10	15	14	49
19. spices & condiments	79	58	22	23	241
20. all crops	4561	4286	3436	2885	24412

Table (2.1) : Estimated number of holdings and area under selected crops and fertilisers

All India

Unirrigated crops  
All figures in (000)

crop	number of holdings reporting the crop	number of holdings reporting fertiliser				
		urea	ammo-nium sulphate	super phosphate	mixed fertiliser	other fertilisers
(1)	(2)	(3)	(4)	(5)	(6)	(7)
rice	21712	2754	896	261	530	274
jowar	10098	196	141	127	117	35
bajra	6401	304	62	83	62	38
maize	9400	741	202	74	54	124
ragi	3891	90	60	72	96	28
wheat	7399	466	133	89	69	45
barley	2145	24	4	7	16	2
other cereals	5247	52	8	16	30	11
gram	4939	37	3	9	3	8
tur	5906	192	42	36	40	17
other pulses	11824	74	40	69	103	19
sugar cane	948	137	31	2	15	200
rape & mustard	1880	27	88	22	2	5
ground nut	4920	176	104	215	136	76
sesamum	1381	13	4	4	4	1
cotton	2869	159	101	29	71	31
jute	1568	152	20	16	24	10
tobacco	361	20	28	311	16	13
spices & condiments	1412	97	49	14	92	24
All crops	46873	4334	1602	853	1300	724

Table (2.1)Contd. : Estimated number of holdings and area under selected crops and fertilisers

crop	estimated area under the crop	unirrigated crops all figures in (000) hectare				
		urea	ammo-nim sulphate	super phosphate	mixed fertiliser	other fertilisers
(1)	(8)	(9)	(10)	(11)	(12)	(13)
1. rice	19809	2108	696	363	520	267
2. jowar	15019	277	214	179	159	87
3. bajra	8448	316	86	103	81	54
4. maize	4140	427	118	49	43	81
5. ragi	2426	64	48	65	116	22
6. wheat	4954	366	104	60	71	42
7. barley	754	19	3	13	13	1
8. other cereals	3428	13	3	16	19	8
9. gram	3138	13	2	6	2	3
10. tur	1809	31	13	11	18	3
11. other pulses	7160	40	13	46	42	11
12. sugar cane	375	52	14	2	17	12
13. rape & mustard	596	15	1	-	5	2
14. ground nut	5298	357	282	566	217	198
15. sesamum	782	11	7	2	-	3
16. cotton	5234	261	147	62	124	65
17. jute	630	46	4	6	5	4
18. tobacco	167	8	45	34	57	26
19. spices & condiments	397	38	20	10	33	8
all crops	95467	4572	1876	1660	1737	993

Table (2.2) : Estimated quantity and value of different fertiliser applied on selected crops

All India

unirrigated crops  
all figures are in lakh Kg./Rs.

crop (1)	urea		ammonium sulphate		super phosphate	
	Q (2)	V (3)	Q (4)	V (5)	Q (6)	V (7)
1. rice	1212	1273	544	468	235	154
2. jowar	133	127	135	124	170	123
3. bajra	202	187	76	52	112	78
4. maize	331	325	92	65	37	23
5. ragi	43	40	30	39	43	51
6. wheat	284	266	82	65	56	41
7. barley	18	14	4	2	16	6
8. other cereals	8	9	7	4	11	6
9. gram	17	12	3	2	12	8
10. tur	22	21	8	9	10	15
11. other pulses	33	29	9	7	29	21
12. sugar cane	60	79	21	14	0	0
13. rape & mustard	11	11	0	0	0	0
14. ground nut	335	334	175	180	614	450
15. sesamum	3	3	6	6	1	1
16. cotton	192	201	94	98	71	53
17. jute	30	29	4	4	4	3
18. tobacco	15	13	105	100	72	38
19. spices & condiments	60	56	34	32	14	14
20. all crops	3103	3082	1512	1364	1614	1172

crop (1)	mixed fertiliser		other fertiliser		all fertilisers total value in lakh Rs. (12)
	Q (8)	V (9)	Q (10)	V (11)	
1. rice	475	394	201	155	2344
2. jowar	118	94	34	33	501
3. bajra	64	55	45	39	411
4. maize	27	22	80	69	504
5. ragi	65	98	9	8	236
6. wheat	51	48	43	26	446
7. barley	14	10	3	2	34
8. other cereals	12	24	1	2	45
9. gram	1	1	2	2	25
10. tur	19	21	3	2	68
11. other pulses	22	21	5	5	83
12. sugar cane	12	8	48	6	107
13. rape & mustard	4	2	2	1	14
14. ground nut	260	240	247	264	1468
15. sesamum	0	0	4	4	14
16. cotton	164	117	95	78	549
17. jute	7	6	2	2	44
18. tobacco	88	79	30	38	268
19. spices & condiments	73	62	16	15	179
20. all crops	2019	1614	1071	846	8078

Table (3.1) : Estimated number of holdings reporting use of chemical fertilisers and estimated area under, quantity consumed and value of the chemical fertiliser by type of fertiliser and size class of operational holdings

All India

Crop : irrigated rice

size class of operational holdings (hectares)	ammonium sulphate				super phosphate			
	no. of holdings reporting (00)	area (00 hectare)	quantity (00 kg)	value (00)	no. of holdings reporting (00)	area (00 hectares)	quantity (00kg)	value (00Rs)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1. 0.00 - 0.20	994	89	14543	14790	458	72	13237	9711
2. 0.21 - 0.40	2147	580	70738	61154	939	259	35168	25929
3. 0.41 - 0.50	1242	507	46733	43968	616	217	30517	21488
4. 0.51 - 1.00	4494	2176	215071	164855	2143	1314	136162	108244
5. 1.01 - 2.02	5681	5034	542850	412056	1960	1653	292556	196015
6. 2.03 - 3.03	2762	4166	374159	315590	1324	1819	244270	161933
7. 3.04 - 4.04	1380	2028	184505	153468	589	870	86770	64972
8. 4.05 - 5.05	852	1611	138383	125171	413	930	96625	76688
9. 5.06 - 6.07	686	1128	108077	79803	344	784	77051	49917
10. 6.08 - 8.09	551	1238	133216	119548	323	778	61355	43612
11. 8.10 - 10.12	319	807	76990	60817	154	357	32477	25693
12. 10-13 - 12.14	194	696	61763	38990	56	261	45566	20152
13. 12.15 - 20.24	265	900	81307	65569	130	333	28040	18941
14. 20.25 & above	121	412	58989	55092	78	610	23793	15065
15. all sizes	21688	21372	2107324	1710871	9527	10257	1203587	830360

Table (3.1) Contd. : Estimated number of holdings reporting use of chemical fertilisers and estimated area under, quantity consumed and value of the chemical fertiliser by type of fertiliser and size class of operational holdings

All India

crop : irrigated rice

size class of operational holdings (hectares)	urea				mixed			
	no. of holdings reporting (00)	area (00 acres) (00 hectares)	quantity (00 kg)	value (00.Rs)	no. of holdings reporting (00)	area (00 acres) (00 hectares)	quantity (00 kg.)	value (00Rs)
(1)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
1. 0.00 - 0.20	2090	222	25053	30414	367	55	19433	14039
2. 0.21 - 0.40	5351	1450	147693	151313	1783	430	184804	57903
3. 0.41 - 0.50	3419	1195	135583	165360	1133	392	56398	63343
4. 0.51 - 1.00	12002	5951	556742	630300	2474	1561	217491	236062
5. 1.01 - 2.02	12361	10160	790388	785121	2841	2674	351227	297691
6. 2.03 - 3.03	6980	7525	655777	635383	1566	1735	248858	207077
7. 3.04 - 4.04	3642	5228	425198	452299	670	943	118373	100370
8. 4.05 - 5.05	2244	3675	323732	332381	548	860	111580	118132
9. 5.06 - 6.07	1413	2524	239898	225399	253	586	56177	50523
10. 6.08 - 8.09	1676	3721	312539	305238	402	781	75982	66752
11. 8.10 - 10.12	904	2088	290658	199683	128	453	53508	40574
12. 10.13 - 12.14	407	962	111085	101816	100	200	29380	18405
13. 12.15 - 20.24	503	1560	117824	117659	233	526	69381	114021
14. 20.25 & above	247	1023	85894	107071	87	469	67014	59624
15. all sizes	53239	47284	4218064	4239437	12585	1528612 11665	1559612	14445162



Table (3.1); Contd. : Estimated number of holdings reporting use of chemical fertilisers and estimated area under, quantity consumed and value of the chemical fertiliser by type of fertiliser and size class of operational holdings

All India		crop : irrigated rice			
		other fertilisers			
size class of operational holdings (hectares)	no. of holdings reporting (00)	area (00 hectares)	quantity (00 kg.)	value (00 Rs.)	
(1)	(18)	(19)	(20)	(21)	
1. 0.00 - 0.20	481	82	14982	14019	
2. 0.21 - 0.40	669	167	40424	16566	
3. 0.41 - 0.50	463	239	28655	24428	
4. 0.51 - 1.00	1438	852	100231	78648	
5. 1.01 - 2.02	1886	2349	226603	184558	
6. 2.03 - 3.03	1036	1610	151153	151102	
7. 3.04 - 4.04	564	950	96863	77567	
8. 4.05 - 5.05	445	786	77610	65915	
9. 5.06 - 6.07	321	684	53877	45885	
10. 6.08 - 8.09	383	1066	95904	88066	
11. 8.10 - 10.12	134	364	49990	46623	
12. 10.13 - 12.14	114	243	13060	15330	
13. 12.15 - 20.24	72	285	9172	9505	
14. 20.25 & above	58	204	14232	27793	
15. all sizes	8064	9881	972756	846005	

Table (3.2) : Estimated number of holdings reporting use of chemical fertilisers and estimated area, under, quantity consumed and value of the chemical fertiliser by type of fertiliser and size class of operational holdings

All India		crop : irrigated jowar							
		ammonium sulphate				super phosphate			
size class of operational holdings (hectares)		no. of holdings reporting (00)	area (00 hectares)	quantity (00 kg)	value (00 Rs)	no. of holdings reporting (00)	area (00 hectares)	quantity (00 kg)	value (00Rs)
(1)		(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1.	0.00 - 0.20								
2.	0.21 - 0.40	36	4	72	72				
3.	0.41 - 0.50								
4.	0.51 - 1.00	133	32	1824	2256				
5.	1.01 - 2.02	2		4	2	62	83	6909	3383
6.	2.03 - 3.03	137	71	6808	9111	74	23	2517	1473
7.	3.04 - 4.04	42	12	2532	1690	44	98	2199	2990
8.	4.05 - 5.05	61	53	6126	3950				
9.	5.06 - 6.07	9	19	1418	1162				
10.	6.08 - 8.09	18	1	94	186	26	5	1267	1267
11.	8.10 - 10.12	14	8	346	166	12	5	1250	562
12.	10.13 - 12.14	35	12	1511	1189	18	7	746	2146
13.	12.15 - 20.24	26	24	3483	207	27	50	5046	4772
14.	20.25 & above	5	3	362	362				
15.	all sizes	518	239	24587	21053	263	271	19934	16593

Table (3.2) Contd. : Estimated number of holdings reporting use of chemical fertilisers and estimated area under, quantity consumed and value of the chemical fertiliser by type of fertiliser and size class of operational holdings

All India

crop : irrigated jowar

size class of operational holdings (hectares)	urea				mixed			
	no. of holdings reporting (00)	area (00 hectares)	quantity (00 kg.)	value (00 Rs)	no. of holdings reporting (00)	area (00 hectares)	quantity (00 kg.)	value (00 Rs)
(1)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
1. 0.00 - 0.20								
2. 0.21 - 0.40								
3. 0.41 - 0.50	38	15	1896	1896	42	23	836	1254
4. 0.51 - 1.00	143	58	6050	6090	147	62	4560	5072
5. 1.01 - 2.02	327	260	19971	50505	140	157	147682	233302
6. 2.03 - 3.03	254	132	13683	12018	139	107	12045	10729
7. 3.04 - 4.04	173	176	12091	11066	6	2	148	71
8. 4.05 - 5.05	189	183	12918	12824	86	43	8136	66756
9. 5.06 - 6.07	32	31	1809	168	30	39	1516	1513
10. 6.08 - 8.09	192	226	15294	13841	102	149	11083	11868
11. 8.10 - 10.12	80	99	11438	110602	77	71	10217	6013
12. 10.13 - 12.14	17	11	566	552	25	64	10142	8842
13. 12.15 - 20.24	96	113	12135	9389	40	101	11336	11873
14. 20.25 & above	29	57	2725	3023	22	69	9283	8860
15. all sizes	1570	1361	110576	133492	856	887	226944	306233

Table (3.2) Contd. : Estimated number of holdings reporting use of chemical fertilisers and estimated area under, quantity consumed and value of the chemical fertiliser by type of fertiliser and size class of operational holdings.

ALL India

crop : irrigated jowar

other fertilisers				
size class of operational holdings (hectares)	no. of holdings reporting (00)	area (00 hectares)	quantity (00 kg.)	value (00 Rs.)
(1)	(18)	(19)	(20)	(21)
1. 0.00 - 0.20				
2. 0.21 - 0.40				
3. 0.41 - 0.50				
4. 0.51 - 1.00				
5. 1.01 - 2.02	14	7	1384	775
6. 2.03 - 3.03	24	9	451	375
7. 3.04 - 4.04	24	39	513	601
8. 4.05 - 5.05	60	38	2314	1590
9. 5.06 - 6.07	9	2	226	126
10. 6.08 - 8.09	26	28	2230	1275
11. 8.10 - 10.12				
12. 10.13 - 12.14	4	2	188	112
13. 12.15 - 20.24	10	12	996	896
14. 20.25 & above	10	48	780	586
15. all sizes	181	185	9082	6336

Table (3.3) : Estimated number of holdings reporting use of chemical fertilisers and estimated area under, quantity consumed and value of the chemical fertiliser by type of fertiliser and size class of operational holdings.

All India

crop : irrigated bajra

size class of operational holdings (hectares)	ammonium sulphate				super phosphate			
	no. of holdings reporting (00)	area (00 hectares)	quantity (00 kg)	value (00 Rs)	no. of holdings reporting (00)	area (00 hectares)	quantity (00 Rs)	value (00 Rs)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1. 0.00 - 0.20								
2. 0.21 - 0.40								
3. 0.41 - 0.50								
4. 0.51 - 1.00	9	6	472	472	117	43	3641	483
5. 1.01 - 2.02	196	84	10194	9045	47	20	2208	2122
6. 2.03 - 3.03	87	38	3778	3330	76	33	3961	5802
7. 3.04 - 4.04	89	40	2649	2136	2	2	183	117
8. 4.05 - 5.05	117	164	4724	4373	32	26	6255	2944
9. 5.06 - 6.07	50	44	1599	1632	42	40	2414	2069
10. 6.08 - 8.09	39	50	5137	3990	58	41	2868	2007
11. 8.10 - 10.12	10	8	490	1176	2	15	3460	2214
12. 10.13 - 12.14								
13. 12.15 - 20.24	37	58	5007	4025				
14. 20.25 & above	17	46	1676	990				
15. all sizes	651	538	35726	31169	376	24220	24990	17756

Table (3.3) Contd. : Estimated number of holdings reporting use of chemical fertilisers and estimated area under, quantity consumed and value of the chemical fertiliser by type of fertiliser and size class of operational holdings.

