

केवल सरकारी प्रयोग के लिए
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कृषि सांख्यिकी मैनुअल AGRICUTURAL STATISTICS MANUAL

भाग—3

PART-III

(समकों का प्रक्रमण एवं क्षेत्र कार्य का मुख्यालय पर समन्वय)
(Processing of data and co-ordination)
of field work at FOD Hqrs.

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भारत सरकार
सांख्यिकी एवं कार्यक्रम कार्यान्वयन मंत्रालय

**GOVERNMENT OF INDIA
MINISTRY OF STATISTICS & PROGRAMME IMPLEMENTATION**



राष्ट्रीय प्रतिदर्श सर्वेक्षण कार्यालय
(क्षेत्र संकार्य प्रभाग)

कृषि सांख्यिकी स्कन्ध, फरीदाबाद

**NATIONAL SAMPLE SURVEY OFFICE
(FIELD OPERATIONS DIVISION)
AGRICUTURAL STATISTICS WING, FARIDABAD**

FOREWORD

The Agricultural Statistics Wing in the Field Operations Division (FOD) of the National Sample Survey Office(NSSO) is entrusted with the responsibility of providing technical guidance and assistance to the states in developing suitable survey techniques for obtaining timely and reliable estimates of crop area and yield and imparting training to State Govt. field personnel. The Scheme for Improvement of Crop Statistics (ICS) was initiated in 1973-74 with the objective of locating deficiencies in the system of collection of area and yield statistics through the joint efforts of the NSSO (FOD) and State Agricultural Statistics Authority (SASA). It is now being implemented in the States of Andhra Pradesh, Assam, Bihar, Chhattisgarh, Gujarat, Haryana, Himachal Pradesh, Jammu & Kashmir, Jharkhand, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Odisha, Punjab, Rajasthan, Tamil Nadu, Uttar Pradesh, Uttaranchal, West Bengal and the Union Territory of Puducherry.

In order to ensure uniformity of concepts, definitions and procedures for smooth execution of the scheme, the Agricultural Statistics Wing had prepared a Manual on various aspects of the work with particular reference to the ICS scheme. The Manual had been brought out in three parts, dealing separately with **(i) Organisational and Operational Procedures, (ii) Technical Instructions for undertaking field work of sample checks under ICS and (iii) Instructions for processing of data and coordination of field work at FOD Headquarters.**

This part, viz. part III, contains detailed instructions for processing of data and coordination of field work to be done at the FOD Headquarters Office at Faridabad. For the purpose of processing, the Headquarters Office has a Electronic Data Processing Unit (EDP Unit). This part also provides details of planning of state-wise programme for the agricultural year, monitoring of progress of field programme, scrutiny & coding of data, procedures and time schedules for preparation of quick estimates of yield rate, functions of the EDP Unit, tabulation programme, preparation of Statewise and All India status reports, preparation of consolidated results of CES and materials for meetings for coordinating Agricultural Statistics work at higher level in different forums.

I place on record my deep appreciation for the painstaking efforts made by the team of officials of NSSO (FOD) of Agricultural Statistics Wing, Faridabad including former officers Sh. G. Mohan Rao, Ms. Nitika Gupta and Sh. Dinesh Chandra, in bringing out this revised edition of Agriculture Statistics Manual Part-III.

Any suggestion for improvement in the contents and get up of this part of the manual are welcome.

Deputy Director General

September, 2013

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CHAPTER –I

INTRODUCTION

1.1 The main objective of the Improvement of Crop Statistics (ICS) scheme is to locate, through the joint efforts of the Central and State authorities, deficiencies in the system of collection of crop statistics in each State/ Union Territory and to suggest remedial measures. The programme of work under the scheme of ICS consists of carrying out checks in each agricultural season of a State on (i) enumeration of area done by the village officials (named differently as patwaris, karnams etc.) in a set of about 10,000 sample villages, (ii) preparation of the crop abstract statements on the basis of the entries made by the patwaris in the village records (called differently as Khasra register, Adangal etc.) in the same set of 10,000 villages and (iii) crop cutting experiments conducted by the State primary workers for about 31,000 experiments in a year. In addition, from 1980-81, sample checks on aggregation of area figures above the village level (tehsil, district and state) in a few selected units have been included as a part of the programme of work. The scheme is intended to provide the basis of determining, in the context of each State, the precise lines along which improvement in the crop estimation system would require to be effected. The scheme is in operation in 20 States and 1 Union Territory. The sample check on aggregation of area figures above the village level is to be taken up generally in one district and one tehsil/taluka in the selected district in each FOD region separately by the Central and State agency.

1.2 FOD is responsible for all activities including survey design, field operations, data processing and preparation of reports relating to ICS Scheme. FOD undertakes the fieldwork relating to the scheme for Improvement of Crop Statistics through its network of field offices spread all over the country. At the headquarters of the NSSO (FOD), Faridabad, all work relating to Agricultural Statistics is handled by the Agricultural Statistics Wing, which is headed by Deputy Director General who works under the overall direction of the Addl. Director General, FOD. The items of work on Agricultural Statistics handled at FOD Hqrs. AS Wing, Faridabad are briefly given below:

- (i) Preparation of state wise work programme for each agricultural year sufficiently in advance of the start of the agriculture year. The work programme contains a broad account of the items of work to be carried out under the ICS Scheme.
- (ii) Printing of various schedules/formats used under ICS Scheme and supplying them to all concerned i.e. Zonal/Regional Offices of FOD and SASAs.
- (iii) Monitoring the progress of work under the ICS scheme in various field offices and preparing a consolidated review of progress at All-India level.
- (iv) Clarifying the doubts and difficulties raised by the field offices.
- (v) Processing and analysis of the ICS data which includes the following operations:-
 - (a) Maintenance of control register for filled-in-schedules in respect of all the Central and State samples.
 - (b) Scrutiny of schedules received from the field
 - (c) Pre-tabulation coding of the data contained in the schedules
 - (d) Preparation of advance estimates of yield rates based on the ICS data on supervised crop cutting experiments and forwarding them to DES, Union Ministry of Agriculture as per a specified time schedule
 - (e) Entry of the data available in the filled-in schedules.
 - (f) Validation of the data.

- (g) Generation of Tables and Annexes.
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CHAPTER-II

Planning of Statewise Programme for the Agricultural year

2.1 The all India work programme for ICS is finalised centrally at the FOD headquarters well in advance before the commencement of the agricultural year.

The programme of work under the ICS envisages:-

- (i) Physical verification of crop inspection done by patwari (in four clusters of five survey numbers each in a village)- Schedule AS 1.0.
- (ii) Checking of aggregation of area done by patwari in the khasra register – schedule AS-1.1
- (iii) Supervision of Crop Cutting Expts. at harvest stage- Schedule A.S. 2.0.

2.2 A Sample of 5,000 villages for sample check on area for (i) & (ii) above (sch. AS. 1.0 & AS. 1.1) and 15,000 crop cutting experiments at the all India level by the NSSO (FOD) and an equal non-overlapping matching sample by the SASA would be covered taking into consideration the resources available. The sample villages are distributed over the 20 States and 1 Union Territory on joint consideration of gross cropped area, total number of Revenue villages and value of produce of specified Kharif and Rabi crops. For distribution of crop cutting experiments, under different crops over States, area under the crop and its importance for the State is taken into consideration. Moreover, the norm of 11 to 12 villages for sample check on area enumeration during a season and 36-40 experiments for supervision in a year per Superintending Officer, as fixed by the Staff Inspection Unit, is also taken into account while working out the allocation.

2.3 For each state detailed district-wise work programme is finalised by the concerned state units located at FOD Faridabad taking into consideration the previous year's work programme and also the average cropped area over 3 years for each district. The design adopted for selection of villages for sample check on area is that of stratified random sampling, where a tehsil/anchal/sub-division/block or a group of them based on geographical contiguity and cropping pattern form a stratum. The total number of villages allotted to a State are first allotted over districts, and then to stratum in proportion to the gross cropped area subject to the minimum of 2 villages for a stratum . This stratumwise allocation of sample villages is common for both items (i) & (ii) above (Sch. AS.1.0 and Sch. AS.1.1) and for all the seasons of the agricultural year.

2.3.1 Operational procedures:

Prepare a list of tehsil/anchal/ the administrative unit which forms the stratum, district wise and in the descending order of area (average three year's gross cropped area). Work out Distt. and State totals of the area. As two Sample Villages (SVs) are to be allotted at the minimum in a stratum, so as to work out minimum area in a stratum, divide the state level total by half of the sample size of the State. Allocate the sample villages at Distt. level rounding off the samples to whole number. Now, within a district, there will be some units having area more than required for one stratum and accordingly may be allocated in proportion to the area whereas for others, combine the units to form a stratum keeping in view the condition of physical contiguity and allot minimum of 2 SVs according to the area worked out (for one stratum for allotment of minimum of 2 SVs). It will, however, be useful to have as many strata as possible.

2.4 For sample check on crop cutting experiments in a State, the villages are selected treating district as stratum with a minimum of 2 villages per stratum. In each selected village usually two crop-cutting experiments are planned for a crop. Thus a minimum of 4 crop cutting experiments per crop are allotted for a stratum. Keeping in view the above the total number of villages allotted for supervision of crop cutting experiments to each district in a State will be in proportion to the allocation of CES villages (expts.) in the district. However, due consideration may also be given to the area under the experimental crop.

2.5 After completion of the above operation in the State units, the plan of work for I.C.S. is forwarded to the DDG (R.O.) stationed at SASA headquarters for making sample selection. The selection of two non- overlapping sets of supervision villages will be made jointly by the SASA and the DDG for the two agencies viz. NSSO (Central) and SASA (State). Detailed instructions for the selection of villages for area enumeration/aggregation of area and crop cutting experiments are available in part II of AS Manual. The DDG (R.O.) stationed at SASA headquarters will forward a list of sample villages selected for supervision to the other DDGs (R.O.) in the State and also to FOD headquarter.

CHAPTER –III

Receipt of Schedules and maintaining account thereof, monitoring of field programme, coding of data

3.1 Improvement of Crop Statistics (ICS) being a time bound programme, Time schedule is prescribed for all items of work from field work to finalisation of the report on the status of Agricultural Statistics in the States for the agricultural year. Time schedule for each season for various operations of the sample check on enumeration of area, page totaling of village khasra registers and crop cutting experiments in the field and despatch of the filled-in schedules to FOD Hqr. is sent to all DDGs Region, S.R.Os and SASAs well before the commencement of the field work (**Annex.I**).

3.2 With regard to sample check on area (Sch. AS 1.0) the Time schedule is to be followed rigidly and it is to be ensured that regular flow of schedules as and when field work is complete, is maintained. However, The time schedule for crop cutting experiments (Sch.AS 2.0) is tentative one subject to variations in the harvesting periods due to reasons such as changes in the weather conditions. Generally, in all cases a schedule is to be despatched after due scrutiny and field level coding by the Superintending Officer and their State Govt. counterpart in respect of State Sample within four days of the completion of the field work. Detailed instructions for field level coding and scrutiny at Superintending Officer level has been given in chapter VII of AS Manual Part II. The work for Sch. AS 1.1 is to be done alongwith the work of Sch. AS 1.0 wherever feasible.

3.3 In order to keep a watch on the progress of field work and also the receipt of schedules at the FOD Hqrs., Control Registers are maintained by each state unit at the FOD Hqr. As required in para 2.7, and 2.11 of Part II of manual, statements 2 and 4 giving the list of villages selected for sample check, n area enumeration and crop cutting experiments are received in the state units at FOD Hqr. bef

Central / State

[illegible]

K = Kharif, R= Rabi, S= Summer

Central / State**Name of Crop:**

Season:

[illegible]