All India

crop : irrigated bajra

size class of operational holdings (hectares)	urea				mixed			
	no. of holdings reporting (00)	area (00 hectares)	quantity (00 kg)	value (00 Rs)	no. of holdings reporting (00)	area (00 hectares)	quantity (00 kg)	value (00 Rs)
(1)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
1. 0.00 - 0.20								
2. 0.21 - 0.40	44	7	662	662				
3. 0.41 - 0.50	17	7	858	429				
4. 0.51 - 1.00	214	83	3724	3352	37	24	3715	1858
5. 1.01 - 2.02	618	259	30343	28657	26	13	2602	1301
6. 2.03 - 3.03	463	363	26271	25771	144	114	10157	6631
7. 3.04 - 4.04	208	190	20401	15736	81	40	6474	4812
8. 4.05 - 5.05	225	184	12941	12717	35	42	4931	3420
9. 5.06 - 6.07	431	133	12343	11537	46	37	3484	1809
10. 6.08 - 8.09	127	161	15238	14977	24	77	6999	5077
11. 8.10 - 10.12	58	47	9263	9539	-			
12. 10.13 - 12.14	31	90	3878	3564	-			
13. 12.15 - 20.24	54	91	13722	12889	11	39	7141	7349
14. 20.25 & above	18	51	3053	3441	7	17	3480	4176
15. all sizes	2208	1666	153397	143271	471	403	48903	36433

Table (3,3) Contd. : Estimated number of holdings reporting use of chemical fertiliser and estimated area under, quantity consumed and value of the chemical fertiliser by type of fertiliser and size class of operational holdings.

All India		crop : irrigated bajra			
		other fertilisers			
size class of operational holdings (hectares)	no. of holdings reporting (00)	area (00 hectares)	quantity (00 kg.)	value (00 Rs.)	
(1)	(18)	(19)	(20)	(21)	
1. 0.00 - 0.20					
2. 0.21 - 0.40					
3. 0.41 - 0.50					
4. 0.51 - 1.00					
5. 1.01 - 2.02	38	15	1883	1695	
6. 2.03 - 3.05	155	169	19836	12660	
7. 3.04 - 4.04	24	65	1236	1853	
8. 4.05 - 5.05	15	15	1052	565	
9. 5.06 - 6.07	18	6	452	253	
10. 6.08 - 8.09	63	81	6483	4701	
11. 8.10 - 10.12	42	87	5709	4486	
12. 10.13 - 12.14	4	2	188	112	
13. 12.15 - 20.24	10	32	2689	2266	
14. 20.25 & above					
15. all sizes	369	472	39528	28591	

Table (3.4) : Estimated number of holdings reporting use of chemical fertilisers and estimated area under, quantity consumed and value of the chemical fertiliser by type of fertiliser and size class of operational holdings

All India

crop : irrigated maize

size class of operational holdings (hectares)	ammonium sulphate				super phosphate			
	no. of holdings reporting (00)	area (00 hectares)	quantity (00 kg.)	value (00 Rs)	no. of holdings reporting (00)	area (00 hectares)	quantity (00 kg.)	value (00 Rs.)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1. 0.00 - 0.20	144	11	1004	950	22	1	456	364
2. 0.21 - 0.40					98	22	5166	2751
3. 0.41 - 0.50	130	40	7930	4276				
4. 0.51 - 1.00	440	170	18449	16628	133	51	4674	4110
5. 1.01 - 2.02	670	323	46200	41997	67	42	5656	4297
6. 2.03 - 3.03	312	190	15469	13679	117	72	7333	6302
7. 3.04 - 4.04	138	73	5700	4272	116	146	15534	9057
8. 4.05 - 5.05	157	112	13070	11674	57	53	6286	6217
9. 5.06 - 6.07	83	58	7523	6476	24	69	5446	3505
10. 6.08 - 8.09	42	28	2847	2542	54	49	12636	14065
11. 8.10 - 10.12	7	3	675	675	27	40	5110	4890
12. 10.13 - 12.14	15	2	717	390				
13. 12.15 - 20.24	20	11	6292	4740	23	26	3058	2032
14. 20.25 & above	13	45	100	60				
15. all sizes	2171	1066	125976	108359	758	571	71355	57590



Table (3.4) Contd. : Estimated number of holdings reporting use of chemical fertilisers and estimated area under, quantity consumed and value of the chemical fertiliser by type of fertiliser and size class of operational holdings

All India

crop : irrigated maize

size class of operational holdings (hectares)	urea				mixed			
	no. of holdings reporting (00)	area (00 hectares)	quantity (00 kg.)	value (00 Rs.)	no. of holdings reporting (00)	area (00 hectares)	quantity (00 kg.)	value (00 Rs.)
(1)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
1. 0.00 - 0.20	274	25	2695	2695				
2. 0.21 - 0.40	178	25	3672	3396	38	8	3425	1789
3. 0.41 - 0.51	285	86	7820	7740				
4. 0.51 - 1.00	1028	409	40819	39794	55	2	109	55
5. 1.01 - 2.02	1776	921	139699	128006	134	61	17534	17324
6. 2.03 - 3.03	889	551	53444	53107	93	103	13510	10278
7. 3.04 - 4.04	457	440	47438	42256	131	76	11996	11071
8. 4.05 - 5.05	373	332	39602	38306	96	90	12408	11012
9. 5.06 - 6.07	225	212	20212	19228	84	73	11172	11503
10. 6.08 - 8.09	297	370	39090	38012	57	104	9718	6955
11. 8.10 - 10.12	158	154	18703	17880	112	113	27789	26237
12. 10.13 - 12.14	69	50	5443	5226	8	15	3792	3792
13. 12.15 - 20.24	111	243	24795	23893	18	90	23558	20947
14. 20.25 & above	26	26	3167	3133	26	79	10523	19293
15. all sizes	6146	3844	446599	422672	852	814	145534	140256

Table (3.4) Contd. : Estimated number of holdings reporting use of chemical fertilisers and estimated area under, quantity consumed and value of the chemical fertiliser by type of fertiliser and size class of operational holdings

All India

crop : irrigated maize

size class of operational holdings (hectares)	no. of holdings reporting (00)	other fertilisers		
		area (00 hectares)	quantity (00 kg.)	value (00 Rs.)
(1)	(18)	(19)	(20)	(21)
1. 0.00 - 0.20	22		114	91
2. 0.21 - 0.40	160	25	3880	2506
3. 0.41 - 0.50	54	31	3444	2590
4. 0.51 - 1.00	130	26	3891	2575
5. 1.01 - 2.02	223	160	22303	14474
6. 2.03 - 3.03	133	79	13415	11703
7. 3.04 - 4.04	74	115	10634	11713
8. 4.05 - 5.05	114	149	30842	16868
9. 5.06 - 6.07	53	67	11605	7595
10. 6.08 - 8.09	104	150	15652	16581
11. 8.10 - 10.12	45	137	6232	5832
12. 10.13 - 12.14	48	40	11813	13195
13. 12.15 - 20.24	32	59	4620	3180
14. 20.25 & above	0	43	5373	3582
15. all sizes	1200	1089	151818	112565

Table (5.5) : Estimated number of holdings reporting use of chemical fertilisers and estimated area under, quantity consumed and value of the chemical fertiliser by type of fertiliser and size class of operational holdings

ALL India

crop : irrigated wheat

six class of operational holdings  
( hectares )

				Ammonium Sulphate		Super Phosphate					
				no. of holdings reporting (00)	area (00 hec- tares)	quantity (00 kg)	value (00.)	no. of holdings reporting (00)	area- (00 hec- tares)	quantity (00 kg)	value (00 Rs )
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
1.	0.00 - 0.20	194	12	1345	1395	22	1	570	478		
2.	0.21 - 0.40	400	100	11051	8305	292	35	4542	3923		
3.	0.41 - 0.50	284	115	30034	12493	98	34	3442	2872		
4.	0.51 - 1.00	1220	374	45339	29714	950	424	47122	34942		
5.	1.01 - 2.02	2918	1873	181251	152266	1159	747	76888	51761		
6.	2.03 - 3.03	1446	1106	99690	81816	713	627	68597	53326		
7.	3.04 - 4.04	936	1025	88890	65742	503	537	59122	47350		
8.	4.05 - 5.05	746	849	79341	71205	457	419	50312	38142		
9.	5.06 - 6.07	408	449	30686	26027	223	340	69390	47884		
10.	6.08 - 8.09	426	953	100651	90370	385	624	102573	78627		
11.	8.10 - 10.12	254	530	37403	36773	154	308	39017	24025		
12.	10.13 - 12.14	134	197	21417	21588	198	265	43612	30360		
13.	12.15 - 20.24	234	501	38168	29861	252	278	54735	32685		
14.	20.25 & above	100	194	39268	27454	74	133	8301	6183		
15.	all sizes	9708	8278	804534	655009	5480	4772	628723	452558		

Table (5.5) contd : - Estimated number of holding reporting use of chemical fertilisers and estimated area under, quantity consumed and value of the chemical fertiliser by type of fertiliser and size class of operational holdings

State : All India

crop : irrigated  
wheat

size class of operational holdings (hectares)	Dryland				Mixed (r)			
	no. of holdings reporting (00)	area (00 hectares)	quantity (00 kg.)	value (00 Rs.)	no. of holdings reporting (00)	area (00 acres)	quantity (00 kg.)	value (00 Rs.)
(1)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
1. 0.00 - 0.20	1784	155	20400	20823	50	4	624	416
2. 0.21 - 0.40	4030	679	75777	69069	260	63	4578	4266
3. 0.41 - 0.50	2357	546	59874	56710	399	132	9701	24052
4. 0.51 - 1.00	10877	3708	340163	333787	773	331	37853	38857
5. 1.01 - 2.02	14251	8390	739951	999962	2144	1345	159320	230835
6. 2.03 - 3.03	7493	6861	650939	619297	1179	1014	113875	106200
7. 3.04 - 4.04	4101	5093	558501	521218	830	1127	170659	168730
8. 4.05 - 5.05	3328	4897	467477	456828	536	706	53371	93955
9. 5.06 - 6.07	2071	3571	418277	407137	318	445	82135	72946
10. 6.08 - 8.09	2212	4738	479939	459512	637	1425	1176793	203013
11. 8.10 - 10.12	1038	2532	294281	288470	243	723	135882	135042
12. 10.13 - 12.14	530	1299	138494	133174	116	354	85453	67001
13. 12.15 - 20.24	852	2287	292426	284683	177	422	62364	60006
14. 20.25 & above	270	834	85451	81195	92	414	103613	51237
15. all sizes	55174	45590	4621950	4731865	7754	8505	1226221	1256556

Table (5.5) Contd : Estimated number of holding reporting use of chemical fertiliser and estimated area under, quantity consumed and value of the chemical fertiliser by type of fertiliser and size class of operational holdings

State : All India

crop : Irrigated wheat

other fertilisers

size class of operational holdings (hectares)	other fertilisers			
	no. of holdings reporting (1)	area (00 hectares) (2)	quantity (00 kg.) (3)	value (00 Rs.) (4)
1. 0.00 - 0.10	141	8	2664	1954
2. 0.21 - 0.40	284	51	10930	6482
3. 0.41 - 0.50		56	10586	9236
4. 0.51 - 1.00	912	369	45933	39615
5. 1.01 - 2.02	217	1602	125285	120230
6. 2.03 - 3.03	101	1070	117745	105308
7. 3.04 - 4.04		1239	138026	135578
8. 4.05 - 5.05	581	1252	126716	91850
9. 5.06 - 6.07	395	874	105063	84559
10. 6.08 - 8.09	442	1274	149340	117857
11. 8.10 - 10.12	335	655	73496	121608
12. 10.13 - 12.14	131	649	66861	65014
13. 12.15 - 20.24	264	1154	140131	142267
14. 20.25 & above	70	421	51296	43862
15. all sizes	1533	10682	1164072	1085424

estimated area under, quantity consumed and value of the chemical fertiliser by type of fertiliser and size class of operational holdings

All India

crop : irrigated barley

size class of operational holdings ( hectares )	Ammonium Sulphate				Super phosphate						
	no. of holdings reporting	area (00 hectares)	quantity (00 kg )	value (00Rs.)	no. of holdings reporting	area (00 hectares)	quantity (00 kg)	value (00 Rs)			
	(00)	(3)	(4)	(5)	(6)	(7)	(8)	(9)			
1.	0.00	-	0.20								
2.	0.21	-	0.40								
3.	0.41	-	0.50								
4.	0.51	-	1.00	105	14	905	749	50	10	1040	832
5.	1.01	-	2.02	75	6	1918	1918	135	40	3268	2341
6.	2.03	-	3.03	104	19	1370	889	54	73	5457	5457
7.	3.04	-	4.04	148	151	3550	2544	99	66	2176	1809
8.	4.05	-	5.05	153	94	988	601	35	22	954	621
9.	5.06	-	6.07	19	11	185	219	8	3	380	167
10.	6.08	-	8.09	21	13	454	436	8	3	380	167
11.	8.10	-	10.12	37	18	1313	779	10	4	111	88
12.	10.13	-	12.14								
13.	12.15	-	20.24	8	27	400	368	8	27	200	160
14.	20.25 & above										
15.	all sizes			670	353	11083	8503	407	248	13966	11642

sp/



Table (3.5) Contd : Estimated number of holding reporting use of chemical fertilisers and estimated area under, quantity consumed and value of the chemical fertiliser by type of fertiliser and size class of operational holdings

State : All India

crop : irrigated  
barley

size class of operational holdings (hectares)	other fertilisers			
	no. of holdings reporting (00)	are (00 hectares)	quantity (00 kg.)	value (00 Rs.)
(1)	(18)	(19)	(20)	(21)
1. 0.00 - 0.20		1.		
2. 0.21 - 0.40	50	2.	104	104
3. 0.41 - 0.50		3.		
4. 0.51 - 1.00	55	11.	546	436
5. 1.01 - 2.02	90	32.	2148	1243
6. 2.03 - 3.03	28	9.	1384	789
7. 3.04 - 4.04	52	25.	2690	2233
8. 4.05 - 5.05	10	8.	100	56
9. 5.06 - 6.07	28	21.	1539	1658
10. 6.08 - 8.09	25	16.	1516	1254
11. 8.10 - 10.12	18	36.	2349	1233
12. 10.13 - 12.14		13.		
13. 12.15 - 20.24	31	26.	2090	4666
14. 20.25 & above		1.		
15. all sizes	387	1845.	14466	13672

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Table (2.7) : Estimated number of holdings reporting use of chemical fertilisers and estimated area under, quantity consumed and value of the chemical fertiliser by type of fertiliser and size class of operational holdings

State : All India

Crop : Irrigated sugarcane

size class of operational holdings (hectares)	Ammonium Sulphate				Super Phosphate			
	no. of holdings reporting (00)	area (00 hectares)	quantity (00 kg)	value (00 Rs.)	no. of holdings reporting (00)	area (00 hectares)	quantity (00 kg)	value (00 Rs.)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1. 0.10 - 0.20								
2. 0.21 - 0.40	165	18	9362	6778				
3. 0.41 - 0.50	44	8	4414	4679	75	6	768	768
4. 0.51 - 1.00	356	70	21483	14332	49	11	1977	1634
5. 1.01 - 2.02	918	241	54459	60411	215	64	10102	9472
6. 2.03 - 3.03	375	200	76948	53657	77	47	13042	12048
7. 3.04 - 4.04	233	51	11562	8210	191	115	31421	28257
8. 4.05 - 5.05	192	130	16665	14475	58	17	3538	2339
9. 5.06 - 6.07	52	21	2235	1688	112	32	13027	7667
10. 6.08 - 8.09	141	115	18603	30964	45	17	3191	2509
11. 8.10 - 10.12	35	13	508	468	23	3	1510	704
12. 10.13 - 12.14	58	60	6458	3958	6		140	84
13. 12.15 - 20.24	91	71	23630	18124	60	36	9526	7258
14. 20.25 & above	45	66	69126	39087	26	11	2605	1806
15. all sizes	2705	1064	315453	256831	937	359	90847	75546