**TIME SCHEDULE FOR SAMPLE CHECK ON AREA ENUMERATION UNDER ICS DURING 2013-14
SEASON: KHARIF**

Sl. No.	STATE	Prescribed TRS Girdawari period	Commence-ment of Sample Check	Expected date of completion	Date of receipt of last schedule at Faridabad Hqr.	
					Central Sample	State Sample
1	2	3	4	5	6	7
1	Andhra Pradesh	up to 25.9	(i) 1.8 (ii) 26.9	31.8 25.10	- 2.11	- 9.11
2	Assam (E.Kharif) (L.Kharif)	up to 5.5 up to 10.9	6.5 11.9	30.6 10.10	8.7 18.10	15.7 25.10
3	Bihar (Bhadai) (Aghani)	10.7 to 20.7 20.9 to 30.9	21.7 1.10	20.8 30.10	28.8 7.11	4.9 14.11
4	Chhattisgarh	up to 30.9	1.10	6.11	14.11	21.11
5	Gujarat	15.9 to 24.9	25.9	30.10	7.11	14.11
6	Haryana	20.9 to 30.9	1.10	30.10	8.11	15.11
7	Himachal Pradesh	1.8 to 10.8	11.8	10.9	18.9	25.9
8	J & K (i) Jammu (ii) Kashmir	15.9 to 31.10 1.9 to 31.10	1.11 1.11	30.11 30.11	8.12 8.12	15.12 15.12
9	Jharkhand (Bhadai) (Aghani)	10.7 to 20.7 20.9 to 30.9	21.7 1.10	20.8 30.10	28.8 7.11	4.9 14.11
10	Karnataka	1.9 to 9.9	10.9	9.10	17.10	24.10
11	Kerala (Aut.) (Wint.)	up to 31.8 up to 30.11	1.9 1.12	15.10 15.1	23.10 23.1	30.10 30.1
12	Madhya Pradesh	up to 30.9	1.10	6.11	14.11	21.11
13	Maharashtra	up to 31.8	01.09	10.10	18.10	25.10
14	Odisha (Aut.) (Wint.)	# up to 31.8 # up to 15.1	1.9 (i) 1.11 (ii) 16.1	15.10 25.11 9.2	23.10 - 17.2	30.10 - 24.2
15	Punjab	1.10 to 10.10	11.10	10.11	18.11	25.11
16	Rajasthan	1.9 to 8.9	9.9	8.10	16.10	23.10
17	Tamil Nadu phase-I Phase-II	by 25.10 by 25.1	26.10 26.1	9.12 25.2	17.12 5.3	24.12 12.3
18	Uttar Pradesh	10.8 to 19.8	20.8	19.9	27.9	4.10
19	Uttarakhand (P) Uttarakhand (H)	10.8 to 19.8 10.8 to 31.8	20.8 1.9	19.9 30.9	27.9 8.10	4.10 15.10
20	West Bengal I - Bhadaï :					
	a) Coochbihar, Jalpaiguri, Darjeeling & Islampur Sub- Divisions of Uttar Dinajpur	5.5 to 27.5	28.5	27.6	5.7	22.7
	b) West Dinajpur (Uttar & Dakshin) (Except Islampur Sub-division) & Malda	25.5 to 16.6	17.6	16.7	24.7	10.8
	c) i) Nadia, Hooghly & Murshidabad	20.6 to 11.7	12.7	11.8	19.8	6.9
	ii) Birbhum	20.7 to 6.8	7.8	6.9	14.9	1.10
	d) Others	10.7 to 27.7	28.7	27.8	4.9	21.9
	II – Winter					
	a) 6 Dists. of North Bengal, (Coochbihar, Jalpaiguri Darjeeling, North & South Dinajpur and Malda)	1.9 to 23.9	24.9	23.10	31.10	17.11
	b) Others	10.9 to 27.9	28.9	27.10	4.11	21.11
21	Puducherry	2.9 to 23.9	24.9	23.10	31.10	7.11

SEASON: RABI

1	2	3	4	5	6	7
1	Andhra Pradesh	up to 25.3	(i) 27.1 (ii) 26.3	26.2 25.4	- 3.5	- 10.5
2	Assam	up to 5.1	6.1	5.2	13.2	20.2
3	Bihar	10.1 to 20.1	21.1	20.2	28.2	7.3
4	Chhatisgarh	up to 15.1	16.1	15.2	23.2	2.3
5	Gujarat	1.1 to 10.1	11.1	10.2	18.2	25.2
6	Haryana	20.2 to 28.2	1.3	30.3	8.4	15.4
7	Himachal Pradesh	16.2 to 26.2	27.2	26.3	3.4	10.4
8	J & K (i) Jammu (ii) Kashmir	1.4 to 31.5 15.4 to 31.5	1.6 1.6	30.6 30.6	8.7 8.7	15.7 15.7
9	Jharkhand	10.1 to 20.1	21.1	20.2	28.2	7.3
10	Karnataka	1.1 to 9.1	10.1	9.2	17.2	24.2
11	Madhya Pradesh	up to 15.1	16.1	15.2	23.2	2.3
12	Maharashtra	up to 31.12	01.1	01.2	09.2	16.2
13	Punjab	1.3 to 10.3	11.3	10.4	18.4	25.4
14	Rajasthan	16.1 to 23.1	24.1	23.2	3.3	10.3
15	Tamil Nadu Phase-III	by 25.3	26.3	25.4	3.5	10.5
16	Uttar Pradesh	1.1 to 10.1	11.1	10.2	18.2	25.2
17	Uttarakhand (P) Uttarakhand (H)	1.1 to 10.1 15.1 to 8.2	11.1 9.2	10.2 10.3	18.2 18.3	25.2 25.3
18	West Bengal (i) Birbhum & Burdwan (ii) Others	15.12 to 6.1 5.12 to 27.12	7.1 28.12	6.2 27.1	14.2 4.2	3.3 21.2
19	Puducherry (Rabi-1)	2.1 to 24.1	25.1	24.2	4.3	11.3

SEASON: SUMMER

1	2	3	4	5	6	7
1	Assam	up to 20.2	21.2	20.3	28.3	4.4
2	Bihar	25.4 to 5.5	6.5	5.6	13.6	20.6
3	Chhatisgarh	up to 30.4 *	NOT PLANNED			
4	Gujarat	1.4 to 10.4	11.4	10.5	18.5	25.5
5	Haryana	5.04 to 15.04	16.04	15.05	23.5	@
6	Jharkhand	25.4 to 5.5	6.5	5.6	13.6	20.6
7	Karnataka	1.4 to 9.4	10.4	9.5	17.5	24.5
8	Kerala (i) Wet (ii) Dry	up to 31.3 up to 30.6	1.4 1.5	30.4 30.06	8.5 8.7	15.5 15.7
9	Madhya Pradesh	up to 30.4 *	NOT PLANNED			
10	Maharashtra	up to 15.4	16.4	16.5	24.5	31.5
11	Odisha	# up to 31.3	1.4	15.5	23.5	30.5
12	Punjab	1.5 to 15.5	16.5	15.6	23.6	30.6
13	Rajasthan	1.5 to 10.5	13.5	10.6	18.6	25.6
14	Uttar Pradesh	1.5 to 10.5	11.5	5.6	13.6	20.6
15	Uttarakhand (P)	1.5 to 10.5	11.5	5.6	13.6	20.6
16	West Bengal i) Burdwan ii) Others	15.3 to 6.4 5.3 to 27.3	7.4 28.3	6.5 27.4	14.5 5.5	21.5 12.5
17	Puducherry (Rabi -II)	2.4 to 23.4	24.4	23.5	31.5	7.6

Note:

(i) = 1st visit, (ii) = 2nd visit

* = Completion date of normal girdawari.

(P) = Plain, (H) = Hills.

@ = No planning for Summer Season

= Due date for completion of Land Utilisation Survey (LUS) work in all CES villages (since the CES villages in Odisha are used as frame for selection of villages for Area Enumeration check under ICS).

TIME SCHEDULE FOR SUPERVISION OF CROP CUTTING EXPERIMENTS UNDER ICS DURING 2013-14.

SEASON: KHARIF

Crop	State	Sample check on crop cutting experiments		Date of receipt of last Schedule at FOD Hqrs. Faridabad		Remarks
		Period of Sample check	Expected date of Completion	Central Sample	State Sample	
1	2	3	4	5	6	7
PADDY	Andhra Pradesh	10.09 to 10.03	10.03	18.03	25.03	
	Assam (Aut.)	01.07 to 20.09	20.09	28.09	05.10	
	(wint)	15.10 to 31.01	31.01	08.02	15.02	
	Bihar (Bhadai)	01.08 to 15.12	15.12	23.12	30.12	
	(Aghani)	15.10 to 15.01	15.01	23.01	30.01	
	Chhatisgarh	20.09 to 25.12	25.12	02.01	09.01	
	Gujarat	01.10 to 30.11	30.11	08.12	15.12	
	Haryana	10.10 to 10.12	10.12	18.12	25.12	
	Himachal Pradesh	15.10 to 30.11	30.11	08.12	15.12	
	Jammu & Kashmir	01.09 to 30.11	30.11	08.12	15.12	
	Jharkhand (Bhadai)	01.08 to 10.11	10.11	18.11	25.11	
	(Aghani)	15.10 to 25.12	25.12	02.01	09.01	
	Karnataka	01.10 to 15.01	15.01	23.01	30.01	
	Kerala (Aut)	01.07 to 05.11	05.11	13.11	20.11	
	(Wint)	01.11 to 15.03	15.03	23.03	30.03	
	Madhya Pradesh	20.09 to 25.12	25.12	02.01	09.01	
	Maharashtra	15.09 to 30.11	30.11	08.12	15.12	
	Odisha (Aut)	10.10 to 10.12	10.12	18.12	25.12	
	(Wint)	10.12 to 15.01	15.01	23.01	30.01	
	Punjab	10.10 to 15.11	15.11	23.11	30.11	
	Tamli Nadu (Kar, Kuruvai, Sornavari) Phase - I	01.07 to 25.10	25.10	02.11	09.11	
	Tami Nadu (Samba, Thaladi, Pishanam) Phase -II	01.12 to 15.04	15.04	23.04	30.04	
	Uttar Pradesh	01.09 to 05.12	05.12	13.12	20.12	
	Uttarakhand	01.09 to 31.10	31.10	08.11	15.11	
	West Bangal (Aus)	01.06 to 20.11	20.11	28.11	5.12	
	(Aman)	01.11 to 10.1	10.1	18.1	25.1	
	Puducherry (I)	01.08 to 31.10	31.10	08.11	15.11	
JOWAR	Andhra Pradesh	22.08 to 25.01	25.01	02.02	09.02	
	Karnataka	10.08 to 31.12	31.12	08.01	15.01	
	Madhya Pradesh	01.09 to 10.01	10.01	18.01	25.01	
	Maharashtra	15.09 to 15.01	15.01	23.01	30.01	
	Rajasthan	15.09 to 30.11	30.11	08.12	15.12	
	Tamil Nadu (phase-II)	15.08 to 30.06	30.06	08.07	15.07	
	Uttar Pradesh	15.10 to 10.12	10.12	18.12	25.12	

1	2	3	4	5	6	7
BAJRA	Andhara Pradesh	10.08 to 10.12	10.12	18.12	25.12	
	Gujarat	05.09 to 05.12	05.12	13.12	20.12	
	Haryana	05.09 to 15.10	15.10	23.10	30.10	
	Karnataka	25.08 to 15.12	15.12	23.12	30.12	
	Maharashtra	01.09 to 30.11	30.11	08.12	15.12	
	Rajasthan	01.09 to 31.10	31.10	08.11	15.11	
	Tamil Nadu	20.07 to 30.06	30.06	08.07	15.07	
	Uttar Pradesh	10.09 to 30.11	30.11	08.12	15.12	
MAIZE	Andhra Pradesh	01.09 to 23.12	23.12	31.12	07.01	
	Bihar	01.08 to 30.09	30.09	08.10	15.10	
	Chhattisgarh	01.09 to 10.11	10.11	18.11	25.11	
	Gujarat	10.09 to 31.10	31.10	08.11	15.11	
	Haryana	15.09 to 30.09	30.09	08.10	15.10	
	Himachal Pradesh	15.09 to 30.11	30.11	08.12	15.12	
	Jammu & Kashmir	01.09 to 25.11	25.11	03.12	10.12	
	Jharkhand	01.08 to 10.11	10.11	18.11	25.11	
	Karnataka	01.09 to 31.12	31.12	08.01	15.01	
	Madhya Pradesh	01.09 to 10.11	10.11	18.11	25.11	
	Odisha	01.09 to 31.10	31.10	08.11	15.11	
	Punjab	01.09 to 10.10	10.10	18.10	25.10	
	Rajasthan	01.09 to 31.10	31.10	08.11	15.11	
	Tamil Nadu	30.09 to 31.10	31.10	08.11	15.11	
	Uttar Pradesh	01.08 to 20.10	20.10	28.10	04.11	
RAGI	Karnataka	15.08 to 31.12	31.12	08.01	15.01	
	Tamil Nadu	15.08 to 31.05	31.05	08.06	15.06	
	Uttarakhand	01.09 to 25.10	25.10	02.11	09.11	
TUR/ REDGRAM	Andhra Pradesh	01.02 to 10.03	10.03	18.03	25.03	
	Chhattisgarh	20.11 to 20.04	20.04	28.04	05.05	
	Gujarat	01.02 to 15.03	15.03	23.03	30.03	
	Karnataka	01.10 to 15.03	15.03	23.03	30.03	
	Madhya Pradesh	20.11 to 20.04	20.04	28.04	05.05	
	Maharashtra	05.11 to 31.03	31.03	08.04	15.04	
	Uttar Pradesh	10.09 to 20.04	20.04	28.04	05.05	
GREENGRAM /MOONG	Andhra Pradesh	01.08 to 30.09	30.09	08.10	15.10	
	Karnataka	01.09 to 31.10	31.10	08.11	15.11	
	Maharashtra	01.08 to 30.09	30.09	08.10	15.10	
	Rajasthan	01.09 to 31.10	31.10	08.11	15.11	
BLACKGRAM / URD	Maharashtra	01.10 to 31.10	31.10	08.11	15.11	
	Odisha (Winter)	15.11 to 28.02	28.02	08.03	15.03	
	Rajasthan	01.09 to 31.10	31.10	08.11	15.11	
	Uttar Pradesh	01.10 to 30.11	30.11	08.12	15.12	
HORSEGRAM / KULTHI	Odisha (Winter)	15.11 to 28.02	28.02	08.03	15.03	
MOTH	Rajasthan	01.09 to 31.10	31.10	08.11	15.11	
COTTON	Andhra Pradesh	10.10 to 15.03	15.03	23.03	30.03	
	Gujarat	10.09 to 10.05	10.05	18.05	25.05	
	Haryana	01.09 to 20.12	20.12	28.12	04.01	
	Karnataka	01.10 to 15.04	15.04	23.04	30.04	
	Madhya Pradesh	15.10 to 10.04	10.04	18.04	25.04	
	Maharashtra	15.08 to 31.03	31.03	08.04	15.04	

1	2	3	4	5	6	7
COTTON (Contd.)	Punjab	15.09 to 25.11	25.11	03.12	10.12	
	Rajasthan	15.10 to 31.03	31.03	08.04	15.04	
	Tamil Nadu	15.11 to 20.07	20.07	28.07	04.08	
JUTE	Assam	15.07 to 20.09	20.09	28.09	05.10	
	West Bengal	01.06 to 30.09	30.09	08.10	15.10	
SUGARCANE	Andhra Pradesh	10.12 to 31.05	31.05	08.06	15.06	
	Assam	01.12 to 31.03	31.03	08.04	15.04	
	Bihar	15.12 to 20.03	20.03	28.03	04.04	
	Haryana	15.12 to 20.04	20.04	28.04	05.05	
	Karnataka	18.09 to 15.05	15.05			

SEASON: RABI & SUMMER						
1	2	3	4	5	6	7
JOWAR	Andhra Pradesh	25.12 to 05.06	05.06	13.06	20.06	
	Karnataka	15.01 to 31.03	31.03	08.04	15.04	
	Maharashtra	01.01 to 31.03	31.03	08.04	15.04	
WHEAT	Assam	01.03 to 10.05	10.05	18.05	25.05	
	Bihar	01.02 to 05.05	05.05	13.05	20.05	
	Chhattiagarh	15.02 to 10.05	10.05	18.05	25.05	
	Gujarat	20.01 to 10.04	10.04	18.04	25.04	
	Haryana	01.04 to 05.05	05.05	13.05	20.05	
	Himachal Pradesh	01.04 to 10.07	10.07	18.07	25.07	
	Jammu & Kashmir					
	(I)Jammu	01.04 to 31.07	31.07	08.08	15.08	
	(II) Kashmir	01.06 to 31.07	31.07	08.08	15.08	
	Jharkhand	01.02 to 20.07	20.07	28.07	04.08	
	Karnataka	15.01 to 31.03	31.03	08.04	15.04	
	Madhya Pradesh	15.02 to 10.05	10.05	18.05	25.05	
	Maharashtra	01.01 to 10.04	10.04	18.04	25.04	
	Punjab	01.04 to 15.05	15.05	23.05	30.05	
	Rajasthan	15.03 to 30.04	30.04	08.05	15.05	
	Uttar Pradesh	01.03 to 15.05	15.05	23.05	30.05	
	Uttarakhand (P)	01.03 to 15.05	15.05	23.05	30.05	
	Uttarakhand (H)	15.04 to 15.06	15.06	23.06	30.06	
	West Bengal	01.02 to 05.05	05.05	13.05	20.05	
BARLEY	Haryana	01.04 to 05.05	05.05	13.05	20.05	
	Himachal Pradesh	01.04 to 10.08	10.08	18.08	25.08	
	Punjab	01.04 to 25.04	25.04	03.05	10.05	
	Rajasthan	01.03 to 30.04	30.04	08.05	15.05	
GRAM	Andhra Pradesh	01.01 to 31.03	31.03	08.04	15.04	
	Bihar	01.02 to 20.04	20.04	28.04	05.05	
	Chhatisgarh	01.02 to 25.04	25.04	03.05	10.05	
	Gujarat	05.02 to 05.04	05.04	13.04	20.04	
	Haryana	01.03 to 30.04	30.04	08.05	15.05	
	Jharkhand	01.02 to 25.05	25.05	02.06	09.06	
	Karnataka	01.01 to 15.04	15.04	23.04	30.04	
	Madhya Pradesh		25.04	03.05	10.05	
	Maharashtra	01.01 to 05.04	05.04	13.04	20.04	
	Punjab	15.03 to 05.05	05.05	13.05	20.05	
	Rajasthan	01.03 to 30.04	30.04	08.05	15.05	
	Uttar Pradesh	01.03 to 15.04	15.04	23.04	30.04	
RAPE & MUSTARD	Assam	05.01 to 05.04	05.04	13.04	20.04	
	Bihar	01.01 to 20.03	20.03	28.03	04.04	
	Chhatisgarh	01.12 to 10.04	10.04	18.04	25.04	
	Gujarat	15.12 to 31.03	31.03	08.04	15.04	
	Haryana	01.02 to 25.04	25.04	03.05	10.05	
	Jharkhand	01.01 to 10.04	10.04	18.04	25.04	
	Madhya Pradesh	01.12 to 10.04	10.04	18.04	25.04	
	Punjab	01.12 to 15.04	15.04	23.04	30.04	
	Rajasthan	01.02 to 31.03	31.03	08.04	15.04	
	Uttar Pradesh	01.03 to 15.03	15.03	23.03	30.03	
	West Bengal	01.12 to 20.03	20.03	28.03	04.04	

1	2	3	4	5	6	7
TUR / REDGRAM	Bihar	01.03 to 30.04	30.04	08.05	15.05	
	Jharkhand	01.03 to 20.07	20.07	28.07	04.08	
PADDY (S)	Andhra Pradesh	10.01 to 25.06	25.06	03.07	10.07	
	Assam	15.04 to 30.06	30.06	08.07	15.07	
	Bihar	01.08 to 15.09	15.09	23.09	30.09	
	Karnataka	01.04 to 31.07	31.07	08.08	15.08	
	Kerala	01.03 to 25.06	25.06	03.07	10.07	
	Odisha	30.04 to 30.06	30.06	08.07	15.07	
	Tamil Nadu (Navarai - Summer)	01.04 to 30.06	30.06	08.07	15.07	
	West Bengal	01.04 to 05.07	05.07	13.07	20.07	
	Puducherry (R -1)	25.12 to 10.02	10.02	18.02	25.02	
	Puducherry (R-11)	01.05 to 01.06	01.06	09.06	16.06	
GROUNDNUT (R)	Andhra Pradesh	21.01 to 25.05	25.05	02.06	09.06	
GROUNDNUT (S)	Karnataka	01.04 to 31.07	31.07	08.08	15.08	
SUNFLOWER (R)	Karnataka	01.12 to 31.03	31.03	08.04	15.04	
SAFFLOWER (R)	Maharashtra	01.02 to 31.03	31.03	08.04	15.04	
BLACKGRAM (URD)	Andhra Pradesh	15.01 to 25.05	25.05	02.06	09.06	
	Assam	15.11 to 15.01	15.01	23.01	30.01	
	Uttar Pradesh (S)	01.06 to 30.06	30.06	08.07	15.07	
GREENGRAM (MOONG)	Odisha (S)	01.04 to 31.05	31.05	08.06	15.06	
	Uttar Pradesh (S)	01.06 to 10.07	10.07	18.07	25.07	
MASUR	Uttar Pradesh	01.03 to 31.03	31.03	08.04	15.04	
SESAMUM (TIL)	West Bengal (S)	01.04 to 31.05	31.05	08.06	15.06	
LINSEED (ALSI)	Chhattisgarh	01.02 to 30.04	30.04	08.05	15.05	
	Madhya Pradesh	01.02 to 30.04	30.04	08.05	15.05	
POTATO	Assam	01.01 to 31.03	31.03	08.04	15.04	
	Uttar Pradesh	01.01 to 31.03	31.03	08.04	15.04	
TOPIOCA	Kerala (Whole Year)	01.07 to 30.06	30.06	08.07	15.07	
ARECANUT	Kerala	01.07 to 30.06	30.06	08.07	15.07	
PEPPER	Kerala	01.11 to 10.03	10.03	18.03	25.03	
BANANA	Kerala	01.07 to 30.06	30.06	08.07	15.07	
PLAINTAIN	Kerala	01.07 to 30.06	30.06	08.07	15.07	
COCONUT	Kerala	01.07 to 30.06	30.06	08.07	15.07	

(R)= Rabi,(S)= Summer, (P) = Plain,(H) = Hills.

**TIME SCHEDULE FOR SAMPLE CHECK ON AGGREGATION OF AREA FOR
STATE SAMPLE UNDER ICS DURING 2013 – 14**

Sl. no.	State	Season	Expected date of completion	Date of receipt of last schedule at FOD Hqrs. Faridabad for State Sample	Remarks
1	2	3	4	5	7
1.	Andhra Pradesh	Kharif	31.1	15.2	
		Rabi	15.6	30.6	
2.	Assam	E.Kharif	31.8	15.9	
		L.Kharif	31.12	15.1	
		Rabi	4.5	19.5	
		Summer	15.6	30.6	
3.	Bihar	Bhadai	30.9	15.10	
		Aghani	10.1	25.1	
		Rabi	1.5	16.5	
		Summer	15.6	30.6	
4.	Chhatisgarh	Kharif	31.12	15.1	
		Rabi	10.5	25.5	
		Summer	31.5	@	
5	Gujarat	Kharif	31.12	15.1	
		Rabi	10.4	25.4	
		Summer	15.6	30.6	
6.	Haryana	Kharif	21.1	5.2	
		Rabi	30.4	15.5	
		Summer	15.6	@	
7.	Himachal Pradesh	Kharif	10.1	25.1	
		Rabi	15.6	30.6	
8.	Jammu & Kashmir	Kharif	31.1	15.2	
		Rabi	30.6	15.7	
9.	Jharkhand	Bhadai	30.9	15.10	
		Aghani	10.1	25.1	
		Rabi	1.5	16.5	
		Summer	15.6	30.6	
10.	Karnataka	Kharif	21.12	5.1	
		Rabi	31.3	15.4	
		Summer	15.6	30.6	
11.	Kerala	Autumn	31.12	15.1	
		Winter	15.3	30.3	
		Summer	30.5	15.6	
12.	Madhya Pradesh	Kharif	31.12	15.1	
		Rabi	10.5	25.5	
		Summer	31.5	@	

1	2	3	4	5	7
13.	Maharashtra	Kharif	31.12	15.1	
		Rabi	31.3	15.4	
		Summer	15.6	30.6	
14.	Odisha	Autumn	26.12	10.1	
		Winter	21.4	6.5	
		Summer	20.8	4.9	
15.	Punjab	Kharif	20.1	3.2	
		Rabi	20.6	5.7	
		Summer	20.6	5.7	
16.	Rajasthan	Kharif	6.1	21.1	
		Rabi	11.6	26.6	
		Summer	15.6	30.6	
17.	Tamil Nadu	For entire Year	30.6	15.7	
18.	Uttar Pradesh	Kharif	15.12	30.12	
		Rabi	30.4	15.5	
		Summer	15.6	30.6	
19.	Uttarakhand (P) (H)	Kharif	15.12	30.12	
		Rabi	30.4	15.5	
		Summer	15.6	30.6	
		Kharif	15.12	30.12	
		Rabi	15.6	30.6	
20.	West Bangal	Not Applicable			
21.	Puducherry	Kharif	22.11	7.12	
		Rabi-1	12.3	27.3	
		Rabi-11	15.6	30.6	

Note: The work of schedule AS 1.1 is to be completed alongwith the work of sch.AS 1.0 wherever feasible However, the pending work for a season can also be taken-up in subsequent season. The date of completion of work only has therefore, been indicative in the time schedule. For Summer / year ending season, the date of completion is to be adhered to.

@ = No Planning during Summer season.

(P) = Plain, (H) = Hills.

CHAPTER IV

Scrutiny, coding of data and despatch of schedules to the EDP Unit

4.1 As per the existing procedure, all AS schedules are to be scrutinised at field level by the Officers concerned of ROs, SROs/NSROs in case of Central sample and by the State officials in case of State Sample as per the Scrutiny Programme given in Chapter VII of ASM Part-II. Again, a second level scrutiny is done at FOD Hqrs., Faridabad as per the prescribed scrutiny instructions to ensure completeness, correctness and quality of data. It covers all the points which have been prescribed for scrutiny at the field level and also includes checking of coding done at field level to meet the requirements of internal consistency of data in different blocks of the schedules, totaling mistakes etc.

Three copies of scrutiny notes in the prescribed form given at **Annex-II** are prepared by the FOD Hqrs. Two copies are sent to the concerned agency to seek clarifications. On receipt of the clarifications from the field, corrections are incorporated in the schedules.

Coding of data at FOD Hqrs., Faridabad

4.2 Prior to the dispatch of schedules for further processing, local units are converted into standard units of area by the Investigators as per the conversion factors given in AS sch. Further coding of certain data is carried out also by Assistant Superintending Officer as per coding programme given **Annex-III** for the purpose of facilitating smooth data processing and to be checked by Superintending Officer. Scrutinised and coded schs. are then put in to bundles by Sample Type, State-wise, District-wise, Season and Experiment-wise. The bundles are sent to EDP unit alongwith the Challan in the prescribed form for further stages of processing such as data entry, validation checks, generation of Tables / Annexures. Code List for specified Crops, Example for Summary Sheet and States wise information regarding conversion of Local Units into Hectares have been given at **Appendix I, II, III & IV** respectively.