Table (3.7) Contd. : Estimated number of holdings reporting use of chemical fertilisers and estimated area under, quantity consumed and value of the chemical fertiliser by type of fertiliser and size class of operational holdings

State : All India

Crop : Irrigated sugarcane

size class of operational holdings (hectares)	Urea				Mixed			
	no. of holdings reporting (00)	area (00 hectares)	quantity (00 kg.)	value (00 Rs.)	no. of holdings reporting (00)	area (00 hectares)	quantity (00 kg.)	value (00 Rs.)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1. 0.00 - 0.20	147	11	4490	2234	45	2	1136	1136
2. 0.21 - 0.40	470	32	2602	2497	149	18	26327	22835
3. 0.41 - 0.50	172	24	2735	2634				
4. 0.51 - 1.00	1855	291	45739	46500	175	71	57248	47842
5. 1.01 - 2.02	2949	905	141340	142739	519	295	107065	74112
6. 2.03 - 3.03	1879	861	143148	140368	190	92	39201	29589
7. 3.04 - 4.04	946	613	88631	87695	291	291	62527	65433
8. 4.05 - 5.05	794	461	83549	82932	164	104	27766	33964
9. 5.06 - 6.07	334	246	53757	52434	126	128	34141	27833
10. 6.08 - 8.09	649	814	156807	134497	178	181	96296	85951
11. 8.10 - 10.12	286	263	29853	30949	60	55	24954	20974
12. 10.13 - 12.14	190	396	47471	41377	72	164	58814	82234
13. 12.15 - 20.24	305	354	54053	55873	102	75	48571	35660
14. 20.25 & above	53	76	6047	5619	38	183	17275	11224
15. all sizes	11029	5347	860222	828348	2109	1659	601321	538787

Table (2.7) Contd. : Estimated number of holdings reporting use of chemical fertilisers and estimated area under, quantity consumed and value of the chemical fertiliser by type of fertiliser and size class of operational holdings

State : All India

Crop : Irrigated sugarcane

size class of operational holdings (hectares)	no. of holdings reporting (00)	other fertilisers		
		area (00 hectares)	quantity (00 kg.)	value (00 Rs.)
(1)	(2)	(3)	(4)	(5)
1. 0.00 - 0.20				
2. 0.21 - 0.40				
3. 0.41 - 0.50	104	16	5740	3314
4. 0.51 - 1.00	27	58	23489	4072
5. 1.01 - 2.02	209	110	19234	11987
6. 2.03 - 3.03	566	221	32410	30451
7. 3.04 - 4.04	208	91	34786	25439
8. 4.05 - 5.05	166	92	13802	10465
9. 5.06 - 6.07	117	85	30935	29514
10. 6.08 - 8.09	129	112	18996	13315
11. 8.10 - 10.12	123	139	17876	13239
12. 10.13 - 12.14	44	36	46324	45614
13. 12.15 - 20.24	41	36	6805	5031
14. 20.25 & above	68	109	14757	12782
	15	109	13524	10466
15. all sizes	1817	1214	278678	215689

Table (3.8) : Estimated number of holdings reporting use of chemical fertilisers and estimated area under, quantity consumed and value of the chemical fertiliser by type of fertiliser and size class of operational holdings

State : All India

Crop : Irrigated cotton

size class of operational holdings (hectares)	Ammonium Sulphate				Super Phosphate			
	no. of holdings reporting (00)	area (00 hectares)	quantity (00 kg)	value (00.)	no. of holdings reporting (00)	area (00 hectares)	quantity (00 kg)	value (00 Rs)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1. 0.00 - 0.20								
2. 0.21 - 0.40								
3. 0.41 - 0.50								
4. 0.51 - 1.00					2	2	108	126
5. 1.01 - 2.02					100	41	<del>9352</del>	5667
6. 2.03 - 3.03	76	47	5135	6230	94	48	13753	12504
7. 3.04 - 4.04	48	45	2892	3240	70	7	838	1745
8. 4.05 - 5.05	72	144	14386	16616	70	92	11247	8664
9. 5.06 - 6.07	34	37	3562	3557	72	88	7038	6374
10. 6.08 - 8.09	62	67	5599	5748	171	89	6960	4560
11. 8.10 - 10.12	26	63	6376	6306	87	109	18918	15678
12. 10.13 - 12.14					28	83	3917	2398
13. 12.15 - 20.24	26	120	15907	15412	38	109	12207	15834
14. 20.25 & above	16	164	20070	21894	14	80	4302	8224
15. all sizes	360	687	73927	79003	746	748	88826	81774

sd/

Table 13.8) Contd.: Estimated number of holdings reporting use of chemical fertilisers and estimated area under, quantity consumed and value of the chemical fertiliser by type of fertiliser and size class of operational holdings

State : All India

Crop : Irrigated cotton

size class of operational holdings (hectares)	no. of holdings reporting (00)	Urea			Mixed			
		area (00 hectares)	quantity (00 kg.)	value (00 Rs.)	no. of holdings reporting (00)	area (00 hectares)	quantity (00 kg.)	value (00 Rs.)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1. 0.00 - 0.20								
2. 0.21 - 0.40	22	2	570	524				
3. 0.41 - 0.50	48	23	481	481				
4. 0.51 - 1.00	85	57	4243	5676	37	23	7430	4272
5. 1.01 - 2.02	368	156	14940	14617	41	32	5511	3713
6. 2.03 - 3.03	338	296	29457	27907	34	36	2142	1556
7. 3.04 - 4.04	216	210	42252	40336	131	65	11691	10526
8. 4.05 - 5.05	319	321	42361	36521	49	22	2000	1887
9. 5.06 - 6.07	407	455	57343	55818	33	40	4122	3761
10. 6.08 - 8.09	435	620	74614	74547	109	97	19756	13430
11. 8.10 - 10.12	294	570	74749	74109	8	3	758	834
12. 10.13 - 12.14	186	407	43818	29116	65	143	11809	12696
13. 12.15 - 20.24	322	771	112389	105936	49	142	20079	16356
14. 20.25 & above	85	259	30472	30345	4	8	385	416
15. all sizes	3125	4147	527689	495933	560	611	85683	69447

Table (3.8) Contd. : Estimated number of holdings reporting use of chemical fertilisers and estimated area under, quantity consumed and value of the chemical fertiliser by type of fertiliser and size class of operational holdings

State : All India

Crop : Irrigated cotton

	size class of operational holdings (hectares)		other fertilisers				
			no. of holdings reporting (00)	area (00 hectares)	quantity (00 kg.)	value (00 Rs.)	
	(1)		(2)	(3)	(4)	(5)	
1.	0.00	-	0.20				
2.	0.21	-	0.40				
3.	0.41	-	0.50				
4.	0.51	-	1.00				
5.	1.01	-	2.02	28	20	2076	1232
6.	2.03	-	3.03	158	135	20707	16498
7.	3.04	-	4.04	38	28	7412	7055
8.	4.05	-	5.05	61	74	9509	9672
9.	5.06	-	6.07	224	238	38566	34388
10.	6.08	-	8.09	48	125	10557	8541
11.	8.10	-	10.12	58	225	42463	44154
12.	10.13	-	12.14	66	193	26683	21360
13.	12.15	-	20.24	101	122	18416	17346
14.	20.25	& above		34	122	9307	7383
15.	all sizes			816	1282	185696	167629

Table (3.9) : Estimated number of holdings reporting use of chemical fertilisers and estimated area under, quantity consumed and value of the chemical fertiliser by type of fertiliser and size class of operational holdings

All India

Irrigated all crops

size class of holdings (hectare)	no of holdings (000)	area	quantity	value
		(000 ha)	(000 Kg)	(000 Rs.)
(1)	(2)	urea		
(1)	(2)	(3)	(4)	(5)
1. 0.02 - 0.20	412	48	6040	6372
2. 0.21 - 0.40	940	246	27325	27221
3. 0.41 - 0.50	612	216	23663	26546
4. 0.51 - 1.00	2164	1178	112990	114000
5. 1.01 - 2.02	2606	2308	209649	235619
6. 2.03 - 3.03	1379	1852	176526	170131
7. 3.04 - 4.04	767	1350	136655	132350
8. 4.05 - 5.05	544	1148	109722	108058
9. 5.06 - 6.07	325	809	90905	86775
10. 6.08 - 8.09	370	1175	119290	113618
11. 8.10 - 10.12	198	636	78114	68234
12. 10.13 - 12.14	96	348	38065	33863
13. 12.15 - 20.24	160	624	71980	69374
14. 20.25 & above	56	284	24669	26391
15. all sizes	10630	12224	1225593	1218552

size class of holdings (hectare)

Ammonium Sulphate

(1)	(6)	(7)	(8)	(9)
1. 0.02 - 0.20	125	13	2306	2277
2. 0.21 - 0.40	272	86	12233	9706
3. 0.41 - 0.50	182	82	10965	8218
4. 0.51 - 1.00	634	307	33889	25774
5. 1.01 - 2.02	862	820	93148	75417
6. 2.03 - 3.03	436	635	64555	53499
7. 3.04 - 4.04	265	400	35827	28596
8. 4.05 - 5.05	181	366	33040	29582
9. 5.06 - 6.07	108	197	17957	14256
10. 6.08 - 8.09	110	276	30102	28453
11. 8.10 - 10.12	58	180	16533	13350
12. 10.13 - 12.14	29	85	8652	6613
13. 12.15 - 20.24	62	208	21226	17317
14. 20.25 & above	26	99	12983	11281
15. all sizes	3351	3754	393419	324340

sd/

Table (3.9) : Estimated number of holdings reporting use of chemical fertilisers and estimated area under, quantity consumed and value of the chemical fertiliser by type of fertiliser and size class of operational holdings

All India		irrigated all crops		
size class of holdings (hectare)	no of holdings (000)	area (000 ha)	quantity (000 k.)	value (000 Rs.)
Super Phosphate				
(1)	(10)	(11)	(12)	(13)
1. 0.02 - 0.20	61	8	1519	1165
2. 0.21 - 0.40	125	33	4695	3411
3. 0.41 - 0.50	79	28	3795	2728
4. 0.51 - 1.00	344	204	22095	17273
5. 1.01 - 2.02	356	302	45306	31183
6. 2.03 - 3.03	221	301	38824	28305
7. 3.04 - 4.04	141	210	24423	18968
8. 4.05 - 5.05	113	186	20967	15858
9. 5.06 - 6.07	72	155	20155	13568
10. 6.08 - 8.09	96	192	24539	19064
11. 8.10 - 10.12	40	97	11284	8208
12. 10.13 - 12.14	31	68	10296	6253
13. 12.15 - 20.24	45	110	15780	11093
14. 20.25 & above	18	88	4250	3520
15. all sizes	1741	1985	248687	181099
Mixed fertilisers				
(1)	(14)	(15)	(16)	(17)
1. 0.02 - 0.20	60	6	3379	2624
2. 0.21 - 0.40	210	54	12330	9629
3. 0.41 - 0.50	160	69	8312	10171
4. 0.51 - 1.00	414	234	38310	36380
5. 1.01 - 2.02	591	516	91160	96242
6. 2.03 - 3.03	344	367	54212	45636
7. 3.04 - 4.04	194	310	47387	43325
8. 4.05 - 5.05	128	212	29224	29784
9. 5.06 - 6.07	77	212	23604	20033
10. 6.08 - 8.09	117	310	44759	42730
11. 8.10 - 10.12	48	168	29903	26844
12. 10.13 - 12.14	34	116	21059	17157
13. 12.15 - 20.24	45	159	28217	30110
14. 20.25 & above	15	134	23253	17968
15. all sizes	2437	2869	456111	428636



Table (3.9) : Estimated number of holdings reporting use of chemical fertilisers and estimated area under, quantity consumed and value of the chemical fertiliser by type of fertiliser and size class of operational holdings

All India		irrigated all crops		
size class of holdings (hectare)	no of holdings (000)	area (000 ha)	quantity (000 kg.)	value (000 Rs.)
other chemical fertilisers				
(1)	(18)	(19)	(20)	(21)
1. 0.02 - 0.20	63	9	3129	2298
2. 0.21 - 0.40	122	35	7158	4042
3. 0.41 - 0.50	61	41	8441	5228
4. 0.51 - 1.00	262	161	21030	16212
5. 1.01 - 2.02	448	494	64334	51377
6. 2.03 - 3.03	263	338	38951	34079
7. 3.04 - 4.04	156	274	31512	27189
8. 4.05 - 5.05	121	280	36831	27537
9. 5.06 - 6.07	96	244	25274	19881
10. 6.08 - 8.09	95	324	34429	28469
11. 8.10 - 10.12	46	163	24978	29116
12. 10.13 - 12.14	30	126	13486	12875
13. 12.15 - 20.24	42	203	21702	21907
14. 20.25 & above	14	97	9692	8262
15. all sizes	1820	2788	340950	288472

sd/

Table (41) : Estimated number of holdings reporting use of chemical fertilisers and estimated area under, quantity consumed and value of the chemical fertiliser by type of fertiliser and size class of operational holdings

State : All India

Crop : Unirrigated rice

size class of operational holdings (hectares)	ammonium sulphate			super phosphate				
	no. of holdings reporting (00)	area (00 hectares)	quantity (00 kg.)	value (00 Rs.)	no. of holdings reporting (00)	area (00 hectares)	quantity (00 kg.)	value (00 Rs.)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1. 0.00 - 0.20	397	47	4710	4040				
2. 0.21 - 0.40	762	137	15771	11445	2	2	99	84
3. 0.41 - 0.50	594	193	29585	26069	2		22	22
4. 0.51 - 1.00	1885	661	66187	47252	369	117	8432	5846
5. 1.01 - 2.02	2106	1325	118241	105472	755	646	51007	35090
6. 2.03 - 3.03	1233	1287	88987	82484	671	948	52700	33253
7. 3.04 - 4.04	732	723	44321	35151	246	374	25607	20757
8. 4.05 - 5.05	456	648	42869	35685	141	1184	11072	6140
9. 5.06 - 6.07	221	475	47914	35578	68	151	7396	4557
10. 6.08 - 8.09	200	351	29021	25637	121	315	16762	10388
11. 8.10 - 10.12	87	321	12256	10169	63	208	12926	9867
12. 10.13 - 12.14	181	403	28903	33860	92	240	24910	14141
13. 12.15 - 20.24	71	301	10454	9377	55	260	17315	8624
14. 20.25 & above	37	89	5068	5352	26	182	6607	5290
15. all sizes	8962	6961	544287	467571	2611	3627	235355	154059

Table (4.1) Contd. : Estimated number of holdings reporting use of chemical fertilisers and estimated area under quantity consumed and value of the chemical fertiliser by type of fertiliser and size class of operational holdings