NSSO (FOD)
Government of India
Faridabad

Original/ Duplicate/ Triplicate

SCRUTINY NOTE ON SCHEDULES AS: -----Season-----Year-----

1: Identification Particulars

1 State:	4 Village (with order of selection in the District / State):
2 District:	5 Name of Officer: (With designation) who filled in the form
3 Tehsil:	6 Crop for C.C. Expts.:

2: Scrutiny Particulars

Block	Sub-block	Col. No.	Line/ Item	Nature of discrepancy	Clarification
1	2	3	4	5	6

No. AS Scrutiny/20 -----20

Date:

No. :

Dated:

NSSO (FOD) RO / SRO -----

The clarification should be immediately furnished through Regional Head NSSO (FOD)

Superintending Officer
For DDG NSSO (FOD)

Submitted after Compliance to
Deputy Director General
NSSO (FOD)
N. H. IV, Faridabad

Head R.O./SRO
NSSO (FOD)

Scheme for Improvement of Crop statistics (ICS)
Instructions for Pre-tabulation coding at FOD Hqrs. Faridabad for 2012-13

Instructions for coding at FOD Hqrs. Faridabad are given below. Codes will be given in blue/black pencil in the code cell provided in the schedule.

Sample check on area enumeration- schedule AS-1.0

I. Checking the coding done by the field staff.

Tabulation coding for thick line boxes will invariably be done/

Sl. No	Block/ SubBlock/ Page No. etc.	Col.No./ Item/Code cell etc.	Instruction	Code
1	2	3	4	5
5	1	Item 7.1	Cadastrally surveyed fully	1
			Partially	2
			Not surveyed	3
			Could not be ascertained	4
			Item left blank	9
6	1	Item 7.2	Deduct the entry in this col. from the year in which village was surveyed and code the answer as follows:- Zone/village not cadastrally surveyed as per Item 7.1 and therefore item 7.2 is not applicable	0
			Time Lag up to 1 year	1
			Time lag 2-5 years	2
			Time Lag 6-10 years	3
			Time lag 11-20 years	4
			Time Lag more than 20 years	5
			Could not be ascertained or item left blank	8
			Map updated but year is not known / Time lag is not available	9
			(i) When the Year is expressed in terms of two calendar years such as agricultural year 1977-78 etc.. The time lag will be calculated according to latest year. For example during the year of survey 1978-79, if the entry in item 7.2 is 1961, the time lag will be 79-61=18 years. If the entry in item 7.2 is 1956-57, the time lag will be 79-57=22 years	
			(ii) Code	
			case map never updated since prepared for the first time. Therefore, the year/code against item 7.2 for such situation will relate to the year of preparation of map for the first time.	
Note: for Sl. No. 5 and 6 codes are to be given only in the first season of year.				
7	1	Item 10	Examine the information available in 10 (a) to 10 (d) and give codes as below:	
			i) If Girdawari is completed in time i.e. before due date i.e. if date in 10 (c) is same or prior to date in 10 (a).	1
			ii) If Girdawari is completed after due date i.e. if date in 10 (c) is after the date in 10 (a).	2
			iii) If Girdawari is completed but actual date of completion is not	3
			iv) If Girdawari is not completed i.e. if there is no entry in 10(c) but there Partially	
			due to:	
			• Occupied with other work (code 1) in Item 10 (d)	4
			• TRS programme was not intimated in time (code 2 in Item 10 (d)	5
			• Other reason (code 9 in Item 10 (d)	6
			• Reasons not available	7
			(v) System of Girdawari does not exist	8
			(vi) If there is no information about completion of Girdawari i.e. entries in 10 (b) and 10(c) are blank.	9
Note: Code 4,5,6,7 mentioned above correspond to code 1,2,3,4 respectively mentioned in Table A-5 under columns 7,8,9,10 and 14,15,16,17				

Sl. No	Block/ Sub Block/ Page No.etc.	Col.No./ Item/Code cell etc.	Instruction	Code
1	2	3	4	5
8	1	Item 11 (c)	Consult items 11 (a) to 11 (c) and give code as follows after comparing the information with due date for submission in item 11 (a) and Girdawari completion in item 10(b) and 10 (c) and other remarks: -	
			(i) If TRS statement is submitted on or before due date and before completion of Girdawari i.e. date in 11(c) is prior to or equal to date in 11(a) and 11(c) is prior to 10 (c) or 10(c) is blank and 10(b) is partially or not yet started (code 2 or 3).	0
			(ii) If TRS Statement is submitted before or on due date and after completion of Girdawari i.e. date in 11(c) is prior or equal to date in 11(a) but on or after the date in 10(c).	1
			(iii) If TRS Statement is submitted in Time but could not be compared with Girdawari completion i.e. 11(c) is prior or equal to date in 11(a), 10(b) as fully completed (code 1) and 10 (c) is blank	2
			(iv) If TRS Statement is submitted after due date but before Girdawari i.e. date in 11(c) is after date in 11 (a) but before date in 10 (c) or 10(c) is blank and 10 (b) is partially or not yet started (code 2 or 3)	3
			(v) If TRS statement is submitted after due date and also after Girdawari i.e. if date in 11(c) is after date in 11(a) and also on or after date in 10(c).	4
			(vi) If TRS statement is submitted late but could not be compared with Girdawari completion i.e. 11(c) is after 11(a), 10(b) is fully completed and 10(c) is blank.	5
			(vii) If TRS Statement is submitted but date of Submission not reported i.e. if entry in item 11(b) is 1 and there is no entry in item 11(c)	6
			(viii) If TRS Statement is not submitted but Girdawari has been completed i.e. if entry in 11(b) is (0) and entry against 10(b) is fully	7
			(ix) If TRS statement is not submitted and Girdawari has not been completed partially or not yet started.	8
			(x) If information about TRS completion not available i.e. items 11(b) to 11(c) are blank. Or (xi) If sample village is non TRS village, No TRS statement is stipulated for the season.	9
			(xii) Although Girdawari has been completed TRS statement was not submitted since TRS submission date was not due at the time of checking of area enumeration work by supervisor.	10
9	3	Col.1	No code cell is provided. Give fresh running serial numbers to each selected serial/survey number.	

Sl. No	Block/ Sub Block/ Page No.etc.	Col.No./ Item/Code cell etc.	Instruction	Code																													
1	2	3	4	5																													
10	3	Col.12 to 15	<p>Codes have to be given in cols. 12 to 15 with lead pencil. For col.12, two digit crop codes are assigned for each State/season (Annex-1 enclosed). Here it may be clarified that each other crop will be treated independent other crop and code 99 will be assigned to it followed by respective other codes in cols.13,14 &15, as has been shown in annex-II. For recognized mixture entries under col.12 to 15 will be made separately according to the crop of the mixture constituent.</p> <p>Col.13 variety code: In a survey number for a particular crop, the variety/varieties noted by supervisor and patwari (Col.5 and 9) will be compared and codes will be given as below:- (Hy = High Yield Variety, L = Local)</p> <table border="1"> <tr> <th rowspan="2">Noted by Supervisor</th><th colspan="4">Noted by Patwari</th></tr> <tr> <th>HY only</th><th>Local only</th><th>HY & local</th><th>Crop not reported</th></tr> <tr> <td>HY only</td><td>11</td><td>12</td><td>13</td><td>14</td></tr> <tr> <td>Local only</td><td>21</td><td>22</td><td>23</td><td>24</td></tr> <tr> <td>HY & Local</td><td>31</td><td>32</td><td>33</td><td>34</td></tr> <tr> <td>Crop not reported</td><td>41</td><td>42</td><td>43</td><td>X</td></tr> </table>	Noted by Supervisor	Noted by Patwari				HY only	Local only	HY & local	Crop not reported	HY only	11	12	13	14	Local only	21	22	23	24	HY & Local	31	32	33	34	Crop not reported	41	42	43	X	
Noted by Supervisor	Noted by Patwari																																
	HY only	Local only	HY & local	Crop not reported																													
HY only	11	12	13	14																													
Local only	21	22	23	24																													
HY & Local	31	32	33	34																													
Crop not reported	41	42	43	X																													
10	3	Col.12 to 15	<p>Col.14 Irrigation code: In a survey number for a particular crop the entries under irrigation particulars in col.6 and 10 will be compared and a code as below will be given. (I= Irrigated, UI = Un-irrigated)</p> <table border="1"> <tr> <th rowspan="2">Noted by Supervisor</th><th colspan="4">Noted by Patwari</th></tr> <tr> <th>Irrigated</th><th>Un-Irrigated</th><th>I & UI</th><th>Crop not reported</th></tr> <tr> <td>Irrigated only</td><td>11</td><td>12</td><td>13</td><td>14</td></tr> <tr> <td>Un-Irrigated only</td><td>21</td><td>22</td><td>23</td><td>24</td></tr> <tr> <td>I & UI</td><td>31</td><td>32</td><td>33</td><td>34</td></tr> <tr> <td>Crop not reported</td><td>41</td><td>42</td><td>43</td><td>X</td></tr> </table>	Noted by Supervisor	Noted by Patwari				Irrigated	Un-Irrigated	I & UI	Crop not reported	Irrigated only	11	12	13	14	Un-Irrigated only	21	22	23	24	I & UI	31	32	33	34	Crop not reported	41	42	43	X	
Noted by Supervisor	Noted by Patwari																																
	Irrigated	Un-Irrigated	I & UI	Crop not reported																													
Irrigated only	11	12	13	14																													
Un-Irrigated only	21	22	23	24																													
I & UI	31	32	33	34																													
Crop not reported	41	42	43	X																													
10	3	Col.12 to 15	<p>Col.13 & 14: It is reiterated that in block 3.3, we concern only with the incidence of error with regard to crop as such and do not consider the errors below crop level (i.e. according to items of input) therefore while comparing the HY and Irrigation particulars, coding in schedule AS 1.0 under col.13 & 14 may please be done according to the illustration enclosed.(Annex-III).</p>																														
			<p>Col.15 Error codes:</p> <p>(i) both the supervisor and Patwari have reported the same area for crop in Serial/Survey numbers.</p>	1																													
			<p>(ii) Supervisor has reported the crop but patwari has not reported the crop.</p>	2																													
			<p>(iii) Supervisor has not reported the crop but patwari has reported the crop.</p>	3																													
			<p>(iv) Supervisor and patwari have reported different area figures for the crop in the same survey number</p>	4																													
			<p><u>Note:</u> In case, when patwari and supervisor both have reported (error code 2 and 3) different crops, separate entries in two lines giving the crop code for two crops as reported by supervisor and patwari will be made.</p>																														

Sl. No	Block/ Sub Block/ Page No. etc.	Col. No./ Item/Code cell etc.	Instruction	Code
1	2	3	4	5
11	Block 4 Page 12	Total area under crops (Top)	Give the total area under crops as reported in cols. 8 & 9 of block 4.	
12	Block 4	Col.7 (crop seed code)	Give crop codes for all specified and other crops (Crop seed as per coding instructions and this will be code) followed by code 1 and 2 to indicate whether the crop is of HY or local variety respectively also give code 991 and 992 for other crop (HY/L varieties respectively). Thus the code in this column will be 3 digitated codes. No code will be necessary for crop mixtures.	
13	Block 4	Col.8 to 11	Net area will be entered against each crop code including other crop code 99 in each col. as per the headings of the cols. Entries for Cols. 8,9,10 & 11 will be obtained by conversion to standard units viz. hac. of entries in cols. 3,4,5 and 6 respectively. The area under crop other than specified (i.e. other crops) of the same season for the State will be pooled together variety wise (i.e. Hy/ L) and entered in two lines in accordance with the 991 and 992 in col.7 In the last line, area under non-crop utilisation will be recorded in one line with code (00). This will include also the area under crop of the other season/ year.	
14	Block 4	Geographi - cal Area (Bottom)	Give the total geographical area of the survey / serial numbers actually surveyed i.e. geographical (bottom) area of the selected clusters. The area is to be recorded in (0.00) hectares	
15	Block 5 (a) & 5 (b)	Col.2	The newly assigned serial number (vide Sl. No.9 & 5(b) above of these instructions) for the corresponding serial/survey number will be entered here.	
		Col.5	Refer entries in cols. 3 and 4 and record crop code in 3 digits, right hand digit being 2 or 1 indicating local or high yielding varieties.	
16	Block 5 (a)	Col.11	Refer cols. 9 and 10 and record crop code in 3 digits as above. If recognised crop mixture is recorded in col.9, code is to be recorded for constituent crop with (+) sign in between. If there are two crops in col. 9, code for predominant crop above may be recorded.	
17	Block 6	Code Boxes (at bottom)	The codes, to be given at the bottom of block 6 in the code boxes for block 6.1, 6.2 & 6.3 are as follows:- Reasons:	
			i) System of Girdawari does not exist	0
			ii) Girdawari not done for previous year /current year.	1
			iii) Khasra Register / other records/ statements (Specify) not available.	2
			iv) Girdawari completed but jinswar / TRS statement not prepared.	3
			v) Reason for non availability of information not known	4
			vi) Sample village is non TRS village	5

Sl. No	Block/Sub Block/ Page No. etc.	Col. No./ Item/ Code cell etc.	Instruction	Code
1	2	3	4	5
17	Block 6	Code Boxes (at bottom)	vii) Not applicable as for Kerala, Orissa & hilly districts of Uttarakhand.	6
			viii) Aggregation figures not available at village level for Kerala and Orissa.	7
			ix) Any other reasons (Specify)	8
			x) Information is available	9
18	Block 8	Code Boxes (at bottom)	(i) If the difference between the area reported in block 3.2 item 4 and block 8 (Total) is (Zero) or less than one hectare.	1
			(ii) If the difference is one or more than one hectare	3
			(iii) For non receipt of information or for blank entries.	2
19	General		(i) If the entry for a particular item is rejected for analysis in schedule (AS 1.0) or AS 2.0) though the schedule is not completely against that particular item.	
			(ii) Codes may be recorded for the crops given in the code list for each season for a state and for crops not included in the list and be recorded.	
			(iii) Box space meant for, coding should be left blank, In case any item is inapplicable.	8
			iv) A statement showing number of villages planned, no. of filled in schedules received, and no. of schedules rejected at scrutiny level would be prepared (in duplicate) in respect of each state. One copy of this statement will be sent to E.D.P. unit along with the schedules and one copy retained as office copy.	