State : All India

Crop : Unirrigated rice

size class of operational holdings (hectares)	no. of holdings reporting (00)	urea			no. of holdings reporting (00)	mixed		
		area (00 hectares)	quantity (00 kg.)	value (00 Rs.)		area (00 hectares)	quantity (00 kg.)	value (00 Rs.)
(1)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
1. 0.00 - 0.20	2005	183	18132	18	530	83	10222	8074
2. 0.21 - 0.40	2817	638	50624	10	558	97	30155	23861
3. 0.41 - 0.50	1404	383	35886	36	356	96	15554	18563
4. 0.51 - 1.00	6250	2527	165950	177	901	352	33135	28927
5. 1.01 - 2.02	7881	6015	331422	344	1398	1873	1135811	113292
6. 2.03 - 3.03	3144	3334	174895	17	802	1140	111283	90607
7. 3.04 - 4.04	1253	1644	84119	8	318	468	34152	30507
8. 4.05 - 5.05	1047	2066	109239	10	148	240	23402	20034
9. 5.06 - 6.07	506	1015	56462	5	110	222	9957	8926
10. 6.08 - 8.09	590	1469	80474	7	72	189	23430	19610
11. 8.10 - 10.12	294	731	37880	38	53	174	12165	10606
12. 10.13 - 12.14	135	392	31785	28	14	54	2660	1729
13. 12.15 - 20.24	135	328	23050	2	19	93	2984	2040
14. 20.25 & above	79	355	12312	1	24	115	12738	16976
15. all sizes	27540	21080	1212230	1272	5303	5196	475418	393748

Table (4.1) Contd. : Estimated number of holdings reporting use of chemical fertilisers and estimated area under, quantity consumed and value of the chemical fertiliser by type of fertiliser and size class of operational holdings

State : All India

Crop : Unirrigated rice

other fertilisers

size class of operational holdings (hectares)	no. of holdings reporting (00)	area (00 hectares)	quantity (00 kg.)	value (00.Rs.)
(1)	(18)	(19)	(20)	(21)
1. 0.00 - 0.20	103	12	1325	1193
2. 0.21 - 0.40	218	56	5149	3939
3. 0.41 - 0.50	116	53	3055	3352
4. 0.51 - 1.00	688	299	29184	21259
5. 1.01 - 2.02	587	567	38049	33186
6. 2.03 - 3.03	395	463	34340	24472
7. 3.04 - 4.04	135	199	20833	17537
8. 4.05 - 5.05	202	403	16323	12001
9. 5.06 - 6.07	92	113	10746	8996
10. 6.08 - 8.09	99	259	20836	13994
11. 8.10 - 10.12	40	84	5106	4670
12. 10.13 - 12.14	31	67	4112	2803
13. 12.15 - 20.24	31	85	11460	7133
14. 20.25 & above	3	11	327	262
15. all sizes	2740	2671	200845	154797

Table (4.2) : Estimated number of holdings reporting use of chemical fertilisers and estimated area under, quantity consumed and value of the chemical fertiliser by type of fertiliser and size class of operational holdings.

State : All India

Crop : Unirrigated Jowar

size class of operational holdings (hectares)	no. of holdings reporting (00)	ammonium sulphate			super phosphate			
		area (00 hectares)	quantity (00 kg.)	value (00.Rs.)	no. of holdings reporting (00)	area (00 hectares)	quantity (00 kg.)	value (00.Rs.)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1. 0.00 - 0.20	38	5	1883	1883				
2. 0.21 - 0.40								
3. 0.41 - 0.50								
4. 0.51 - 1.00	29	12	1450	1566	44	18	883	883
5. 1.01 - 2.02	303	17	10942	6824	60	2		
6. 2.03 - 3.03	115	138	14174	10028	109	54	3277	3551
7. 3.04 - 4.04	148	165	12046	10430	274	348	34746	22696
8. 4.05 - 5.05	123	156	7797	6356	31	46	1918	1159
9. 5.06 - 6.07	93	100	4693	5545	58	20	1954	1484
10. 6.08 - 8.09	193	342	22927	17409	180	226	26842	18349
11. 8.10 - 10.12	105	169	10386	9378	172	255	26165	14774
12. 10.13 - 12.14	88	141	9824	10818	177	238	19722	18380
13. 12.15 - 20.24	151	650	30815	35044	54	142	19020	14000
14. 20.25 & above	25	95	7602	8478	102	391	34306	25807
					13	49	1931	1646
15. all sizes	1411	2144	134539	123759	1274	1789	170464	122729

Table (4.2) Contd. : Estimated number of holdings reporting use of chemical fertilisers and estimated area under, quantity consumed and value of the chemical fertiliser by type of fertiliser and size class of operational holdings.

State : All India

Crop : Unirrigated Jowar

size class of operational holdings (hectares)	urea				mixed				
	no. of holdings reporting (00)	area (00 hectares)	quantity (00 kg.)	value (00.Rs.)	no. of holdings reporting (00)	area (00 hectares)	quantity (00 kg.)	value (00.Rs.)	
	(1)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
1. 0.00 - 0.20									
2. 0.21 - 0.40									
3. 0.41 - 0.50	44	18	883	883					
4. 0.51 - 1.00	79	20	2551	2626	51	12	1513	1303	
5. 1.01 - 2.02	539	239	13812	13987	246	75	16471	9886	
6. 2.03 - 3.03	372	323	20230	19243	84	60	5847	3631	
7. 3.04 - 4.04	144	283	5139	4700	183	95	15540	12576	
8. 4.05 - 5.05	108	134	5199	5216	158	246	17617	10988	
9. 5.06 - 6.07	118	125	9122	8366	52	105	5664	4980	
10. 6.08 - 8.09	184	422	13640	13336	184	320	20540	15317	
11. 8.10 - 10.12	100	180	13447	13416	36	48	1447	1177	
12. 10.13 - 12.14	32	130	2410	2291	58	140	3411	7141	
13. 12.15 - 20.24	165	369	26034	22171	66	180	22710	17747	
14. 20.25 & above	76	529	20578	21206	50	310	7669	9184	
15. all sizes	1961	2771	133045	127441	1168	1591	118429	93930	

Table (4.2) Contd. : Estimated number of holdings reporting use of chemical fertilisers and estimated area under, quantity consumed and value of the chemical fertiliser by type of fertiliser and size class of operational holdings.

State : All India

Crop : Unirrigated Jowar

size class of operational holdings (hectares)	other fertilisers			
	no. of holdings reporting (00)	area (00 hectares)	quantity (00 kg.)	value (00.Rs.)
(1)	(18)	(19)	(20)	(21)
1. 0.00 - 0.20				
2. 0.21 - 0.40				
3. 0.41 - 0.50				
4. 0.51 - 1.00	62	19		
5. 1.01 - 2.02	17	4	1546	1361
6. 2.03 - 3.03	47	79	429	549
7. 3.04 - 4.04	9	6	1815	1998
8. 4.05 - 5.05	9	10	236	359
9. 5.06 - 6.07			945	756
10. 6.08 - 8.09	96	159		
11. 8.10 - 10.12	34	93	9562	8803
12. 10.13 - 12.14	10	36	6884	6135
13. 12.15 - 20.24	39	261	244	244
14. 20.25 & above	28	206	5586	5910
			6262	6584
15. all sizes	351	873	33509	32699

Table (4.3) : Estimated number of holdings reporting use of chemical fertilisers and estimated area under, quantity consumed and value of the chemical fertiliser by type of fertiliser and size class of operational holdings.

State : All India

Crop : Unirrigated Bajra

size class of operational holdings (hectares)	ammonium sulphate				super phosphate			
	no. of holdings reporting (00)	area (00 hectares)	quantity (00 kg.)	value (00.Rs.)	no. of holdings reporting (00)	area (00 hectares)	quantity (00 kg.)	value (00.Rs.)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1. 0.00 - 0.20								
2. 0.21 - 0.40					105	10	2274	1431
3. 0.41 - 0.50								
4. 0.51 - 1.00	22	16	2200	2860				
5. 1.01 - 2.02	75	28	690	1381	59	40	4712	4383
6. 2.03 - 3.03	8	11	188	112	142	86	10956	7994
7. 3.04 - 4.04	170	91	7536	4718	110	170	18485	8422
8. 4.05 - 5.05	107	150	8897	8526	65	76	10612	8126
9. 5.06 - 6.07	46	64	4968	3397	60	122	9653	5712
10. 6.08 - 8.09	70	119	9980	11888	89	84	12346	8011
11. 8.10 - 10.12	20	16	1000	1360	128	284	32349	24760
12. 10.13 - 12.14	46	112	8956	6549	24	15	1232	762
13. 12.15 - 20.24	40	197	7103	8677	50	146	9597	8838
14. 20.25 & above	19	57	24645	2736				
15. all sizes	623	861	76163	52204	832	1093	112216	78439



Table (4.3) Contd. : Estimated number of holdings reporting use of chemical fertilisers and estimated area under, quantity consumed and value of the chemical fertiliser by type of fertiliser and size class of operational holdings.

State : All India

Crop : Unirrigated Bajra

size class of operational holdings (hectares)	urea				mixed			
	no. of holdings reporting (00)	area (00 hectares)	quantity (00 kg.)	value (00.Rs.)	no. of holdings reporting (00)	area (00 hectares)	quantity (00 kg.)	value (00.Rs.)
(1)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
1. 0.00 - 0.20	22	4	550	506				
2. 0.21 - 0.40	87	26	1969	1887				
3. 0.41 - 0.50	185	34	3663	3419				
4. 0.51 - 1.00	735	277	13137	12609				
5. 1.01 - 2.02	417	283	16478	15639	85	66	5709	6718
6. 2.03 - 3.03	357	251	16496	15308	67	15	2955	2869
7. 3.04 - 4.04	370	473	30303	30224	166	71	212619	7144
8. 4.05 - 5.05	269	338	23854	20356	102	80	12573	8538
9. 5.06 - 6.07	261	592	30912	27203	79	145	9130	6549
10. 6.08 - 8.09	123	245	22055	21556	50	125	4253	4134
11. 8.10 - 10.12	64	138	4014	3740				
12. 10.13 - 12.14	110	362	33044	28499	28	52	2734	3192
13. 12.15 - 20.24	36	130	5532	5976	30	109	16017	13881
14. 20.25 & above					13	47	2434	1646
15. all sizes	3036	3153	202007	186922	620	710	268424	54671

Table (4.3) Contd. : Estimated number of holdings reporting use of chemical fertilisers and estimated area under, quantity consumed and value of the chemical fertiliser by type of fertiliser and size class of operational holdings.

State : All India

Crop : Unirrigated Bajra

size class of operational holdings (hectares)	other fertilisers			
	no. of holdings reporting (00)	area (00 hectares)	quantity (00 kg.)	value (00 Rs.)
(1)	(18)	(19)	(20)	(21)
1.1 0.00 - 0.20				
2. 0.21 - 0.40				
3. 0.41 - 0.50				
4. 0.51 - 1.00	40	11	282	1413
5. 1.01 - 2.02	45	20	221	176
6. 2.03 - 3.03	35	57	8420	4272
7. 3.04 - 4.04	30	19	2640	2465
8. 4.05 - 5.05	42	58	5198	6759
9. 5.06 - 6.07	30	26	6222	3277
10. 6.08 - 8.09	76	141	9293	8941
11. 8.10 - 10.12	24	88	6852	5442
12. 10.13 - 12.14	20	32	979	1215
13. 12.15 - 20.24	33	87	5378	5285
14. 20.25 & above				
15. all sizes	375	539	45485	39245

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Table (4.4) : Estimated number of holdings reporting use of chemical fertilisers and estimated area under, quantity consumed and value of the chemical fertiliser by type of fertiliser and size class of operational holdings.

State : All India

Crop : Unirrigated Maize

size class of operational holdings (hectares)	no. of holdings reporting (00)	ammonium sulphate			super phosphate			
		area (00 hectares)	quantity (00 kg.)	value (00.Rs.)	no. of holdings reporting (00)	area (00 hectares)	quantity (00 kg.)	value (00.Rs.)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1. 0.00 - 0.20	50	6	260	156	14	2		
2. 0.21 - 0.40	33	6	715	519	89	7	350	491
3. 0.41 - 0.50	89	22	4076	3977	14	7	932	623
4. 0.51 - 1.00	530	173	16064	13357	115	1	112	56
5. 1.01 - 2.02	704	429	35435	23873	281	30	4339	2493
6. 2.03 - 3.03	290	195	11741	8441	59	154	8453	5472
7. 3.04 - 4.04	140	117	11548	7072	45	54	2816	2429
8. 4.05 - 5.05	66	49	3047	2008	29	49	4356	3315
9. 5.06 - 6.07	55	26	2561	1764	35	63	6036	2976
10. 6.08 - 8.09	35	66	3238	1769	33	15	3950	1827
11. 8.10 - 10.12	9	11	1512	939	33	30	2906	1221
12. 10.13 - 12.14	8	59	758	758	21	68		
13. 12.15 - 20.24	8	23	758	758	8	23	2035	1502
14. 20.25 & above							758	758
15. all sizes	2017	1182	91713	65391	743	495	37043	23163

State : All India

Crop : Unirrigated Maize

size class of operational holdings (hectares)	urea				mixed			
	no. of holdings reporting (00)	area (00 hectares)	quantity (00 kg.)	value (00.Rs.)	no. of holdings reporting (00)	area (00 hectares)	quantity (00 kg.)	value (00.Rs.)
(1)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
0.00 - 0.20	293	24	3357	3359	50		520	416
0.21 - 0.40	206	28	2129	1914				
0.41 - 0.50	155	47	7674	2686				
0.51 - 1.00	1731	519	43696	39408	54	3	302	345
1.01 - 2.02	2590	1391	97957	99249	238	132	7273	5474
2.03 - 3.03	1130	662	38447	39281	2		32	32
3.04 - 4.04	381	361	28087	25081	24	34	2912	1648
4.05 - 5.05	263	225	23235	20824	101	61	8115	5296
5.06 - 6.07	255	250	19795	14530	12	55	1252	1234
6.08 - 8.09	197	270	19931	18419	33	58	3711	3018
8.10 - 10.12	89	115	16170	13331	23	12	835	969
10.13 - 12.14	29	102	3968	3763				
12.15 - 20.24	81	118	12595	11942				
20.25 & above	13	162	13514	30774	4	70	1953	3195
all sizes	7413	4274	330555	324561	541	425	26905	21627

Table (4.4) Contd. : Estimated number of holdings reporting use of chemical fertilisers and estimated area under, quantity consumed and value of the chemical fertiliser by type of fertiliser and size class of operational holdings.

State : All India

Crop : Unirrigated Maize

size class of operational holdings (hectares)	other fertilisers			
	no. of holdings reporting (00)	area (00 hectares)	quantity (00 kg.)	value (00.Rs.)
(1)	(18)	(19)	(20)	(21)
1. 0.00 - 0.20	22	3	456	638
2. 0.21 - 0.40	195	46	6245	10056
3. 0.41 - 0.50	4	3	451	252
4. 0.51 - 1.00	130	28	7071	11676
5. 1.01 - 2.02	404	299	30472	23621
6. 2.03 - 3.03	199	108	12901	8325
7. 3.04 - 4.04	129	112	7175	4373
8. 4.05 - 5.05	42	82	4593	3881
9. 5.06 - 6.07	95	86	6402	3711
10. 6.08 - 8.09	14	18	1398	1090
11. 8.10 - 10.12	4	10	1098	1006
12. 10.13 - 12.14				
13. 12.15 - 20.24	4	11	1464	800
14. 20.25 & above				
15. all sizes	1242	806	79726	69429

Table (4.5) : Estimated number of holdings reporting use of chemical fertilisers and estimated area under, quantity consumed and value of the chemical fertiliser by type of fertiliser and size class of operational holdings.