B. Sample check on Crop cutting Experiments (Sch AS-2.0)

1. Coding at FOD Hqrs. (To be done by ASOs)

Sl. No	Block/ Sub Block/ Page No. etc.	Col.No./ Item/Code cell etc.	Instruction	Code
1	2	3	4	5
1	Page 1 (Top)	Four code cells (Top)	In these four code cells given at the top the following entries will be made in order Cell 1-State Code Cell 2-Distt. Code Cell 3- Village order of selection Cell 4- Crop Code	
2	Page 1	(Top) Serial	A running serial number of all the Schedules in a State (crop-wise) should be given and the last serial number within a State (crop-wise) be ringed. If any schedule is totally rejected at scrutiny stage it should be indicated b 21(i).	
3	Page 1	(Top) Crop	2 digit crop code will be given as per Annex -I enclosed. In the States, where stratification has been adopted for CES for a crop a two digit code with hyphen in between will be given as under: (a) Stratification adopted for irrigation only and the crop is (i) Unirrigated (ii) Irrigated (b) If stratification adopted for seed variety only and the crop is (i) High Yielding (ii) Local (c) If stratification adopted both for Irrigation and variety of seed and the crop is (i) Irrigated/ HY (ii) Irrigated/ Local (iii) Un-irrigated/ HY (iv) Un-irrigated/ Local For example for crop Paddy (code 01) if stratification is done both for irrigation and high yielding and experiments in the schedule relate to irrigated / local variety, the code will be 01-36	
4	Page 1	Season (Top)	Kharif Early Kharif Late Kharif Rabi Summer includes Zaid-Rabi, Garma, Rabi-II of Puducherry Whole Year	1 2 3 4 5 6
<p>Early Kharif includes Bhadai, Aus, Autumn & Kar, Kuruvai, Sornawari i.e. Phase-I of Tamil Nadu Late Kharif includes Aghani, Aman, Winter & Samba, Thaladi, Pishanam i.e. Phase-II of Tamil Nadu Rabi includes Navarai i.e. Phase-III of Tamil Nadu & Rabi I of Puducherry Summer includes Zaid-Rabi, Garma, Rabi-II of Puducherry Whole Year will refer to crop cutting experiments in Tamil Nadu (except Paddy) and Banana, Plantain, Arecanut, Pepper and Tapioca in Kerala.</p>				

Sl. No	Block/ Sub Block/ Page No. etc.	Col. No./ Item/Code cell etc.	Instruction			Code	
1	2	3	4			5	
5	1	Item 8 (c) (Code Cell)	Consider item 8(a) to 8(c) and give codes as follows:				
			Where the experiment is conducted by	Codes			
				Trained	Un- Trained	Details not known	
				1	2	3	
				Delegated to equivalent/ senior person	4	5		6
Delegated to junior person	7	8	9				
Designated person (No change in Primary worker)							
6	2	Item 6	Item 6 (a), 6 (b) and 6 (c): give code in the respective cells against the entry.				
							1
			If there is code 0				2
			If Sub/Sl. No. is not involved in selection				8
			If nothing is reported				9
7	3	Col.4	(i) If any of the entries differ between lines 1 & 2 either for col.3 or for col.4				1
			(ii) If entries in lines 1 and 2 for col. 3 or for col. 4 are same.				2
			(iii) If not applicable (in case of hilly Districts of Uttarakhand).				8
			(iv) If any/all entry/entries is/are missing				9
8	3	Col.6	(i) If any entry differs between lines 1 and 2 in any of col. 5 and col.6.				1
			(ii) If entries in both lines of col. (5) and col. (6) are same				2
			(iii) If not applicable (in case of hilly Districts of Uttarakhand).				8
			(iv) If any/all entries is/are missing.				9
9	5.1	Item 3 (iii)	This item should be invariably filled in with the connected entries in gms. in box spaces, even when it is pure crop or zero yield.				
10	7	Item 1	If entry in item 1 is 0				0
			If entry in item 1 is 1				1
			If entry in item 1 is 4				8
			For Sugarcane				8
11	8	Item 1 (i)	Compare entries codes in code cells in cols. 2 and 5 as below:				
							1
							2
			instructions.				8
			One of the entries is missing though envisaged				9
12	8	Item 1 (iii) Col.2 & 5					1
							2
			envisaged				8
			One of the entries is missing				9
13	8	Item 2 (i) Col.2 & 5					1
			Entries				2
			envisaged				8
			One of the entries is missing				9

Sl. No	Block/ Sub Block/ Page No. etc.	Col.No./ Item/Code cell etc.	Instruction	Code				
1	2	3	4	5				
14	8	Item 1 (i) Col.4 & 7	Give code in cells under Kh. by comparing primary worker (P), supervisor (S) and Khasra register (Kh.) entries as below:					
			Entries as per					
							Code	
			HY		HY	HY	1	
			HY		HY	L	2	
			HY		L	HY	3	
			HY		L	L	4	
			L		HY	HY	5	
			L		HY	L	6	
			L		L	HY	7	
			L		L	L	8	
			One or more items are missing and comparison is not possible.			9		
			15		8	Item 1 (i) Col.4 & 7	Give code in cells under Kh. by comparing primary worker (P), supervisor (S) and Khasra register (Kh.) entries as below:	
							Entries as per	
				Code				
I	I	I		1				
I	I	UI		2				
I	UI	I		3				
I	UI	UI		4				
UI	I	I		5				
UI	I	UI		6				
UI	UI	I		7				
UI	UI	UI		8				
One or more items are missing and comparison is not possible.				9				
16	8	Item 3 (i) Col.2 & 4		differ				
			envisaged					
			One of the entries is missing					
17	8	Item 3 (iii)- c Col.3 & 5	If there is entry against N					
			If there is entry against P					
			If there is entry against K					
			(There may be more than one code according to entries against N P.& K)					
			If fertilizer is not applied					
			If N,P &K is not reported but a quantity is recorded in item 3(ii) (b)					
18	8	Item 4 (i) Col.2 & 4	differ	1				

CODE LIST FOR SPECIFIED CROPS

Sl.No.	Name of the State	Code	Season Kharif		Season Rabi & Summer	
			Crop	Code	Crop	Code
1	2	3	4	5	6	7
1	Andhra Pradesh	28	Rice	01	Rice (R)	02
			Jowar	03	Jowar (R)	04
			Bajra	05	Bengalgram/Gram	10
			Maize	06	Groundnut (R)	16
			Redgram (Tur)	11	Blackgram (Urd)	18
			Cotton	12	Other crops	99
			Sugarcane	14		
			Groundnut	15		
			Castor	23		
			Greengram (Moong)	31		
			Cashew nut	38		
			Other crops	99		
2	Assam	18	Jute	13	Rice (S)	02
			Sugarcane	14	Wheat	08
			Cashew nut	38	Rape & Mustard	17
			Rice (Autumn)	91	Black gram	18
			Rice (Winter)	92	Potato	45
			Other crops	99	Other crops	99
3	Bihar	10	Rice (Bhadai)	91	Rice (Summer)	02
			Rice (Aghani)	92	Wheat	08
			Maize	06	Gram	10
			Sugarcane	14	Rape & Mustard	17
			Other crops	99	Red gram (Tur/Arhar)	43
					Other crops	99
4	Jharkhand	20	Rice (Bhadai)	91	Wheat	08
			Rice (Aghani)	92	Gram	10
			Maize	06	Rape & Mustard	17
			Other crops	99	Red gram (Tur/Arhar)	43
					Other crops	99
5	Gujarat	24	Rice	01	Wheat	08
			Bajra	05	Gram	10
			Maize	06	Rape & Mustard	17
			Redgram (Tur)	11	Other crops	99
			Cotton	12		
			Groundnut	15		
			Castor	23		
			Sesamum (Til)	33		
			Other crops	99		

Sl.No.	Name of the State	Code	Season Kharif		Season Rabi & Summer	
			Crop	Code	Crop	Code
1	2	3	4	5	6	7
6	Haryana	6	Rice	01	Wheat	08
			Bajra	05	Barley	09
			Maize	06	Gram	10
			Cotton	12	Rape & Mustard	17
			Sugarcane	14	Other crops	99
			Other crops	99		
7	Himachal Pradesh	2	Rice	01	Wheat	08
			Maize	06	Barley	09
			Other crops	99	Other crops	99
8	Jammu & Kashmir	1	Rice	01	Wheat	08
			Maize	06	Other crops	99
			Other crops	99		
9	Karnataka	29	Rice	01	Rice (S)	02
			Jowar	03	Jowar (R)	04
			Bajra	05	Wheat	08
			Maize	06	Gram	10
			Ragi	07	Ground nut (S)	16
			Redgram (Tur)	11	Sunflower (R)	34
			Cotton	12	Other crops	99
			Sugarcane	14		
			Groundnut	15		
			Greengram (Moong)	31		
			Sunflower	32		
			Cashew nut	38		
			Other crops	99		
10	Kerala	32	Rice (Aut.)	91	Rice (S)	02
			Rice (Wint.)	92	Tapioca	19
			Cashew nut	38	Arecanut (S)	24
			Other Crops	99	Pepper (S)	25
					Banana (S)	26
					Plantain (S)	27
					Coconut (S)	30
					Other Crops	99
11	Madhya Pradesh	23	Rice	01	Wheat	08
			Jowar	03	Gram	10
			Maize	06	Rape & Mustard	17
			Redgram (Tur)	11	Linseed (Alsi)	29
			Cotton	12	Other crops	99
			Groundnut	15		
			Soyabean	22		
			Kodo Kutki	28		
			Sesamum	33		
			Other Crops	99		

Sl.No.	Name of the State	Code	Season Kharif		Season Rabi & Summer	
			Crop	Code	Crop	Code
1	2	3	4	5	6	7
12	Chhattisgarh	22	Rice	01	Wheat	08
			Maize	06	Gram	10
			Redgram (Tur)	11	Rape & Mustard	17
			Kodo Kutki	28	Linseed (Alsi)	29
			Other crops	99	Other crops	99
13	Maharashtra	27	Rice	01	Jowar (R)	04
			Jowar	03	Wheat	08
			Bajra	05	Gram	10
			Redgram (Tur)	11	Safflower	35
			Cotton	12	Other Crops	99
			Sugarcane	14		
			Groundnut	15		
			Soyabean	22		
			Green gram (Moong)	31		
			Blackgram (Urd)	40		
			Other crops	99		
14	Odisha	21	Rice (Aut.)	91		
			Rice (Wint.)	92	Rice (S)	02
			Maize	06	Green gram (Moong) (S)	37
			Potato (Wint.)	20	Other crops	99
			Horsegram (Wint.)	36		
			Blackgram (Urd)	40		
			Other crops	99		
15	Punjab	3	Rice	01	Wheat	08
			Maize	06	Barley	09
			Cotton	12	Gram	10
			Sugarcane	14	Rape & Mustard	17
			Other crops	99	Other crops	99
16	Rajasthan	8	Jowar	03		
			Bajra	05	Wheat	08
			Maize	06	Barley	09
			Cotton	12	Gram	10
			Sugarcane	14	Rape & Mustard	17
			Groundnut	15	Other crops	99
			Green gram (Moong)	31		
			Sesamum (Til)	33		
			Moth	39		
			Blackgram (Urd)	40		
			Other crops	99		