State : All India

Crop : Unirrigated Wheat

size class of operational holdings (hectares)	ammonium sulphate				super phosphate			
	no. of holdings reporting (00)	area (00 hectares)	quantity (00 kg.)	value (00.Rs.)	no. of holdings reporting (00)	area (00 hectares)	quantity (00 kg.)	value (00.Rs.)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1. 0.00 - 0.20					28	3	842	477
2. 0.21 - 0.40								
3. 0.41 - 0.50	155	71	15348	15348	69	11	1520	1216
4. 0.51 - 1.00	236	82	6338	4431	104	22	2463	1874
5. 1.01 - 2.02	416	237	13575	10136	378	178	14552	9098
6. 2.03 - 3.03	196	104	8514	5808	122	94	6726	4096
7. 3.04 - 4.04	77	51	4671	3228	49	28	3747	2272
8. 4.05 - 5.05	69	58	9134	7305	45	80	13881	10620
9. 5.06 - 6.07	19	10	535	385	6	1	56	28
10. 6.08 - 8.09	67	110	10485	8878	18	23	588	427
11. 8.10 - 10.12	20	47	2210	1296	37	18	2337	1924
12. 10.13 - 12.14	32	153	7274	5255	26	126	8709	8709
13. 12.15 - 20.24	18	115	2739	2691	6	2	139	72
14. 20.25 & above	20	8	1150	696	6	11	139	134
15. all sizes	1325	1046	81973	65457	894	597	55699	40947

Table (4.5) Contd. : Estimated number of holdings reporting use of chemical fertilisers and estimated area under, quantity consumed and value of the chemical fertiliser by type of fertiliser and size class of operational holdings.

State : All India

Crop : Unirrigated Wheat

size class of operational holdings (hectares)	urea				mixed			
	no. of holdings reporting (00)	area (00 hectares)	quantity (00 kg.)	value (00.Rs.)	no. of holdings reporting (00)	area (00 hectares)	quantity (00 kg.)	value (00.Rs.)
(1)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
1. 0.00 - 0.20	234	8	1650	1650				
2. 0.21 - 0.40	109	18	437	382				
3. 0.41 - 0.50	109	25	1176	1239	40	14	830	734
4. 0.51 - 1.00	639	186	992	10062	199	63	7314	6678
5. 1.01 - 2.02	1577	1030	67744	66748	159	96	4828	4661
6. 2.03 - 3.03	795	622	44628	44853	76	53	5365	5196
7. 3.04 - 4.04	344	413	39436	37837	38	95	4308	2990
8. 4.05 - 5.05	267	361	39049	26525	59	87	11025	11456
9. 5.06 - 6.07	156	181	9918	9841	28	59	1698	1493
10. 6.08 - 8.09	236	400	26101	27135	62	79	8379	5970
11. 8.10 - 10.12	71	99	9030	9030	7	44	1798	2250
12. 10.13 - 12.14	33	169	24369	9505				
13. 12.15 - 20.24	44	30	1579	1607	19	53	3688	4226
14. 20.25 & above	42	119	8984	9123	4	70	1952	3195
15. all sizes	4656	3661	284063	265537	691	713	51185	48849

sd/

Table (4.5) Contd. : Estimated number of holdings reporting use of chemical fertilisers and estimated area under, quantity consumed and value of the chemical fertiliser by type of fertiliser and size class of operational holdings.

State : All India

Crop : Unirrigated Wheat

size class of operational holdings (hectares)	no. of holdings reporting (00)	other fertilisers		
		area (00 hectares)	quantity (00 kg.)	value (00.Rs.)
(1)	(18)	(19)	(20)	(21)
1.. 0.00 - 0.20	22	3	456	638
2. 0.21 - 0.40	74	21	2692	1971
3. 0.41 - 0.50				
4. 0.51 - 1.00				
5. 1.01 - 2.02	36	10	3310	1854
6. 2.03 - 3.03	54	62	5661	1981
7. 3.04 - 4.04	70	31	2498	1786
8. 4.05 - 5.05	114	129	8151	6804
9. 5.06 - 6.07	23	37	1864	1239
10. 6.08 - 8.09	26	36	4421	2360
11. 8.10 - 10.12	7	8	338	338
12. 10.13 - 12.14				
13. 12.15 - 20.24	12	45	8770	4733
14. 20.25 & above	8	40	4925	2856
15. all sizes	466	422	43086	26060

sd/



Table 4.6 : Estimated number of holdings reporting use of chemical fertilisers and estimated area under quantity consumed and value of the chemical fertiliser by type of fertiliser and size class of operational holdings

All India

unirrigated all crops

size class of holdings (hectare)			no. of holdings (000)	area (000 ha)	quantity (000 kg.)	value (000 Rs.)
(1)			(2)	(3)	(4)	(5)
1.	0.02	-	0.20	260	23	
2.	0.21	-	0.40	325	76	3526
3.	0.41	-	0.50	193	54	6052
4.	0.51	-	1.00	869	54	5210
5.	1.01	-	2.02	1240	388	28710
6.	2.03	-	3.03	559	1006	62960
7.	3.04	-	4.04	254	651	39545
8.	4.05	-	5.05	195	377	24726
9.	5.06	-	6.07	114	430	29593
10.	6.08	-	8.09	140	274	19551
11.	8.10	-	10.12	73	427	35910
12.	10.13	-	12.14	30	229	16273
13.	12.15	-	20.24	54	150	11064
14.	20.25	& above		25	244	16883
15.	all sizes			4334	239	10118
					4572	310316
						308174

size class of holdings (000)			Ammonium Sulphate			
(1)			(6)	(7)	(8)	(9)
1.	0.02	-	0.20	54	6	
2.	0.21	-	0.40	103	19	709
3.	0.41	-	0.50	70	32	2182
4.	0.51	-	1.00	296	121	5409
5.	1.01	-	2.02	400	278	12680
6.	2.03	-	3.03	208	226	25797
7.	3.04	-	4.04	143	174	18127
8.	4.05	-	5.05	94	179	15279
9.	5.06	-	6.07	55	100	12575
10.	6.08	-	8.09	59	173	8459
11.	8.10	-	10.12	32	143	13970
12.	10.13	-	12.14	38	124	10934
13.	12.15	-	20.24	35	230	8949
14.	20.25	& above		13	71	12139
15.	all sizes			1602	1876	3989
						151197
						136416

sp/

Table 4.6 : Estimated number of holdings reporting use of chemical fertilisers and estimated area under quantity consumed and value of the chemical fertiliser by type of fertiliser and size class of operational holdings

All India

unirrigated all crops

size class of holdings hectare				no. of holdings (000)	area (000ha)	quantity (000 kg.)	value (000 Rs.)
				Super Phosphate			
(1)	(2)	(3)	(4)	(3)	(11)	(12)	(13)
1.	0.02	-	0.20	15	1	181	174
2.	0.21	-	0.40	35	9	2247	1655
3.	0.41	-	0.50	20	6	581	449
4.	0.51	-	1.00	109	47	3798	2809
5.	1.01	-	2.02	166	151	13298	9382
6.	2.03	-	3.03	149	209	17167	12334
7.	3.04	-	4.04	98	189	14786	13700
8.	4.05	-	5.05	49	119	14971	9190
9.	5.06	-	6.07	44	110	15217	9433
10.	6.08	-	8.09	58	194	19218	11647
11.	8.10	-	10.12	43	232	25611	20789
12.	10.13	-	12.14	28	140	11362	9507
13.	12.15	-	20.24	28	191	17162	12487
14.	20.25 & above			10	60	5765	3667
15.	all sizes			853	1660	161364	117218

size class of holdings (000)				Mixed Fertilisers			
(1)	(2)	(3)	(4)	(14)	(15)	(16)	(17)
1.	0.02	-	0.20	104	17	3565	2296
2.	0.21	-	0.40	109	21	5701	4470
3.	0.41	-	0.50	54	18	2957	2802
4.	0.51	-	1.00	227	96	17282	12915
5.	1.01	-	2.02	316	337	35324	26332
6.	2.03	-	3.03	150	218	29570	22536
7.	3.04	-	4.04	109	193	21861	18379
8.	4.05	-	5.05	57	135	13122	10574
9.	5.06	-	6.07	40	96	8880	6970
10.	6.08	-	8.09	64	200	33027	25532
11.	8.10	-	10.12	21	73	7314	5640
12.	10.13	-	12.14	17	68	3394	3220
13.	12.15	-	20.24	23	141	14526	13350
14.	20.25 & above			8	98	5340	6324
15.	all sizes			1300	1711	201863	161392

Table 4.6 : Estimated number of holdings reporting use of chemical fertilisers and estimated area under quantity consumed and value of the chemical fertiliser by type of fertiliser and size class of operational holdings

All India

unirrigated all crops

size class of holdings (hectare)		no. of holdings (000)	area (000 ha)	quantity (000 kg.)	value (000 Rs.)
		other chemical fertilisers			
(1)		(18)	(19)	(20)	(21)
1.	0.02 - 0.20	31	3	814	438
2.	0.21 - 0.40	74	17	2694	2412
3.	0.41 - 0.50	27	12	3917	1283
4.	0.51 - 1.00	116	54	7998	6628
5.	1.01 - 2.02	158	120	11321	8666
6.	2.03 - 3.03	83	104	12620	7461
7.	3.04 - 4.04	43	57	5738	4640
8.	4.05 - 5.05	48	113	8392	6720
9.	5.06 - 6.07	39	69	6954	5446
10.	6.08 - 8.09	46	147	14312	13511
11.	8.10 - 10.12	18	80	7836	7635
12.	10.13 - 12.14	14	51	8434	4101
13.	12.15 - 20.24	17	111	13330	13028
14.	20.25 & above	7	51	2776	2648
15.	all sizes	724	993	107138	84615

sp/

Table(5) : Estimated number of holdings, area under, quantity and value of fertiliser applied on all irrigated crops

State/UT	Urea		all crops combined	
	no. of holdings (000)	area (000 ha)	quantity (000 Kg.)	value (000 Rs.)
(1)	(2)	(3)	(4)	(5)
1. Andhra Pradesh	1281	1123	114258	117692
2. Assam	-	-	-	-
3. Bihar	634	785	36827	36143
4. Gujarat	330	533	65876	58583
5. Haryana	137	484	61890	65164
6. Himachal Pradesh	0	1	53	30
7. Jammu and Kashmir	111	89	6869	6883
8. Karnataka	333	242	43728	31920
9. Kerala	190	178	12876	12209
10. Madhya Pradesh	374	546	47888	43304
11. Maharashtra	286	359	55167	51187
12. Manipur	2	1	92	85
13. Meghalaya	0	2	14	11
14. Orissa	9	19	434	448
15. Punjab	388	1480	203319	194801
16. Rajasthan	226	473	36170	35424
17. Tamil Nadu	1351	1337	114257	126722
18. Tripura	1	0	28	24
19. Uttar Pradesh	4369	4227	397138	408968
20. West Bengal	536	327	25652	26395
21. Delhi	3	8	1264	952
22. Goa, Daman and Diu	8	2	618	615
23. Pondicherry	11	8	1175	992
All India	10630	12224	1225593	1218552

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Table(5)Contd.: Estimated number of holdings, area under, quantity and value of fertiliser applied on all irrigated crops

State/UT	Ammonium Sulphate		all crops combined	
	no. of holdings (000)	area (000 ha)	quantity (000 Kg.)	value (000 Rs.)
(1)	(6)	(7)	(8)	(9)
1. Andhra Pradesh	467	519	69367	63705
2. Assam	-	-	-	-
3. Bihar	478	562	39613	33499
4. Gujarat	96	159	19365	18592
5. Haryana	19	53	6996	5716
6. Himachal Pradesh	6	2	662	534
7. Jammu and Kashmir	63	46	3662	2189
8. Karnataka	158	160	34482	24140
9. Kerala	76	55	5463	3834
10. Madhya Pradesh	139	125	12225	7641
11. Maharashtra	199	267	31612	28299
12. Manipur	0	0	3	3
13. Meghalaya	-	-	-	-
14. Orissa	64	66	5090	4168
15. Punjab	75	204	26446	19656
16. Rajasthan	58	97	3094	4130
17. Tripura	-	-	-	-
18. Tamil Nadu	541	566	50377	44721
19. Uttar Pradesh	474	505	51450	42219
20. West Bengal	423	359	31972	19962
21. Delhi	1	2	236	175
22. Goa, Daman and Diu	9	3	530	711
23. Pondicherry	5	4	774	446
All India	3351	3754	393419	324340

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Table(5)Contd.: Estimated number of holdings, area under, quantity and value of fertiliser applied on all irrigated crops

State/UT	Superphosphate		all crops combined	
	no. of holdings (000)	area (000 ha)	quantity (000 Kg.)	value (000 Rs.)
(1)	(10)	(11)	(12)	(13)
1. Andhra Pradesh	296	289	32728	28667
2. Assam	-	-	-	-
3. Bihar	108	149	9982	8117
4. Gujarat	112	163	29901	23004
5. Haryana	8	14	797	872
6. Himachal Pradesh	22	8	2340	1671
7. Jammu and Kashmir	14	11	983	776
8. Karnataka	180	168	40711	25931
9. Kerala	60	44	4851	3851
10. Madhya Pradesh	137	275	28573	13712
11. Maharashtra	95	91	12772	10329
12. Manipur	0	0	32	28
13. Meghalaya	-	-	-	-
14. Orissa	23	32	3061	1590
15. Punjab	68	167	30567	22026
16. Rajasthan	43	37	2950	2027
17. Tamil Nadu	186	195	17551	14610
18. Tripura	1	0	16	13
19. Uttar Pradesh	194	200	18071	15042
20. West Bengal	192	134	11417	7614
21. Delhi	2	8	1354	1203
22. Goa, Daman and Diu	-	-	-	-
23. Pondicherry	0	0	30	16
All India	1741	1985	248687	181099

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Table(5)Contd.: Estimated number of holdings, area under, quantity and value of fertiliser applied on all irrigated crops

State/UT	Mixed fertilisers		all crops combined	
	no. of holdings (000)	area (000 ha)	quantity (000 Kg.)	value (000 Rs.)
(1)	(14)	(15)	(16)	(17)
1. Andhra Pradesh	108	144	20653	26331
2. Assam	-	-	-	-
3. Bihar	108	118	5718	5492
4. Gujarat	38	105	12524	9955
5. Haryana	5	12	1962	1856
6. Himachal Pradesh	1	2	130	108
7. Jammu and Kashmir	8	5	532	431
8. Karnataka	96	144	15529	13101
9. Kerala	186	123	19568	13310
10. Madhya Pradesh	58	64	10777	10298
11. Maharashtra	259	335	93001	94570
12. Manipur	-	-	5	6
13. Meghalaya	-	2	14	11
14. Orissa	7	10	1802	2006
15. Punjab	77	315	69838	59443
16. Rajasthan	12	29	1336	651
17. Tamil Nadu	680	739	119436	94528
18. Tripura	-	-	9	6
19. Uttar Pradesh	555	598	62731	79256
20. West Bengal	232	118	18966	16226
21. Delhi	-	-	-	-
22. Goa, Daman and Diu	-	-	-	-
23. Pondicherry	7	6	1580	1051
All India	2437	2869	456111	428636

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Table(5)Contd.: Estimated number of holdings area under, quantity and value of fertiliser applied on all irrigated crops

State/UT	Other chemical fertilisers		all crops combined	
	no. of holdings (000)	area (000 ha)	quantity (000 Kg.)	value (000 Rs.)
(1)	(18)	(19)	(20)	(21)
1. Andhra Pradesh	200	312	37699	36211
2. Assam	-	-	-	-
3. Bihar	49	54	2397	2369
4. Gujarat	49	99	16517	18640
5. Haryana	71	148	15122	10109
6. Himachal Pradesh	2	3	192	125
7. Jammu and Kashmir	10	11	1058	997
8. Karnataka	128	107	14119	13515
9. Kerala	106	138	16036	12163
10. Madhya Pradesh	48	46	3332	3114
11. Maharashtra	46	79	12116	11447
12. Manipur	-	-	-	-
13. Meghalaya	-	-	-	-
14. Orissa	154	171	19562	14297
15. Punjab	197	796	106856	86883
16. Rajasthan	11	25	1480	1499
17. Tamil Nadu	91	121	5042	7484
18. Tripura	-	-	2	1
19. Uttar Pradesh	526	571	76172	60867
20. West Bengal	123	95	9790	7122
21. Delhi	6	8	1549	968
22. Goa, Daman and Diu	-	-	-	-
23. Pondicherry	3	4	1409	661
All India	1820	2788	340950	288472



Table(6) : Estimated number of holdings, area under, quantity and value of fertiliser applied on all unirrigated crops

All India State/UT	Urea		all crops combined	
	no. of holdings (000)	area (000 ha)	quantity (000 Kg.)	value (000 Rs.)
(1)	(2)	(3)	(4)	(5)
1. Andhra Pradesh	283	285	24726	24995
2. Assam	9	7	1512	1577
3. Bihar	622	656	31208	31518
4. Gujarat	271	807	72455	69124
5. Haryana	25	41	3955	3786
6. Himachal Pradesh	13	17	1029	831
7. Jammu and Kashmir	6	3	226	230
8. Karnataka	98	153	10642	9150
9. Kerala	102	57	4109	4835
10. Madhya Pradesh	267	451	22256	20170
11. Maharashtra	234	341	19408	18981
12. Manipur	4	5	137	129
13. Meghalaya	2	1	261	164
14. Orissa	9	21	428	493
15. Punjab	44	125	11406	10674
16. Rajasthan	58	66	3411	3171
17. Tamil Nadu	113	69	6115	6044
18. Tripura	6	2	109	87
19. Uttar Pradesh	1701	1132	78627	80401
20. West Bengal	449	320	17374	19925
21. Delhi	-	1	35	22
22. Goa, Daman and Diu	18	12	887	1867
23. Pondicherry	-	-	-	-
All India	4334	4572	310316	308174

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Table(6)Contd.: Estimated number of holdings, area under, quantity and value of fertiliser applied on all unirrigated crops

All India	Ammonium Sulphate		all crops combined	
State/UT	no. of holdings (000)	area (000 ha)	quantity (000 Kg.)	value (000 Rs.)
(1)	(6)	(7)	(8)	(9)
1. Andhra Pradesh	129	146	22301	20398
2. Assam	6	5	244	183
3. Bihar	284	283	17791	12830
4. Gujarat	112	358	26182	27215
5. Haryana	3	4	527	314
6. Himachal Pradesh	15	16	2019	1210
7. Jammu and Kashmir	11	6	713	468
8. Karnataka	86	155	12890	13919
9. Kerala	78	29	2471	1764
10. Madhya Pradesh	70	91	4745	3892
11. Maharashtra	306	397	29925	26829
12. Manipur	1	1	26	24
13. Meghalaya	-	-	-	-
14. Orissa	69	67	3301	2746
15. Punjab	12	44	2403	1604
16. Rajasthan	13	32	2249	1070
17. Tripura	1	0	21	10
18. Tamil Nadu	35	22	2344	3224
19. Uttar Pradesh	241	135	14268	12323
20. West Bengal	107	72	5458	3637
21. Delhi	-	-	-	-
22. Goa, Daman and Diu	22	12	1290	2740
23. Pondicherry	1	1	29	17
All India	1602	1876	151197	136416

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Table(6)Contd.: Estimated number of holdings, area under, quantity and value of fertiliser applied on all un-irrigated crops

All India State/UT (1)	Super Phosphate		all crops combined	
	no. of holdings (000) (10)	area (000 ha) (11)	quantity (000 Kg.) (12)	value (000 Rs.) (13)
1. Andhra Pradesh	106	152	21303	14474
2. Assam	6	3	217	134
3. Bihar	70	67	4490	3024
4. Gujarat	95	561	62687	48000
5. Haryana	5	19	3806	2703
6. Himachal Pradesh	28	19	1662	1136
7. Jammu and Kashmir	1	1	122	71
8. Karnataka	103	207	16612	16395
9. Kerala	22	14	1408	1140
10. Madhya Pradesh	145	303	25874	13457
11. Maharashtra	99	152	13155	9670
12. Manipur	1	1	49	46
13. Meghalaya	-	-	-	-
14. Orissa	9	17	280	240
15. Punjab	14	47	3209	1742
16. Rajasthan	1	6	148	134
17. Tamil Nadu	37	21	2615	2319
18. Tripura	2	1	66	46
19. Uttar Pradesh	63	27	1657	1431
20. West Bengal	45	41	1532	963
21. Delhi	-	-	-	-
22. Goa, Daman and Diu	1	1	172	93
23. Pondicherry	-	-	-	-
<b>All India</b>	<b>853</b>	<b>1660</b>	<b>161364</b>	<b>117218</b>

Table (6)Contd. : Estimated number of holdings, area under, quantity and value of fertiliser applied on all unirrigated crops

All India	Mixed fertiliser		All crops combined	
	State/UT	number of holdings (000)	area (000 ha)	quantity (000 Kg.)
(1)	(14)	(15)	(16)	(17)
1. Andhra Pradesh	64	116	16047	15648
2. Assam	14	6	428	323
3. Bihar	39	47	1840	1828
4. Gujarat	60	196	27493	24215
5. Haryana	1	2	378	351
6. Himachal Pradesh	3	36	1271	1242
7. Jammu & Kashmir	4	2	197	162
8. Karnataka	118	317	17062	15923
9. Kerala	258	125	31125	19892
10. Madhya Pradesh	19	43	4239	2789
11. Maharashtra	304	481	46552	39088
12. Manipur	-	0	40	38
13. Meghalaya	1	1	113	85
14. Orissa	3	15	1345	808
15. Punjab	2	5	400	254
16. Rajasthan	4	10	552	588
17. Tamil Nadu	141	110	36532	24051
18. Tripura	1	0	30	18
19. Uttar Pradesh	128	95	7302	6586
20. West Bengal	132	100	8846	7453
21. Delhi	-	-	-	-
22. Goa, Daman & Diu	4	3	69	48
23. Pondicherry	-	-	2	2
All India	1300	1717	201863	161392

Table (6)Contd. : Estimated number of holdings, area under, quantity and value of fertiliser applied on all unirrigated crops

State/UT	Other chemical fertiliser		All crops combined	
	number of holdings (000)	area (000 ha)	quantity (000 Kg.)	value (000 Rs.)
(1)	(18)	(19)	(20)	(21)
1. Andhra Pradesh	86	123	13722	11788
2. Assam	1	0	19	7
3. Bihar	51	36	3037	2253
4. Gujarat	76	271	36438	35689
5. Haryana	16	26	2808	1710
6. Himachal Pradesh	7	15	846	502
7. Jammu & Kashmir	2	1	63	74
8. Karnataka	82	123	8669	6988
9. Kerala	90	51	9979	4616
10. Madhya Pradesh	4	5	303	208
11. Maharashtra	19	78	3643	2705
12. Manipur	-	-	8	5
13. Meghalaya	-	-	-	-
14. Orissa	67	62	6280	4377
15. Punjab	26	33	4922	2760
16. Rajasthan	15	6	837	1663
17. Tamil Nadu	11	9	925	559
18. Tripura	2	1	70	46
19. Uttar Pradesh	116	93	9856	4911
20. West Bengal	50	52	4178	3344
21. Delhi	2	7	343	218
22. Goa, Daman & Diu	-	-	-	-
23. Pondicherry	1	1	192	192
All India	724	993	107139	84615

Table (7) : Estimated number of holdings, area under, quantity and value of fertiliser applied on selected crops for selected states

crop	fertiliser	no. of holdings (000)	area (000 ha )	quantity (000 K.)	value (000 Rs.)
(1)	(2)	(3)	(4)	(5)	(6)
State : <u>Andhra Pradesh</u>					
rice (I)	AM	400	421	53423	49992
	SP	240	252	24560	22202
	Ur	1184	955	94912	98127
	M	92	117	14433	19787
	O	171	228	25066	24474
all crops combined (I)	AM	467	519	69367	63705
	SP	296	289	32728	28667
	Ur	1281	1123	114258	117692
	M	108	144	20653	26331
	O	200	312	37699	36211
Jowar (U)	AM	10	11	1317	937
	SP	22	20	1322	1351
	Ur	23	60	2298	2395
	M	8	6	552	458
	O	10	12	900	73
other pulses (U)	AM	1	0	24	26
	SP	18	2	164	176
	Ur	1	3	54	62
	M	-	-	-	-
	O	11	7	282	321
ground nut (U)	AM	14	34	1676	1926
	SP	51	61	6399	4578
	Ur	3	23	1200	1157
	M	12	19	1864	2065
	O	11	12	1301	1310
all crops combined (U)	AM	129	146	22301	20398
	SP	106	152	21603	14474
	Ur	283	285	24726	24995
	M	64	116	16047	15648
	O	86	123	13722	11788

I = irrigated  
U = unirrigated

AM = ammonium sulphate  
Ur = urea  
SP = super phosphate  
M = mixed  
O = other chemical fertilisers

Table (7)Contd. : Estimated number of holdings, area under quantity and value of fertiliser applied on selected crops for selected states

crop	fertiliser	no. of holdings (000)	area (000 ha)	quantity (000 Kg.)	value (000 Rs.)
(1)	(2)	(3)	(4)	(5)	(6)
State : <u>Assam</u>					
rice (U)	AM	2	3	126	97
	SP	4	2	72	58
	Ur	6	0	1204	1294
	M	12	5	270	273
all crops combined (U)	AM	6	5	244	183
	SP	6	3	217	134
	Ur	9	7	1512	1577
	M	14	6	428	323
	O	1	0	19	7
State : <u>Bihar</u>					
rice (I)	AM	341	330	18587	15284
	SP	58	61	3604	3029
	Ur	444	445	17739	16950
	M	58	49	2157	1834
	O	22	18	583	514
wheat (I)	AM	269	173	12621	11058
	SP	64	62	4692	3847
	Ur	448	254	13787	13787
	M	60	57	2953	3012
	O	39	31	1358	1446
all crops combined (I)	AM	478	562	39613	33499
	SP	108	149	9982	8117
	Ur	684	785	36827	36143
	M	108	118	5718	5492
	O	49	54	2397	2369
rice (U)	AM	176	163	8543	6472
	SP	28	31	104	1003
	Ur	392	332	12276	12742
	M	20	13	637	517
	O	24	13	1087	934
wheat (U)	AM	80	44	2938	2238
	SP	36	17	1370	900
	Ur	268	161	9426	9491
	M	21	7	288	348
	O	2	2	108	91
all crops combined (U)	AM	284	283	17791	12830
	SP	70	67	4490	3024
	Ur	622	656	31208	31518
	M	39	47	1840	1828
	O	51	36	3037	2253

Table (7)Contd. : Estimated number of holdings, area under quantity and value of fertiliser applied on selected crops for selected states

crop	fertiliser	no. of holdings (000)	area (000 ha)	quantity (000 Kg.)	value (000 Rs.)
(1)	(2)	(3)	(4)	(5)	(6)
State : Gujarat					
bajra (I)	AM	8	4	236	173
	SP	2	0.4	48	19
	Ur	48	49	3271	3441
	M	2	2	98	67
	O	2	2	72	120
wheat (I)	AM	58	45	8015	6337
	SP	78	68	17347	11748
	Ur	196	186	21722	19000
	M	27	63	8564	6411
	O	20	28	4695	5453
cotton (I)	AM	23	50	5622	6417
	SP	41	59	6599	6600
	Ur	105	147	20971	18235
	M	17	32	3070	2838
	O	32	50	9859	10912
all crops (I)	AM	96	159	19365	18592
	SP	112	163	29901	22004
	Ur	330	533	65876	58583
	M	38	105	12524	9955
	O	49	99	16517	18640
jowar (U)	AM	33	44	7976	3379
	SP	34	39	4689	3180
	Ur	37	63	4221	4041
	M	19	15	1922	1426
	O	8	14	1173	1123
bajra (U)	AM	35	63	3267	3812
	SP	44	70	7782	5835
	Ur	120	177	12890	11930
	M	17	34	2538	2573
	O	25	38	3050	3096
cotton (U)	AM	29	52	4338	4695
	SP	8	21	3457	2594
	Ur	104	171	14154	15265
	M	21	46	9750	7541
	O	15	38	6457	5770



Table (7)Contd. : Estimated number of holdings, area under quantity and value of fertiliser applied on selected crops for selected states

crop	fertiliser	no. of holdings (000)	area (000 ha.)	quantity (000 Kg.)	value (000 Rs.)
(1)	(2)	(3)	(4)	(5)	(6)
Stat : Gujarat(contd.)					
ground nut (U)	AM	41	150	11011	12918
	SF	84	413	45231	35696
	Ur	94	265	28854	28534
	M	25	83	11009	10631
	O	49	169	21516	23565
all crops combined (U)	AM	112	358	26182	27215
	SP	95	561	62687	48000
	Ur	271	807	72455	69124
	M	60	196	27493	24215
	O	76	271	36438	35689
State : Haryana					
rice (I)	AM	5	8	1045	962
	Ur	54	102	13615	12764
	M	3	1	221	191
	O	9	15	1352	872
bajra (I)	AM	3	4	291	316
	Ur	10	11	1481	1430
	O	5	4	684	410
wheat (I)	AM	16	28	3802	2857
	SP	7	8	572	576
	Ur	121	244	32604	37809
	M	3	6	1172	1120
	O	47	85	9004	6251
all crops combined (I)	AM	19	53	6996	5716
	SP	8	14	797	872
	Ur	137	484	61890	65164
	M	5	12	1962	1856
	O	71	148	15122	10109
bajra (U)	SP	5	4	818	601
	Ur	7	7	436	347
	O	2	5	459	264
wheat (U)	AM	1	2	135	76
	SP	3	3	825	546
	Ur	11	14	1263	1362
	M	1	1	244	235
	O	4	4	439	294

Table (7)Contd. : Estimated number of holdings, area under quantity and value of fertiliser applied on selected crops for selected states

crop	fertiliser	no. of holdings (000)	area (000 ha)	quantity (000 Kg.)	value (000 Rs.)
(1)	(2)	(3)	(4)	(5)	(6)
State : <u>Haryana (cont.)</u>					
gram (U)	AM	1	1	87	47
	SP	5	4	907	577
	Ur	3	4	269	209
	O	1	0	50	45
all crops combined (U)	AM	3	4	527	314
	SP	5	19	3806	2703
	Ur	25	41	3955	3786
	M	1	2	378	351
	O	16	26	2808	1710
State : <u>Himachal Pradesh</u>					
wheat (I)	AM	6	1	338	322
	SP	15	4	991	750
	Ur	0	0	36	20
	M	1	1	52	41
	O	2	2	124	78
all crops combined (I)	AM	6	2	662	534
	SP	22	8	2340	1671
	Ur	0	1	53	30
	M	1	2	130	108
	O	2	3	192	125
maize (U)	AM	13	8	978	608
	SP	21	12	1054	718
	Ur	11	10	677	517
	M	3	18	657	639
	O	4	8	322	220
wheat (U)	AM	6	4	275	161
	SP	10	6	526	369
	Ur	3	4	179	139
	M	3	18	614	604
	O	6	6	377	208