SL.N o.	Name of the State	Code	Season Kharif		Season Rabi & Summer	
			Crop	Code	Crop	Code
1	2	3	4	5	1	2
17	Tamil Nadu	33	Rice (K/K/S)	91	Rice (S) Navarai	93
			Rice (S/T/P)	92	Jowar	03
			Jowar	03	Bajra	05
			Bajra	05	Ragi	07
			Maize	06	Cotton	12
			Ragi	07	Sugarcane	14
			Cotton	12	Groundnut	15
			Sugarcane	14	Sesamum (Til/ Gingley)	33
			Groundnut	15	Cashew nut	38
			Sesamum (Til/ Gingley)	33	Other crops	99
			Cashew nut	38		
			Other crops	99		
18	Uttar Pradesh	9	Rice	01	Wheat	08
			Jowar	03	Gram	10
			Bajra	05	Rape & Mustard	17
			Maize	06	Black gram (Urd)	18
			Redgram (Tur)	11	Green gram (Moong) (S)	37
			Sugarcane	14	Potato	45
			Sesamum	33	Masur	49
			Blackgram/Urad	40	Other crops	99
			Other crops	99		
19	Uttarakhand	5	Rice	01		
			Ragi	07	Wheat	08
			Sugarcane	14	Other crops	99
			Other crops	99		
20	West Bengal	19	Rice (Aus.)	91	Rice (S)	02
			Rice (Aman)	92	Wheat	08
			Jute	13	Rape & Mustard	17
			Other crops	99	Sesamum (Til)	44
					Other crops	99
21	Puducherry	34	Rice	01	Rice (Rabi-I)	97
			Other crops	99	Rice (Rabi-II)	98
					Other crops	99

Note: 1. K/K/S. Kar / Kuruvai / Sornavari
2. S/T/P Samba / Thalady / Pishanam

(3.3) पर्यवेक्षक तथा पटवारी के अनुसार चयनित सर्वेक्षण संख्याओं का उपयोग । (3.3) Utilisation in the selected Survey Nos. as per supervisor and Patwari.														
क्रम / सर्वेक्षण संख्या Serial / Survey No.	स्थानीय इकाइयों में भौगोलिक क्षेत्रफल Geographical area in local units	(अ) पर्यवेक्षक के अनुसार (a) as per Supervisor					(ब) पटवारी के अनुसार (b) as per Patwari				मुख्यालय फरीदाबाद में भरे जाने हेतु To be filled in at Hqrs.office Faridabad			
		पैच संख्या Patch No	फसल / फसल श्रृंखला / पैच फसल उपयोग @ Crop / Crop Mixture/ non crop use @		सिंचाई (सिंचित -1, असिंचित -2) Irrigation (Irr.-1, UI-2)	स्थानीय इकाइयों में क्षेत्रफल Area in Local units	फसल / फसल फसल / उपयोग @ Crop / Crop Mixture/ non crop use @		सिंचाई (सिंचित -1, असिंचित -2) Irrigation (Irr.-1, UI-2)	स्थानीय इकाइयों में क्षेत्रफल Area in Local units	फसल संकेतांक Crop Code	प्रकार संकेतांक Variety Code	सिंचाई संकेतांक Irrigation Code	त्रुटि संकेतांक Error Code
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
समुच्चय सं० Cluster no.														
21	9.31	1,2	Paddy	2	1	3.05	Paddy	2	1	3.00	01	22	11	4
		6	Chilly	2	1	0.01					99	24	14	2
							Potato	2	1	0.03	99	42	41	3
		4, 5	Vegetable	2	1	2.00	Vegetable	2	1	2.00	99	22	11	1
		7	Fodder	2	1	3.00	Fodder				99	24	14	2
							Ginger	2	1	4.00	99	42	41	3
		8	Other fallows	x	x	1.25								

Appendix-III

(3.3) पर्यवेक्षक तथा पटवारी के अनुसार चयनित सर्वेक्षण संख्याओं का उपयोग । (3.3) Utilisation in the selected Survey Nos. as per supervisor and Patwari.														
क्रम / सर्वेक्षण संख्या Serial / Survey No.	स्थानीय इकाइयों में भौगोलिक क्षेत्रफल Geographical area in local units	(अ) पर्यवेक्षक के अनुसार (a) as per Supervisor					(ब) पटवारी के अनुसार (b) as per Patwari				मुख्यालय फरीदाबाद में भरे जाने हेतु To be filled in at Hqrs.office Faridabad			
		पैच संख्या Patch No	फसल / फसल मिश्रण / गैर फसल उपयोग @ Crop / Crop Mixture/ non crop use @			स्थानीय इकाइयों में क्षेत्रफल Area in Local units	फसल / फसल मिश्रण / गैर फसल उपयोग @ Crop / Mixture/ non crop use @			स्थानीय इकाइयों में क्षेत्रफल Area in Local units	फसल संकेतांक Crop Code	प्रकार संकेतांक Variety Code	सिंचाई संकेतांक Irrigation Code	त्रुटि संकेतांक Error Code
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
समुच्चय सं० Cluster no.														
Example I														
100	8.00	1	Paddy	1	1	1.00	Paddy	1	2	1.50				
		2	Paddy	2	1	3.00	Paddy	1	1	5.50				
		3	Paddy	1	2	1.00	Paddy	2	1	1.00	01	33	33	1
		4	Paddy	2	2	3.00								
Example II														
	8.00	1	Paddy	1	1	1.00	Paddy	1	1	1.00				
		2	Paddy	1	2	3.00	Paddy	2	1	2.50				
		3	Paddy	2	1	0.50					01	33	31	4
		4	Maize	1	1	3.50	Maize	1	1	3.50				
							Maize	1	2	1.00	06	11	13	4

STATEWISE INFORMATION REGARDING CONVERSION OF LOCAL UNITS INTO HECTARES (SCH.AS 1.0 & 1.1)

Sl.No	State	Name of Local unit	Conversion factor	Remarks
1	2	3	4	5
1	Andhra Pradesh	Acre Cent	0.4047 0.0101	
2	Assam	Bigha Katha Chatak Bigha Katha Lacha	0.1338 0.0067 0.0004 0.1338 0.0268 0.0013	Bigha, Chatak & Lacha in two Distts.
3	Bihar	Acre Decimal	0.4047 0.0040	
4	Chattisgarh	Hectare	-	
5	Gujarat	Hectare	-	Acre/Guntha in 25% of Total
6	Haryana	Kanal Marla Bigha	0.0506 (Max.) 0.0025 0.0843	
7	Himachal Pradesh	Bigha	0.0809	
8	Jammu & Kashmir	Kanal Marla	0.0506 0.0025	
9	Jharkhand	Acre Decimal	0.4047 0.0040	
10	Karnataka	Acre Guntha Cent	0.4047 0.0101 0.0040	

1	2	3	4	5
11	Kerala	Cent	0.0040	
12	Madhya Pradesh	Hectare	-	
13	Maharashtra	Hectare	-	
		Acre	0.4047	
		Guntha	0.0101	
14	Odisha	Acre	0.4047	
15	Punjab	Kanal	0.0506 (Max)	
		Marla	0.0025	
		Acre	0.4047	
16	Rajasthan	Bigha	0.2529	
		Bishwa	0.1619	
		Bishwansi	0.2161	
17	Tamil Nadu	Hectares	-	
18	Uttar Pradesh		-	
		Hectare	0.4047	
		Acre/Decimal	0.2530	
		Bigha		
19	Uttarakhand	Bishwa	0.1618	
		Hectare	-	
		0.0630		
20	West Bengal	Bigha		1 Nali= 200 Sq.Mtrs. 16 Muthi= 1 Nali (Bigha in Udham Singh Nagar Distt.)
		Nali Muthi		
21	Puducherry	Acre	0.4047	
		Decimal	0.0040	
21	Puducherry	Hectare	-	

CHAPTER: V

Preparations of estimates of average yield rate – procedure, time schedule, utility etc.

5.1 The primary responsibility for collection of agricultural statistics including those of area and production of crops rests with the State Governments. The yield rates of principal crops are estimated under General Crop Estimation Surveys (GCES) through Crop cutting experiments conducted by the State agencies. The crop cutting experiment consists of (i) locating and marking of an experimental plot of specified size in a field selected on the principles of random sampling, (ii) harvesting and threshing of its produce and (iii) recording the weight of the produce. The design adopted for survey is one of the stratified multi-stage random sampling, generally with tehsils/taluka/revenue inspector circles/ C.D.blocks/ anchals etc . as strata, village within a stratum as first stage unit of sampling, field within each selected village as second stage sampling unit and experimental plot of a specified shape and size as the ultimate unit of sampling.

5.2 The National Sample Survey Office (NSSO) has the overall responsibility of assisting the states in developing suitable survey techniques for obtaining reliable and timely estimates. Under the ICS scheme, the Central (NSSO) staff and the State supervisory staff supervise the crop cutting experiments conducted by State Primary Workers, in a sub-sample of GCES villages. The schedule AS 2.0 is used for recording the observations of the supervisory staff on crop cutting experiments. All the filled-in Central and State sample schedules are sent to NSSO (FOD), Faridabad from the field for analysis and estimation of yield rates. As already mentioned in Chapter-III of this Manual, tentative cut-off dates are prescribed for receipt of last schedule at Faridabad for each crop for different States in respect of Central and State samples. Similarly, due dates are also fixed for submission of yield estimates for each crop for each State in respect of Central and State sample to the Directorate of Economics and Statistics (DES), Ministry of Agriculture.

5.2.1 The yield estimates of various crops pertaining to different States are to be prepared and sent to the DES within two weeks (14 days) from the date of receipt of schedules of at least 70 percent c.c.experiments at FOD Hqrs. or the prescribed dates for receipt of last schedule, whichever is earlier for the Central/State/Pooled samples. This will require scrutiny, coding and processing of schedules of AS 2.0 promptly, apart from timely pursuing the Regional Heads of FOD and SASAs for despatching all the pending schedules of Central and State sample respectively.

5.2.2 While submitting the estimates for yield rates of the various crops, the following points should be observed by the state units:

(i) For central sample, a provisional estimate may be prepared and submitted as soon as 70% response in terms of c.c expts. is achieved or on due date of receipt of last schedule which ever is earlier.

(ii) At the time of submission of state sample estimates, i.e. within two weeks from the prescribed date for receipt of last schedule in respect of state sample, the central sample estimate(s) may also be revised, if necessary, by including the schedules received, if any, after the submission of provisional estimates. The pooled estimates may also be prepared and submitted along with the central (revised) and state sample estimates. These may be treated as final ICS estimates.

(iii) In case the response for either of the samples remains less than 70% even by the due date, the estimates will be worked out, but those estimates may not be forwarded to DES unless decision is taken otherwise. Reasons for low response should be ascertained/examined and intimated to the DES accordingly with a copy to C&T Unit of AS wing. The current estimate prepared for a crop need not be compared if in the previous year, estimate could not be forwarded to DES owing to low response.

(iv) It may also be noted that if central and state samples estimates are significantly different from their respective estimates of previous year (after applying “t” test) then while forwarding such estimates to the DES, remarks to this effect qualifying the pooled estimates may be recorded.

(v) In case the response of one agency is more than 70% and of another agency is less than 70% but the pooled response is more than 70%, then independent estimates for both the agencies will be prepared but instead of pooled estimate, combined estimate by grouping the data under crop cutting experiments at stratum level (ignoring agency) will be prepared. The estimates based on the agency for which more than 70% response is achieved and the combined estimates will be forwarded to DES with the remarks that the estimates for specific agency are not being forwarded due to low response as per the practice. However, all the estimates (i.e. based on more than 70% response, less than 70% response: combined or pooled) will be presented in the concerned State-wise Status Report alongwith the relevant remarks. Similarly, if for one agency, the response is 70% or more and the pooled one is less than 70% , the agency wise and pooled estimates will be prepared. The estimates based on 70% or more response may be forwarded to the Directorate of Economics & Statistics, New Delhi. The same as well the estimates based on sample with less than 70% response and the pooled one are to be presented in state-wise Status Report.

(vi) It may be ensured that proper procedure of preparation of yield estimates of the crops, for which pre-stratification in planning of experiments under ICS has been adopted according to the corresponding pre-stratification under CES in the State, is followed. As per instructions laid down in the following paragraphs the estimate of yield rate and its % SE is to be worked out separately for each category of a crop and then the estimates for different categories at State level is to be combined. In case response for any category is less than 70%, a combined (at the stratum level) estimate will be prepared ignoring categories.

(vii) The estimates of percentage standard errors (% SE) are to be worked out and presented, along with their yield estimates, in brackets up to one place of decimal.

5.2.3 While putting up the estimates for approval, the following details may invariably be given in a separate statement:

(a) Position regarding non-response indicating number of experiments lost, missed, rejected or for which schedules have not been received.

(b) ICS, CES estimates of yield rate for the last five years (starting with previous year) with corresponding % SE, wherever available.

(c) The percentage of experiments under Irrigation, HYV, Manures and Fertilizers to be indicated in the prescribed proforma alongwith estimates.

(d) Classification of crops according to crop condition to be indicated in the proforma.

(e) Any abnormal observation noticed is to be indicated.

(f) The number of schedules pertaining to State sample received at the time of preparation of central sample estimate when the later alone is being forwarded may be indicated.

5.2.4 While preparing the estimates of average yield of various crops under ICS, State Units are required to apply “t” test for assessing the level of significance between ICS and CES estimates.

5.2.5 There are some states where % SE are not worked out for some or all the crops and if these crops happen to be the crops covered under ICS, then the test of significance to the estimates worked out under scheme for ICS with that of CES estimates for the respective crops, need not be applied.

5.2.6 The ICS field supervisors while filling up the schedule are required to furnish extra information with regard to exact measurements of all the four sides and two diagonals of the experimental plot when the plot happens to be of variable size in Block 10 of Sch. AS 2.0. This additional information obtained from the field is intended to be used at hqrs. for converting the yield of the variable plot as demarcated in the field into the yield of plot of standard size as adopted in the respective State under its C.E.S. procedure.

Hence for the States, where sowing of crops like Cotton, Redgram (Tur) etc. in rows exists, the State units may calculate the area of variable plot by using the following formula:

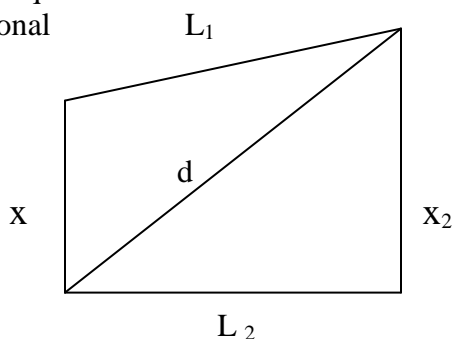
$$\text{Area of the variable plot} = \frac{1}{4} \left[\sqrt{\{(L_1 + x_1)^2 - d^2\} \times \{d^2 - (L_1 - x_1)^2\}} + \sqrt{\{(L_2 + x_2)^2 - d^2\} \times \{d^2 - (L_2 - x_2)^2\}} \right]$$

$$\text{Yield of the standard plot} = \frac{\text{Yield of the variable plot}}{\text{Area of the variable plot}} \times \text{Area of the standard plot}$$

Where L_1, L_2 = the lengths of the side of the plot along the rows

x_1, x_2 = the lengths of the unequal sides across the rows

d = length of the diagonal



5.2.7 SOME TERMINOLOGY USED WHILE ESTIMATING AVERAGE YIELD BASED ON DATA IN SCHEDULE AS 2.0

Under ICS programme Schedule AS 2.0 is designed to report various types of errors committed by the State Primary Workers while conducting the crop cutting experiments on specified crops. Besides, the first green weight of the produce in relevant columns of the schedule are to be reported. This weight is being used for working out average yield of that crop at State level. Though, calculation of yield rate estimates based on supervisor's data (on yield) is only a by product, the findings serve an important objective of calibrating the official forecasts. The main objective of the ICS while checking CCEs is to observe the extent and types of errors committed by State Primary Workers.

Before the estimation procedure is explained it is necessary to clear some of the terminology, the details and use in estimation procedure.

- i) **Recovery ratio** : The first weight of the produce taken out from the plans i.e. cobs in case of Jowar, Bajra, Maize, weight of grains in case of Paddy, Wheat barely, Gram etc, the ratio between the cobs to grain (wet), Paddy to Rice (after taking away husk) are known as recovery ratio.
- ii) **Driage ratio** : The ratio of weight between the wet grains or produce to dried and marketable produce is known as Driage ratio.
- iii) **Ginning ratio** : The weight of cotton to lint Cotton without seeds i.e. (cotton – seeds) is known as ginning ratio. This ratio is obtained from ginning factories.
- iv) **Net weight** : So far, one must have heard the net weight which is always less than the gross weight while purchasing the goods for household uses. In Agricultural Statistics the net weight will always be more than gross weight. While reporting the weight of crop (produce) when sown in mixture, the percentage of the experimental crop sown in that mixture is also given. In this case, we have to work out the weight of the produce had it been sown pure.

$$\frac{\text{Weight of the produce from the plot}}{\text{Percentage of the experimental crop in the mixture}} \times 100 = \text{net weight of the produce}$$

- v) **Conversion factor** : Converting the yield from Grams per plot to Kg. per hectare

$$\frac{\text{Weight of produce in Gms.}}{\text{Plot size in Mtrs.}} \times \frac{10000}{1000}$$

For working out the State level average yield of the produce following steps will be followed. In all the cases the net weight will be worked out as under.

$$\frac{\text{Produce in plot of the Crop where sown in mixture}}{\text{Percentage of the Crop in the mixture}} \times 100 = \text{Net weight}$$

All such wts. i.e. gross weight in case of crops sown in pure (which will be termed as net weight) and the net weight so worked out will be added and a simple average will be worked out at district level. The reason for working out simple average at district level is because district is the stratum under ICS. The next step will be working out the weighted average at the state level and the weights will be area under that crop in the district covered for estimation of average yield. This will be done in following manner.

$$\frac{A_1 \times X_1 + A_2 \times X_2 + \dots + A_n \times X_n}{A_1 + A_2 + \dots + A_n} = \text{weighted average at State level}$$

Where A_1 indicates the area under the crop in district 1 and A_2 is the area in the district 2 and X_1 is the simple average of the plot yields in the district 1 and X_2 in the district 2.

(A) Estimation of Average Yield and its Standard Error for the crops other than Cotton

5.3 On the basis of the data collected through schedule AS 2.0, AS wing prepares estimates of yield rates of the principal crops alongwith their percentage standard error. The procedure followed to obtain such estimate at state level is as follows:

Description of various steps to be followed for preparation of yield rate estimates and % SE

Operational Procedure:

1. District being the stratum under ICS scheme for sample check on crop cutting experiments (Schedule AS 2.0), first of all district- wise estimates of yield rate is calculated
- (i) Estimate of yield rate for the crop at district level in terms of green weight in grams per plot is simple average of sample plot yields and is given by

$$\hat{Y}_{ig} = \frac{\sum_{j=1}^{m_i} \sum_{k=1}^{n_{ij}} Y_{ijk}}{n_i}$$

Where

\hat{Y}_{ig} = average yield rate for the crop at district level in terms of green weight in grams per plot
 Y_{ijk} = plot yield in gms. in the k^{th} experimental plot of j^{th} sample village in the i^{th} district,
 n_{ij} = number of experiments analysed in the j^{th} sample village of the i^{th} district,

n_i = number of experiments analysed in the i^{th} district, given by $n_i = \sum_{j=1}^{m_i} n_{ij}$

m_i = number of sample villages in which experiments are analysed in the i^{th} district,

- (ii) Calculate the conversion factor to convert the yield rate of green produce in grams /plot to yield rate in terms of green produce in kg./ha. Composite Conversion factor (C.C.F) is to be worked out by making use of the drilage ratio at the state level for the latest available year and the plot size. For rice also, use the recovery ratio of rice from paddy.

2. Estimate at state level is prepared as weighted average of district level estimates, taking area under the crop in each district as weight for the district.

$$\text{Average yield rate at state level in Kg/hac. is given by } \frac{\hat{Y}}{Y} = \frac{\sum_{i=1}^d a_i \times \bar{Y}_{ig}}{\sum_{i=1}^d a_i} \times \text{C.F.}$$

Where, a_i = area under the crop in the i^{th} district during the previous year.
 d = number of districts in the State.

3. The estimate of variance of the yield rate at state level is directly calculated using analysis of variance technique for all crops except for Cotton.

The estimated variance of estimated yield rate at state level is given by

$$\hat{V}\left(\frac{\hat{Y}}{Y}\right) = \frac{\left[F \sum_{i=1}^d \frac{a_i^2}{n_i} + (E - F) \sum_{i=1}^d \frac{a_i^2 \sum_{j=1}^{m_i} n_{ij}^2}{\lambda n_i^2} \right]}{\left[\sum_{i=1}^d a_i \right]^2}$$

Where $\hat{V}\left(\frac{\hat{Y}}{Y}\right)$ = Estimated variance of the estimate of average yield rate at state level
and

$$\lambda_i = \frac{n_i^2 - \sum_{j=1}^{m_i} n_{ij}^2}{n_i(m_i - 1)}$$

E = mean square of yield between villages, which is given by

$$E = \frac{\sum_{i=1}^d \left[\sum_{j=1}^{m_i} \frac{(\sum_{k=1}^{n_{ij}} Y_{ijk})^2}{n_{ij}} - \frac{(\sum_{j=1}^{m_i} \sum_{k=1}^{n_{ij}} Y_{ijk})^2}{n_i} \right]}{\sum_{i=1}^d (m_i - 1)}$$

F = mean square of yield within villages, which is given by

$$F = \frac{\sum_{i=1}^d \left[\sum_{j=1}^{m_i} \sum_{k=1}^{n_{ij}} Y_{ijk}^2 - \sum_{j=1}^{m_i} \frac{(\sum_{k=1}^{n_{ij}} Y_{ijk})^2}{n_{ij}} \right]}{\sum_{i=1}^d (n_i - m_i)}$$

The percentage standard error of the yield rate is given by

$$\frac{SE(\bar{Y})}{\bar{Y}} \times 100 \text{ or } \frac{\sqrt{V(\bar{Y})}}{\bar{Y}} \times 100$$

i.e $\% \text{ S.E.} = \frac{\text{Standard Error of the estimate}}{\text{Estimate}} \times 100$

The estimate of yield rate and its standard error will be prepared and presented separately for central and state sample. Since the value of Y_{ijk} is in terms of green produce in gms/plot,

the above formula gives $V(\bar{Y})$ in terms of green produce in $(\text{gms/plot})^2$ and therefore, to obtain the variance in terms of dry produce in $(\text{kg/ha})^2$, this will be multiplied by $(\text{C.F.})^2$.

5.4 Crop for which pre-stratification in the planning of experiments under ICS has been adopted according to the corresponding pre stratification under CGES in the State, the estimates of yield rate and its standard error will be prepared separately for each category of the crop. The estimates for two or more categories of a crop at State level will be combined as under:

Let

\bar{Y}_1 be the estimated average yield rate for the first category.

\bar{Y}_2 be the estimated average yield rate for the second category.

A_1 be the area of the crop for the state under the first category.

A_2 be the area of the crop for the state under the second category.

Then the combined estimate of yield rate is given by: $\bar{Y}_{(1+2)} = \frac{\bar{Y}_1 A_1 + \bar{Y}_2 A_2}{A_1 + A_2}$

$$\text{or in general } \bar{Y} = \frac{\sum_i \bar{Y}_i A_i}{\sum_i A_i}$$

and estimate of its variance is given by : $V[\bar{Y}_{(1+2)}] = P_1^2 \text{Var}(\bar{Y}_1) + P_2^2 \text{Var}(\bar{Y}_2)$

where $P_1 = \frac{A_1}{A_1 + A_2}$ and $P_2 = \frac{A_2}{A_1 + A_2}$

$\hat{\hat{V}}(\bar{Y}_1)$

= the estimate of variance of the Ist category

$\hat{\hat{V}}(\bar{Y}_2)$

= the estimate of variance of the IInd category

Putting the value of P_1 and P_2 in above variance formula, we get

$\hat{\hat{V}}[\bar{Y}_{(1+2)}]$

$\hat{\hat{V}}(\bar{Y}_1)$

$\hat{\hat{V}}(\bar{Y}_2)$

$$\begin{aligned} \hat{\hat{V}}[\bar{Y}_{(1+2)}] &= \left(\frac{A_1}{A_1 + A_2} \right)^2 \hat{\hat{V}}(\bar{Y}_1) + \left(\frac{A_2}{A_1 + A_2} \right)^2 \hat{\hat{V}}(\bar{Y}_2) \\ &= \frac{A_1^2 \cdot \hat{\hat{V}}(\bar{Y}_1)}{(A_1 + A_2)^2} + \frac{A_2^2 \cdot \hat{\hat{V}}(\bar{Y}_2)}{(A_1 + A_2)^2} = \frac{A_1^2 \cdot \hat{\hat{V}}(\bar{Y}_1) + A_2^2 \cdot \hat{\hat{V}}(\bar{Y}_2)}{(A_1 + A_2)^2} \\ &\text{or in general } \hat{\hat{V}}(\bar{Y}) = \frac{\sum_i A_i^2 \hat{\hat{V}}(\bar{Y}_i)}{(\sum_i A_i)^2} \end{aligned}$$

Similar procedure will be followed for all types of stratification including four fold stratification. The estimate of yield rate and its standard error will be prepared and presented separately for central and state samples. The estimates for the two samples at State level will then be pooled together as under:

Let

$\hat{\bar{Y}}_c$

be the estimated average yield rate for central sample.

$\hat{\bar{Y}}_s$

be the estimated average yield rate for state sample

\hat{V}_c

be the estimate of variance for the central sample

\hat{V}_s

be the estimate of variance for state sample.

Calculate Inverse of Variance as $e_c = \frac{1}{V_c}$ and $e_s = \frac{1}{V_s}$

The pooled estimate of yield is given by

$$\hat{\bar{Y}}_p = \frac{e_c \hat{\bar{Y}}_c + e_s \hat{\bar{Y}}_s}{e_c + e_s} \quad \text{or} \quad \hat{\bar{Y}}_p = \frac{\hat{\bar{Y}}_c V_s + \hat{\bar{Y}}_s V_c}{V_c + V_s}$$

and an estimate of its variance by

$\hat{\hat{V}}(\bar{Y}_p)$

$$\hat{\hat{V}}(\bar{Y}_p) = \frac{1}{e_c + e_s}$$

or

$\hat{\hat{V}}(\bar{Y}_p)$

$$\hat{\hat{V}}(\bar{Y}_p) = \frac{V_c \times V_s}{V_c + V_s}$$

5.5 After estimating the yield rates, comparison of the current year ICS estimate with previous year ICS estimate and CES estimate by applying “t” test (Statistical test for significance) is carried out. It examines whether there is any significant difference between the two estimates.