Table (7)Contd. : Estimated number of holdings, area under quantity and value of fertiliser applied on selected crops for selected states

crop	fertiliser	no. of holdings (000)	area (000 ha)	quantity (000 Kg.)	value (000 Rs.)
(1)	(2)	(3)	(4)	(5)	(6)
State : <u>Himachal Pradesh (contd.)</u>					
all crops combined (U)	AM	15	16	2019	1210
	SP	28	19	1662	1136
	Ur	13	17	1029	831
	M	3	36	1271	1242
	O	7	15	846	502
State : <u>Jammu &amp; Kashmir</u>					
rice (I)	AM	57	38	3098	1736
	SP	12	9	739	590
	Ur	106	76	6071	6026
	M	6	4	322	268
	O	6	6	549	577
all crops combined (I)	AM	63	46	3662	2189
	SP	14	11	983	776
	Ur	111	89	6869	6883
	M	8	5	532	431
	O	10	11	1058	997
wheat (U)	AM	2	1	115	61
	SP	1	0	51	23
	Ur	3	1	105	110
	M	2	1	137	112
	O	1	0	53	29
maize (U)	AM	7	4	431	294
	SP	1	0	67	44
	Ur	1	1	26	50
	M	3	1	48	41
	O	1	0	8	42
all crops combined (U)	AM	11	6	713	468
	SP	1	1	122	71
	Ur	6	3	226	230
	M	4	2	197	162
	O	2	1	63	74

Table(7)Contd. : Estimated number of holdings, area under quantity and value of fertiliser applied on selected crops for selected states

crop	fertiliser	no. of holdings (000)	area (000 ha)	quantity (000 Kg.)	value (000 Rs.)
(1)	(2)	(3)	(4)	(5)	(6)
<u>State : Karnataka</u>					
rice(I)	AM	126	112	26512	19412
	SP	157	144	37397	23511
	Ur	247	182	33181	21400
	M	59	43	7025	5954
	O	91	93	10727	10631
Jowar(I)	AM	8	6	723	428
	SP	2	2	343	275
	Ur	11	8	1023	866
	M	10	9	1312	793
	O				
all crops combined(I)	AM	158	160	34482	24140
	SP	180	168	40711	25931
	Ur	333	242	43728	30920
	M	96	144	15529	13101
	O	128	107	14119	13515
Jowar(U)	AM	26	39	2002	2056
	SP	23	49	3912	3074
	Ur	7	21	810	638
	M	10	28	1920	1824
	O	8	9	350	494
ragi(U)	AM	22	23	1531	1796
	SP	49	56	3205	4221
	Ur	29	39	2341	1970
	M	71	101	5589	5516
	O	16	17	717	644
ground nut(U)	AM	7	15	528	551
	SP	16	17	1736	1085
	Ur	3	7	479	308
	M	14	18	1413	849
	O	1	3	82	61
all crops combined(U)	AM	86	155	12890	13919
	SP	103	207	16612	16395
	Ur	98	153	10642	9150
	M	118	317	17062	15923
	O	82	123	8669	6988

Table(7)Contd.: Estimated number of holdings, area under quantity and value of fertiliser applied on selected crops for selected states

crop	fertiliser	no. of holdings (000)	area (000 ha)	quantity (000 kg.)	value (000 Rs.)
(1)	(2)	(3)	(4)	(5)	(6)
<u>State : Kerala</u>					
rice(I)	AM	75	55	5423	3207
	SP	59	44	4682	3715
	Ur	134	174	12491	11855
	M	157	108	16209	10914
	O	103	131	14868	11451
all crops combined(I)	AM	76	55	5463	3834
	SP	60	44	4851	3851
	Ur	190	178	12876	12209
	M	186	123	19568	13310
	O	106	138	16036	12163
rice(U)	AM	55	20	1549	1156
	SP	12	10	966	763
	Ur	86	52	3635	4440
	M	98	34	4969	3751
	O	24	25	1956	1582
all crops combined(U)	AM	73	29	2471	1764
	SP	22	14	1408	1140
	Ur	102	57	4109	4835
	M	258	125	31125	19892
	O	90	51	9979	4616
<u>State : Madhya Pradesh</u>					
rice(I)	AM	38	32	2360	1530
	SP	74	197	18604	8666
	Ur	169	334	22878	20313
	M	5	13	541	416
	O	3	13	536	449
wheat(I)	AM	60	61	4745	3035
	SP	49	48	6684	308
	Ur	168	149	16487	15383
	M	44	43	8119	7991
	O	40	29	2486	2260

Table(7)Contd.: Estimated number of holdings, area under quantity and value of fertiliser applied on selected crops for selected states

crop	fertiliser	no. of holdings (000)	area (000 ha)	quantity (000 Kg.)	value (000 Rs.)
(1)	(2)	(3)	(4)	(5)	(6)
<u>State : Madhya Pradesh(Contd.)</u>					
all crops combined(I)	AM	139	125	12225	7641
	SP	137	275	28573	13712
	Ur	374	546	47888	43304
	M	58	64	10777	10298
	O	48	46	3832	3114
rice(U)	AM	59	38	2631	2207
	SP	101	205	15747	8299
	Ur	227	381	18469	17121
	M	5	13	1292	767
	O	1	4	227	127
jowar(U)	AM	4	8	392	196
	SP	15	22	2163	1002
	Ur	9	13	719	532
	M	4	6	706	353
	O				
wheat(U)	AM	5	4	745	565
	SP	10	8	796	650
	Ur	4	5	327	311
	M	4	10	714	670
	O				
other pulses(U)	AM	1	2	108	81
	SP	18	26	1711	939
	Ur	13	15	641	515
	M	5	2	85	42
	O				
all crops combined(U)	AM	70	91	4745	3892
	SP	145	303	25874	13457
	Ur	267	451	22256	20170
	M	19	43	4239	2789
	O	4	5	303	208

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Table(7)Contd.: Estimated number of holdings, area under quantity and value of fertiliser applied on selected crops for selected states

crop	fertiliser	no. of holdings (000)	area (000 ha)	quantity (000 kg.)	value (000 Rs.)
(1)	(2)	(3)	(4)	(5)	(6)
<u>State : Maharashtra</u>					
rice(I)	AM	83	120	10886	9000
	SP	17	7	2135	1957
	Ur	51	27	3682	3249
	M	88	66	9979	9911
	O	5	6	353	398
jowar(I)	AM	14	5	752	809
	SP	9	6	560	632
	Ur	53	48	3858	6827
	M	50	59	18904	27235
	O	6	12	269	258
wheat(I)	AM	58	42	3930	3658
	SP	41	30	3157	2694
	Ur	119	81	10952	9092
	M	61	43	8640	11048
	O	9	9	657	656
sugar cane(I)	AM	42	25	7078	8021
	SP	22	12	2906	2204
	Ur	105	91	18484	15904
	M	90	79	41555	36074
	O	18	15	6936	7170
all crops(I)	AM	199	267	31612	28299
	SP	95	91	12772	10329
	Ur	286	359	55167	51187
	M	259	335	93001	94570
	O	46	79	12116	11447
rice(U)	AM	188	153	15097	13900
	SP	37	35	1929	1774
	Ur	98	83	5563	5748
	M	173	210	25769	21386
	O	1	0	24	29

Table(7)Contd.: Estimated number of holdings, area under quantity and value of fertiliser applied on selected crops for selected states

crop	fertiliser	no. of holdings (000)	area (000 ha)	quantity (000 Kg.)	value (000 Rs.)
(1)	(2)	(3)	(4)	(5)	(6)
<u>State : Maharashtra(Contd.)</u>					
jowar(U)	AM	56	100	5494	5187
	SP	29	45	4389	3394
	Ur	68	85	3819	3748
	M	69	98	5873	4768
	O	9	50	781	836
cotton(U)	AM	52	72	3029	2998
	SP	13	23	2101	1795
	Ur	42	74	3370	3386
	M	35	55	5530	4262
	O	8	12	884	659
all crops combined (U)	AM	306	397	29925	26829
	SP	99	152	13155	9670
	Ur	234	341	19408	18981
	M	304	481	46552	39088
	O	19	78	3643	2705
<u>State : Orissa</u>					
rice(I)	AM	45	51	4321	3789
	SP	17	23	2157	1092
	Ur	5	20	402	410
	M	6	10	1795	1983
	O	101	148	14523	11317
all crops combined(I)	AM	64	66	5090	4168
	SP	23	32	3061	1590
	Ur	9	19	434	448
	M	7	10	1802	2006
	O	154	171	19562	14297
rice(U)	AM	52	55	2618	2138
	SP	8	16	229	189
	Ur	7	12	278	328
	M	2	6	256	227
	O	65	60	5389	3798
all crops combined(U)	AM	69	67	3301	2746
	SP	9	17	280	240
	Ur	9	21	428	493
	M	3	15	1345	808
	O	67	62	6280	4377



Table(7)Contd.: Estimated number of holdings, area under quantity and value of fertiliser applied on selected crops for selected states

crop	fertiliser	no. of holdings (000)	area (000 ha)	quantity (000 Kg.)	value (000 Rs.)
(1)	(2)	(3)	(4)	(5)	(6)
<u>State : Punjab</u>					
rice(I)	AM	26	38	5555	3569
	SP	7	15	1628	1037
	Ur	158	268	37585	35963
	M	14	30	6480	5073
	O	55	74	11376	6940
maize(I)	AM	15	16	1933	1788
	SP	20	24	3658	2916
	Ur	112	122	14703	13383
	M	35	48	8925	8311
	O	54	66	9434	7105
wheat(I)	AM	49	122	14629	11064
	SP	44	91	16369	11789
	Ur	337	815	113077	108546
	M	71	199	47914	41168
	O	147	449	64736	59665
all crops combined(I)	AM	75	204	26446	19656
	SP	68	167	30567	22026
	Ur	388	1480	203319	194801
	M	77	315	69838	59443
	O	197	796	106856	86883
wheat(U)	AM	4	23	979	739
	SP	2	8	314	249
	Ur	26	55	5663	5342
	M	2	4	238	165
	O	21	19	2836	1529
ground nut(U)	AM	6	10	1034	557
	SP	9	22	1983	924
	Ur	6	11	693	663
	O	2	2	486	272
all crops combined(U)	AM	12	41	2403	1604
	SP	14	47	3209	1742
	Ur	44	125	11406	10674
	M	2	5	400	254
	O	26	33	4922	2760

Table(7)Contd.: Estimated number of holdings, area under quantity and value of fertiliser applied on selected crops for selected states

crop	fertiliser	no. of holdings (000)	area (00 ha)	quantity (000 Kg.)	value (000 Rs.)
(1)	(2)	(3)	(4)	(5)	(6)
<u>State : Rajasthan</u>					
wheat(I)	AM	38	60	2506	3397
	SP	20	20	1316	1040
	Ur	176	220	19477	19581
	M	12	20	1301	605
	O	10	13	527	365
barley	AM	28	21	173	137
	SP	1	3	20	16
	Ur	96	89	5488	5311
	O	4	4	316	547
all crops combined(I)	AM	58	97	3094	4130
	SP	43	37	2950	2027
	Ur	226	473	36170	35424
	M	12	29	1336	651
	O	11	25	1480	1499
bajra(U)	AM	1	2	98	61
	Ur	44	26	1369	1308
	M	4	5	204	383
	O	1	3	99	59
all crops combined(U)	AM	13	32	2249	1070
	SP	1	6	148	134
	Ur	58	66	3411	3171
	M	4	10	552	588
	O	15	6	837	1663

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Table(7)Contd.: Estimated number of holdings, area under quantity and value of fertiliser applied on selected crops for selected states

crops	fertiliser	no. of holdings (000)	area (000 ha)	quantity (000 Kg.)	value (000 Rs.)
(1)	(2)	(3)	(4)	(5)	(6)
<u>State : Tamil Nadu</u>					
rice(I)	AM	477	514	42297	37808
	SP	140	162	14232	10864
	Ur	1256	1198	101019	113888
	M	550	561	80567	66638
	O	74	11	4202	6467
ground nut(I)	AM	14	6	514	443
	SP	6	6	481	353
	Ur	19	11	1084	971
	M	55	50	8250	5465
	O	2	1	188	210
all crops combined(I)	AM	541	566	50377	44721
	SP	186	195	17551	14610
	Ur	1351	1337	114257	126722
	M	680	739	119436	94528
	O	91	121	5042	7484
rice(U)	AM	13	6	730	532
	SP	2	3	252	379
	Ur	48	25	2166	2573
	M	25	13	1171	983
	O	4	1	119	119
ragi(U)	AM	5	7	531	1347
	SP	0	1	105	100
	Ur	10	10	617	615
	M	3	2	334	203
	O	1	2	35	42
other cereal(U)	Ur	7	4	259	275
	M	5	3	324	202
groundnut(U)	AM	4	3	285	239
	Ur	6	7	266	292
	M	45	50	8356	6895
	O	2	1	157	102
all crops combined(U)	AM	35	22	2344	3224
	SP	37	21	2615	2319
	Ur	113	69	6115	6044
	M	141	110	36532	24051
	O	11	9	925	559

Table(7)Contd.: Estimated number of holdings, area under quantity and value of fertiliser applied on selected crops for selected states

crops	fertiliser	no. of holdings (000)	area (000 ha)	quantity (000 Kg.)	value (000 Rs.)
(1)	(2)	(3)	(4)	(5)	(6)
<u>State : Uttar Pradesh</u>					
rice(I)	AM	161	99	7103	6159
	SP	34	25	1152	1062
	Ur	1032	652	51422	51091
	M	90	70	6567	12820
	O	58	49	4964	2422
wheat(I)	AM	322	269	26503	21353
	SP	152	115	8842	7220
	Ur	3844	2554	231187	246386
	M	453	392	42404	52927
	O	410	365	30591	30592
all crops Combined(I)	AM	474	505	51450	42219
	SP	194	200	18071	15042
	Ur	4369	4227	397138	408968
	M	555	598	62731	79256
	O	526	571	76172	60867
rice(U)	AM	151	74	8472	7623
	SP	23	10	412	394
	Ur	1254	721	46455	47652
	M	66	47	2749	2635
	O	45	40	1871	1764
maize(U)	AM	64	22	2072	1665
	SP	16	5	143	143
	Ur	351	140	11624	10202
	M	25	10	1120	765
	O	36	24	2243	1686
Wheat(U)	AM	16	7	1535	1535
	SP	10	32	224	164
	Ur	118	90	6954	7034
	M	30	28	2668	2567
	O	11	10	406	365
all crops combined(U)	AM	241	135	14268	12323
	SP	63	27	1657	1431
	Ur	1701	1132	78627	80401
	M	128	95	7302	6586
	O	116	93	9856	4911

Table(7)Contd.: Estimated number of holdings, area under quantity and value of fertiliser applied on selected crops for selected states

crops	fertiliser	no. of holdings (000)	area (000 ha)	quantity (000 Kg.)	value (000 Rs.)
(1)	(2)	(3)	(4)	(5)	(6)
<u>State : West Bengal</u>					
rice(I)	AM	308	302	25813	15849
	SP	123	95	8222	5168
	Ur	385	232	18060	17985
	M	119	72	7855	7056
	O	90	73	6106	4810
wheat(I)	AM	86	17	2668	1782
	SP	67	18	1250	1007
	Ur	92	28	1993	1987
	M	39	15	882	819
	O	26	4	604	423
jute(I)	AM	45	19	1012	627
	SP	28	13	587	335
	Ur	89	35	2113	2114
	M	28	7	1777	1625
	O	7	3	106	74
all crops combined(I)	AM	423	359	31972	19962
	SP	192	134	11417	7614
	Ur	536	327	25652	26395
	M	232	118	18966	16226
	O	123	95	9790	7122
rice(U)	AM	97	65	4975	3304
	SP	21	23	434	262
	Ur	350	253	12482	12346
	M	97	85	7136	5877
	O	39	45	3891	3053
wheat(U)	AM	7	3	222	135
	SP	15	9	702	454
	Ur	20	13	1550	1551
	M	5	0	87	70
	O	2	1	78	78

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Table(7)Contd.: Estimated number of holdings, area under quantity and value of fertiliser applied on selected crops for selected states

crops	fertiliser	no. of holdings (000)	area (000 ha)	quantity (000 Kg.)	value (000 Rs.)
(1)	(2)	(3)	(4)	(5)	(6)
<u>State : West Bengal(Contd.)</u>					
jute(U)	AM	17	3	201	147
	SP	15	5	216	127
	Ur	144	44	2807	2770
	M	22	3	613	490
	O	9	3	147	135
all crops combined(U)	AM	107	72	5458	3637
	SP	45	41	1532	963
	Ur	449	320	17374	19925
	M	132	100	8846	7453
	O	50	52	4178	3344

I = irrigated

U = unirrigated

AM = ammonium sulphate

Ur = urea

SP = super phosphate

M = mixed

O = other chemical fertilisers

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Table (8.1) : Percentage of area treated with and application rate of urea by states

srl. no.	state/union territory	irrigated crops			unirrigated crops		
		p.c.of area treated	application rate		p.c.of area treated	application rate	
			kg./hect.	Rs./hect.		kg./hect.	Rs./hect.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	
1.	Andhra Pradesh	42.7	101.7	104.8	4.1	86.9	87.8
2.	Assam	-	-	-	0.4	213.5	222.7
3.	Bihar	24.5	46.9	46.0	3.3	47.6	48.1
4.	Gujarat	40.7	123.5	109.8	11.5	89.7	85.6
5.	Haryana	31.9	128.2	134.9	2.9	96.1	92.0
6.	Himachal Pradesh	0.7	94.0	52.6	2.8	62.6	50.5
7.	Jammu & Kashmir	35.7	77.5	77.6	0.7	78.1	79.9
8.	Karnataka	26.2	180.3	131.6	2.0	69.5	59.7
9.	Kerala	47.1	72.1	68.4	6.7	71.4	85.6
10.	Madhya Pradesh	21.4	87.6	79.3	3.0	49.3	44.7
11.	Maharashtra	16.5	153.5	142.4	2.4	56.9	55.7
12.	Orissa	4.12	23.5	25.3	0.6	20.7	22.9
13.	Punjab	48.6	137.4	131.8	15.3	90.8	85.0
14.	Rajasthan	24.2	76.5	75.1	0.7	51.4	47.8
15.	Tami' Nadu	49.5	85.4	94.8	2.7	88.8	87.8
16.	Uttar Pradesh	35.0	94.0	96.8	10.4	69.5	71.0
17.	West Bengal	26.8	78.3	80.6	9.0	54.2	53.7
18.	All states & UTs.	33.4	100.3	99.7	4.8	67.9	67.4

Table (8.2) : Percentage of area treated with and application rate of ammonium sulphate - by states.

Srl. no.	state/union territory	irrigated crops		unirrigated crops			
		p.c. of area treated	application rate		p.c. of area treated	application rate	
			kg/hect.	R./hect.		kg/hect.	R./hect.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	
1.	Andhra Pradesh	19.7	133.7	122.8	2.1	152.6	139.6
2.	Assam	0.4	115.3	90.6	0.3	43.2	36.2
3.	Bihar	17.5	70.4	59.6	3.6	62.9	45.3
4.	Gujarat	12.2	121.4	116.6	5.1	73.2	76.1
5.	Haryana	3.5	130.7	106.8	0.3	115.2	68.7
6.	Himachal Pradesh	2.6	292.1	235.5	2.6	128.6	77.1
7.	Jammu & Kashmir	18.5	79.7	47.6	1.5	108.6	77.1
8.	Karnataka	17.6	215.1	150.6	2.1	82.9	89.5
9.	Kerala	14.6	98.5	69.2	3.4	84.7	60.5
10.	Madhya Pradesh	4.9	98.2	61.4	0.6	51.9	42.6
11.	Maharashtra	12.3	118.4	105.9	2.3	75.4	67.6
12.	Orissa	14.6	77.8	63.7	2.0	49.5	41.2
13.	Punjab	6.7	129.4	96.2	5.3	55.1	36.8
14.	Rajasthan	5.0	31.9	42.7	0.3	69.8	33.2
15.	Tamil Nadu	21.0	89.1	79.1	0.9	106.1	145.9
16.	Uttar Pradesh	4.2	101.8	83.6	1.2	105.9	91.5
17.	West Bengal	29.3	39.1	55.6	2.0	75.4	50.2
18.	All states/UTs.	10.3	104.8	86.4	2.0	80.6	72.7



Table (8.3) : Percentage of area treated with and application rate of superphosphate.

Srl. no.	state/union territory	irrigated crops			unirrigated crops		
		p.c. of area treated	kg/hect.	lb./hect.	p.c. of area treated	kg/hect.	lb./hect.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	
1. Andhra Pradesh	11.0	113.5	99.4	2.2	142.3	95.4	
2. Assam	-	-	-	0.2	76.6	47.3	
3. Bihar	4.5	69.0	56.1	0.9	68.3	45.0	
4. Gujarat	12.5	183.3	141.0	3.0	111.9	85.7	
5. Haryana	0.9	56.3	61.6	1.4	199.7	141.8	
6. Himachal Pradesh	9.7	278.0	198.5	3.1	90.5	61.8	
7. Jammu & Kashmir	4.3	92.7	73.1	0.2	172.1	101.0	
8. Karnataka	18.4	243.2	154.9	2.7	80.1	79.1	
9. Kerala	11.7	109.6	87.0	1.6	101.7	82.4	
10. Madhya Pradesh	10.8	104.0	49.9	2.0	85.5	44.5	
11. Maharashtra	4.2	139.7	113.0	1.1	86.8	63.8	
12. Orissa	7.1	97.0	50.4	0.5	16.3	14.0	
13. Punjab	5.5	133.2	132.0	5.7	63.1	36.9	
14. Rajasthan	1.9	78.7	54.1	0.1	23.2	20.9	
15. Tamil Nadu	7.2	89.9	74.3	0.8	124.9	110.8	
16. Uttar Pradesh	1.7	90.2	75.1	0.3	61.1	52.8	
17. West Bengal	11.0	85.0	56.7	1.2	37.2	23.4	
18. All states & UTs.	5.4	125.3	91.2	1.7	97.2	70.6	

Table (8.4) : Percentage of area treated with and application rate of mixed fertiliser by states.

Srl. no.	state/union territory	irrigated crops			unirrigated-crops		
		p.c. of area treated	application rate kg/hect.	application rate P./hect.	p.c. of area treated	application rate kg/hect.	application rate P./hect.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	
1.	Andhra Pradesh	5.5	143.3	122.6	1.7	138.1	134.6
2.	Assam	-	-	-	0.3	72.4	54.9
3.	Bihar	3.7	48.3	40.6	0.6	39.2	38.9
4.	Gujarat	8.0	118.8	94.5	2.8	140.1	123.4
5.	Haryana	0.8	162.2	154.9	0.2	147.2	136.5
6.	Himachal Pradesh	2.4	63.4	53.0	6.0	35.6	34.8
7.	Jammu & Kashmir	2.1	101.5	82.1	0.4	118.0	96.5
8.	Karnataka	15.9	107.6	90.8	4.2	53.8	50.2
9.	Kerala	32.5	158.6	107.9	14.4	249.8	159.6
10.	Madhya Pradesh	2.5	170.0	162.4	0.3	98.2	64.6
11.	Maharashtra	15.4	277.3	232.0	3.4	96.7	81.2
12.	Orissa	2.2	184.8	207.3	0.5	87.7	52.7
13.	Punjab	10.3	221.9	188.8	0.6	83.7	53.2
14.	Rajasthan	1.5	46.3	22.5	0.1	56.6	60.3
15.	Tamil Nadu	27.4	168.8	128.5	4.3	333.5	219.5
16.	Uttar Pradesh	5.0	104.9	128.0	0.9	76.8	69.2
17.	West Bengal	9.6	160.8	83.2	2.3	88.6	74.6
18.	All states & UTs.	7.9	159.0	149.4	1.8	116.2	92.9

Table (8.5) : Percentage of area treated with and application rate of other fertilisers by states.

sr. no.	state/union territory	irrigated crops		unirrigated crops			
		p.c. of area treated	application rate kg/hect.	p.c. of area treated	application rate kg/hect.	p.c. of area treated	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	
1.	Andhra Pradesh	11.9	120.6	115.9	1.3	111.3	96.2
2.	Assam	-	-	-	0.0	52.2	19.2
3.	Bihar	1.7	44.4	43.8	0.5	83.4	61.8
4.	Gujarat	7.6	166.9	183.4	3.9	134.3	131.5
5.	Haryana	9.8	102.0	63.2	1.9	106.4	64.8
6.	Himachal Pradesh	3.7	59.2	183.3	2.6	54.8	32.5
7.	Jammu & Kashmir	4.3	98.1	92.5	0.2	63.2	79.3
8.	Karnataka	11.8	132.1	126.4	1.6	70.8	57.1
9.	Kerala	38.1	116.6	88.5	5.9	195.4	90.4
10.	Madhya Pradesh	1.8	84.0	68.3	0.0	59.2	40.6
11.	Maharashtra	3.6	153.6	142.2	0.5	46.3	34.8
12.	Orissa	38.2	114.7	83.8	1.9	100.6	69.9
13.	Punjab	26.2	134.3	109.2	4.0	149.5	83.8
14.	Rajasthan	1.3	57.9	58.7	0.1	150.4	298.9
15.	Tamil Nadu	4.5	41.6	61.8	0.4	102.5	62.0
16.	Uttar Pradesh	4.7	133.3	106.5	0.9	106.6	53.1
17.	West Bengal	7.8	103.1	81.3	1.5	80.2	64.2
18.	All states/UTs.	7.6	123.3	103.5	1.0	107.9	85.2

Table (9.1) : Irrigated crop area treated with farm yard manure and value of manure applied for selected crops and states

S t a t e	crop	farm yard	
		area (000 Ha.)	value (000 Rs.)
(1)	(2)	(3)	(4)
1. Andhra Pradesh	rice	576	67750
	all crops	784	97888
2. Bihar	rice	425	12268
	wheat	253	8938
	all crops	922	32795
3. Gujarat	bajra	40	1670
	cotton	82	1858
	all crops	234	10936
4. Haryana	wheat	101	54355
	gram	29	13450
	all crops	281	157995
5. Himachal Pradesh	rice	18	4737
	maize	10	1521
	wheat	21	5433
	all crops	58	13990
6. Jammu & Kashmir	rice	59	11708
	all crops	80	16673
7. Karnataka	rice	376	85729
	all crops	528	115334
8. Kerala	rice	38	4533
	all crops	79	12424
9. Madhya Pradesh	rice	450	29924
	wheat	175	22151
	all crops	790	81740
10. Maharashtra	rice	218	13600
	jowar	203	26088
	all crops	735	75504
11. Orissa	rice	307	19180
	all crops	344	22686
12. Punjab	maize	34	5202
	wheat	38	3735
	all crops	188	21570
13. Rajasthan	maize	139	23667
	wheat	239	44384
	all crops	705	124159
14. Tamil Nadu	rice	884	71608
	all crops	1278	122775
15. Uttar Pradesh	rice	583	53302
	wheat	1513	142812
	sugarcane	328	33548
	all crops	3645	347493
16. West Bengal	rice	652	57295
	all crops	785	69252

Table (9.2) : Unirrigated crop area treated with farm yard manure and value of manure applied for selected crops and states

S t a t e	crop	farm yard	
		area (000 Ha.)	value (000 Rs.)
(1)	(2)	(3)	(4)
1. Andhra Pradesh	rice	111	8907
	jowar	1549	87402
	bajra	115	7118
	groundnut	490	38640
	all crops	3752	224788
2. Assam	rice	108	3017
	all crops	135	4916
3. Bihar	rice	1218	53772
	maize	442	23788
	wheat	316	18122
	all crops	2302	115806
4. Gujarat	jowar	172	10499
	bajra	418	35816
	cotton	312	13679
	groundnut	270	24775
	all crops	1678	107216
5. Haryana	bajra	101	4674
	all crops	257	12083
6. Himachal Pradesh	maize	161	21837
	wheat	166	20883
	all crops	428	58734
7. Jammu & Kashmir	maize	150	22386
	wheat	78	8662
	all crops	263	36664
8. Karnataka	rice	521	40030
	jowar	468	25488
	ragi	1320	122943
	all crops	3408	273106
9. Kerala	rice	56	6360
	all crops	322	42318

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S t a t e	farm yard		
	crop	area (000 Ha.)	value (000 Rs.)
(1)	(2)	(3)	(4)
10. Madhya Pradesh	rice	1472	89280
	maize	357	39566
	cotton	207	38888
	all crops	3300	237156
11. Maharashtra	jowar	1243	61460
	cotton	868	80490
	all crops	3689	233052
12. Orissa	rice	1676	105459
	all crops	1898	113205
13. Punjab	wheat	35	3061
	all crops	63	5487
14. Rajasthan	bajra	866	49775
	maize	138	28318
	other pulses	306	8569
	all crops	1772	109148
15. Tamil Nadu	jowar	180	15825
	bajra	193	17136
	groundnut	350	36868
	all crops	1297	116642
16. Uttar Pradesh	rice	932	58045
	maize	363	37901
	wheat	572	49785
	all crops	3045	250424
17. West Bengal	rice	1284	75727
	all crops	1608	93814

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Table (10) : Estimated area under and value of oil cake and other organic manure applied by states

all crops

all figures are in lakh

States	oil cake				other organic manures			
	irrigated		unirrigated		irrigated		unirrigated	
	area (Ha)	value (Rs.)	area (Ha)	value (Rs.)	area (Ha)	value (Rs.)	area (Ha)	value (Rs.)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1. Andhra Pradesh	..	17	..	32	..	41	..	23
2. Assam	-	-	..	..	-	-	1	27
3. Bihar	..	4	..	38	..	3	2	75
4. Gujarat	..	8	..	1	..	24	3	172
5. Haryana	..	1	-	-	-	-	-	-
6. Himachal Pradesh	-	-	-	-	..	1	..	..
7. Jammu & Kashmir	-	-	-	-	..	10	..	5
8. Karnataka	..	9	..	8	3	334	12	716
9. Kerala	..	12	..	20	..	82	1	149
10. Madhya Pradesh	..	..	..	5	..	8	1	112
11. Maharashtra	..	28	..	4	1	74	1	42
12. Manipur	-	-	-	-	..	..	..	..
13. Meghalaya	-	-	-	-	-	-	..	1
14. Orissa	..	6	..	27	..	5	2	70
15. Punjab	-	-	-	-	..	7	..	7
16. Rajasthan	-	-	-	-	..	5	..	1
17. Tamil Nadu	2	180	1	64	2	166	..	13
18. Tripura	-	-	..	..	-	-	-	-
19. Uttar Pradesh	..	4	..	4	2	94	..	20
20. West Bengal	3	349	1	129	..	2	..	16
21. Delhi	-	-	-	-	-	-	-	-
22. Goa, Daman & Diu	-	-	-	-	-	-	-	-
23. Pondicherry	..	1	-	-	-	-	-	-
all states	5	621	4	332	9	858	26	1449

(N.B : .. indicates the contribution is small)

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