Let \bar{Y}_1 & \bar{Y}_2 be the estimates of the two kind and $V(\bar{Y}_1)$ & $V(\bar{Y}_2)$ be the corresponding estimates of variances.

Then, the test statistics is given by
$$t = \frac{|\bar{Y}_1 - \bar{Y}_2|}{\sqrt{V(\bar{Y}_1) + V(\bar{Y}_2)}}$$

If “t” < 1.96, the conclusion is that there is no significant difference between the two estimates, otherwise (i.e. if t ≥ 1.96) the difference is significant.

Also calculate the percentage difference between the two estimates as given below

$$\% \text{ difference} = \frac{\bar{Y}_1 - \bar{Y}_2}{\bar{Y}_2} \times 100$$

5.6 Ancillary information like crop condition, irrigation particulars, seed variety particulars, use of fertilizers, manures, pesticides etc.is also to be tabulated.

5.7 After entering the particulars of the schedules in the control register immediately on receipt, the schedules have to be scrutinized. Net weight of the harvested produce, if required is to be calculated. **The procedure for estimation of average yield of a crop consists of the following steps:**

- (i) Preparation of Basic data sheet
- (ii) Preparation of Intermediate table (Table-1)
- (iii) Preparation of working sheet for variance calculation (Table-2)
- (iv) Calculation of average yield rate and its standard error for pooled sample (Table-3)
- (v) Application of 't' test (Table-4)
- (vi) Presentation of estimates for approval (Table-5)
- (vii) Forwarding estimates to DES

The above steps are being discussed in detail in the following paragraphs:-

(i) PREPARATION OF BASIC DATA SHEET:

Preparation of basic data sheet is the preliminary work to be carried out for the calculation of the estimates. The information available in various blocks of schedule AS 2.0 are to be transferred after making necessary conversions if any, into the basic data sheet. These sheets are filled up stratum-wise (District-wise).

(a) Care may be taken while obtaining the gross plot yield from the schedules specially when the plot size is variable. In case of crops like tur, castor, sugarcane, cotton, tobacco which are sown in rows, one way or both the ways i.e length-wise or/ and breadth-wise, the average of lengths or/and breadths may be taken and the corresponding gross plot yield may be adjusted for the standard plot size.

(b) Consistency may be seen between net plot yield and other ancillary information entered in various columns.

(c) Care may be taken in case of abnormal plot yields.

EXPLANATORY NOTE FOR FILLING THE COLUMNS OF BASIC DATA SHEET

1) Col.1, 2, &3: They are self-explanatory.

2) Col.4 : In case of mixture crops, this entry will be less than 100. The entry is a transfer entry from block 9.2, col. 3 of schedule AS 2.0

3) Col.4, 5 & 6 : i) Care should be taken while filling col. 4,5 & 6 when in different Districts, different plot sizes are observed. All these plot sizes should be converted into one standard plot size. The converted yield for standard plot size can be worked out by using the following formula:

$$\text{Yield of Standardised Plot} = \frac{\text{Yield of the selected Plot (gms) x Area of the Standardised Plot}}{\text{Area of selected Plot}}$$

Relation among Cols.4, 5 & 6 should be noted. If in an experimental plot, the experimental crop is sown in mixture say, 80 % and yield of the plot is 800 grams, then the figure in col.4, 5 and 6 are 80%, 800 grams and 1000 grams respectively. Entry for Col.6 can be worked out by following formula:

$$\text{Net plot yield} = \frac{\text{Gross plot yield}}{\% \text{ age of experimental crop sown in mixture}} \times 100$$

For missed, lost and those experiments which are rejected for analysis, entries should be made in the basic data sheet under the columns 1,2,3 leaving all other columns blank. Remarks like missed, lost, rejected may be written under these columns.

It may also be ensured that the entry in Col.6 should always be greater than or equal to the entry in Col. 5.

- 4) Col.7 to 17: These are transfer entries from various blocks of schedule AS 2.0 and are self-explanatory. Proper codes may be given against each column.
- 5) When estimates are prepared separately for irrigated, unirrigated, high-yielding, local or Hilly area and plain area, basic data sheets also are to be prepared separately.
- 6) To workout distt. level simple average in gms /plot, calculate:

n_i = number of experiments analysed in a district (col.3).

$\sum x_i$ = sum the plot yield (net)entered in col. 6 of the data sheet

\bar{X}_d = district level simple average = $\frac{\sum x_i}{n_i}$ in gms./plot

Calculate \bar{X}_d for all the districts covered in the State.

BASIC DATA SHEET

STATE:-

SEASON:

CROP:

SAMPLE TYPE:

D I S T R I C T	Village Or Order of selection	Expt No. I / II	% of Experimental Crop in the selected plot	Plot Yield (Gms.)		Ancillary Information				Fertilisers Rate of Application			Man- ure Yes=1 No=0	Pesti- Cides Yes=1 No=0	Crop Con- dition Code *	Eff- ected By (Code) **
				Gross	Net	SEED		Irri- ga- tion Yes=1 No=0	Ferti- liser Supp- lied Yes=1 No=0	N	P	K				
						Varie- ty HY=1 LV=0	Rat- e Kg/ Hac.									
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17

(ii) PREPARATION OF INTERMEDIATE TABLES:

In all, there are five intermediate tables, which are used in calculation of estimate on yield rate. Data available in Sch. AS 2.0 are first tabulated in these intermediate tables required for calculation of yield rate estimate at various stages. Detailed procedure for tabulating the data in these tables are discussed below:

Table 1 deals with calculation of district yield rates and state level yield rate. It also gives the analysis on response of schedules AS 2.0. The details are given on next page.

Table 2 deals with the calculation of variance of yield rate. Detailed analysis of Table 2 is given on page 49.

Table 3 deals with the preparation of Pooled estimate and its variance. The details are given on page 54.

Table 4 deals with the various tests that are to be undertaken to test significance of the difference between estimates based on two independent samples. The details are given on page 56.

Table 5 deals with the ancillary information for proper appraisal of the estimate. Most of the items in various tables are self-explanatory. The details are given on page 58.

However, highlights of some tables are discussed below. The following points may be noted while preparing the Table 1.

1. When a particular district consists of only one village, the district is to be clubbed with another district keeping geographical contiguity and agro-climatic conditions in consideration. After clubbing, a new notional district shall be formed with concerned plot yield, no. of expts., area etc.,
2. Items 1, 2, 3, 4, are self-explanatory. In item 4, when different plot sizes are available in various schedules they are all to be converted into one standard plot size.
3. Item 5 contains specific conversion factor corresponding to a particular plot size. For example for crop paddy, plot size 5m x 5m, Conversion Factor for converting the yield from gms/plot to Kg/ha is equal to

$$\frac{10,000}{25} \times \frac{1}{1000} = \frac{10}{25} = 0.4$$

Similarly, for a plot size of 10m x 5m the conversion factor equals to

$$\frac{10,000}{50} \times \frac{1}{1000} = \frac{10}{50} = 0.2$$

4. Items 6 & 7 are to be copied from CES Appendices furnished by SASA. The year for which latest information on these items is available will be given in brackets.
5. Item 8 = Item 5 x Item 6 x Item 7 (if any)
6. All columns from 1 to 6 are self-explanatory.

INTERMEDIATE TABLE – 1

DISTRICT-WISE YIELD RATES

Prepared by :

Checked by :

1. State :				5. Conversion Factor : From gms./ plot to Kg/ha. (0.0000)	
2. Year & Season :				6. Driage Ratio (0.0000) (Year :)	
3. Crop :				7. Recovery Ratio (0.0000) (Year :)	
4. Plot Size :				8. Composite Conversion Factor (C.C.F.) (Item 5 x 6 x 7) (0.0000)	
Sl. No.	Name of the District	No. of Expts.		Average Yield	Area under the Crop '000' ha (a _i) (year:)
		Planned	Analysed	gms. / plot (\bar{Y}_i)	
1	2	3	4	5	6

Note : Against item 6 & 7 and col. 6, year to which the information relates will be indicated within brackets.

Calculation of yield rate at State level .a) Total of column 6 Σa_i :b) Total of (Col. 5 x Col. 6) $\Sigma \bar{Y}_i a_i$:

c) Weighted Average yield rate at State level = $\frac{\text{Item b}}{\text{Item a}} \times \text{item 8} = \frac{\Sigma \bar{Y}_i a_i}{\Sigma a_i} \times \text{item 8} = \text{-----Kg/ha.}$

ANALYSIS OF RESPONSE

1.	Total number of experiments Planned	
2.	Total number of experiments Received	
3.	Total number of experiments Analysed	
4.	Total number of experiments Lost	
5.	Total number of experiments Missed	
6.	Total number of experiments Rejected	
7.	Total number of experiments for which schedules not received.	

(iii) PREPARATION OF WORKING SHEET FOR VARIANCE CALCULATIONS

A copy of the working sheet is appended (Intermediate Table – 2). The following points may be noted while preparing the working sheet (Intermediate Table-2 on page 52.)

1. When there is only one village available in the district for analysis, the entries of this village should be clubbed with the geographically contiguous district as done for calculation of district level average.
2. After calculating the variance as per the formula listed in **para 5.3**, C.F. should be applied to the variance so that it corresponds to dried marketable produce. Here the correction is equal to the square of the composite conversion factor that was applied to the average yield rate.
3. Percentage coefficient of variation is also to be calculated and is to be presented in forwarding letter along with the estimate within brackets.
4. All the columns of the working sheet are to be filled in for each district irrespective of the number of villages/experiments it contains. One line will be used for one district.

EXPLANATORY NOTE FOR FILLING THE COLUMNS OF WORKING SHEET: (Intermediate Table - 2)

Col.1 & 2	:	They are self-explanatory.
Col.3	:	n_i The total number of expts. analysed in the i^{th} district.
Col.4	:	$\sum_{j=1}^{m_i} n_{ij}^2$ where n_{ij} is the number of expts. analysed in the j^{th} village of i^{th} district. It may be either one or two. $j = 1, 2, \dots, m_i$.
Col.5	:	m_i Number of villages analysed in the i^{th} district.
Col.6	:	Col. 5 – 1
Col.7	:	Col. 3 – Col.5
Col.8	:	The average number of expts. per village in the district. It is obtained by the formula: $\lambda_i = \frac{(\text{Col.3})^2 - (\text{Col.4})}{(\text{Col.3}) \times (\text{Col. 6})}$
Col.9	:	a_i Area under the crop in '000' hac on the i^{th} district.
Col.10	:	$\frac{a_i^2}{\text{Col.3}}$ square of distt. level area divided by col.3
Col.11 = Z_i	=	$\frac{\text{Col.10} \times \text{Col.4}}{\text{Col.8} \times \text{Col.3}}$ Denotes the conversion factor for non-orthogonality
Col.12 = $\sum_{j=1}^{m_i} \sum_{k=1}^{n_{ij}} y_{ijk}^2$	=	Denotes total crude sum of squares of plot yield in the i^{th} district (Square the yield of each plot and sum it over all the villages)
Col.13 = $\sum_{j=1}^{m_i} \left(\frac{\sum_k y_{ijk}}{n_{ij}} \right)^2$	=	Denotes sum of squares between villages of the district. (Square the village level total of yield, divide it by the number of experiments (1 or 2) in that village and sum it over all the villages)

Col.14 = $\frac{\sum_{j=1}^{m_i} \sum_{k=1}^{n_{ij}} y_{ijk}^2}{n_i}$ denotes the correction factor for sum of squares to be applied to the Col. 12 and Col.13 for the district i.e.

(square of the total plot yield at district level \div Total Number of experiments analysed in the district)

Total for columns 3, 6, 7, 9, 10, 11, 12, 13, 14 are to be entered against the ‘total row’

Now calculate as follows:

E = mean square of yield between villages (MSBV), which is given by

$$E = \frac{\sum_{i=1}^d \left[\sum_{j=1}^{m_i} \frac{(\sum_{k=1}^{n_{ij}} Y_{ijk})^2}{n_{ij}} - \frac{(\sum_{j=1}^{m_i} \sum_{k=1}^{n_{ij}} Y_{ijk})^2}{n_i} \right]}{\sum_{i=1}^d (m_i - 1)}$$

$$E = (S_b^2) = \frac{\text{Total of Col.13} - \text{Total of Col.14}}{\text{Total of Col.6}}$$

F = mean square of yield within villages (mswv), which is given by

$$F = \frac{\sum_{i=1}^d \left[\sum_{j=1}^{m_i} \sum_{k=1}^{n_{ij}} Y_{ijk}^2 - \sum_{j=1}^{m_i} \frac{(\sum_{k=1}^{n_{ij}} Y_{ijk})^2}{n_{ij}} \right]}{\sum_{i=1}^d (n_i - m_i)}$$

$$F = (S_w^2) = \frac{\text{Total of Col.12} - \text{Total of Col.13}}{\text{Total of Col.7}}$$

VARIANCE FORMULA:

$$V(\bar{Y}) = \frac{\left[F \sum_{i=1}^d \frac{a_i^2}{n_i} + (E - F) \sum_{i=1}^d \frac{a_i^2 \sum_{j=1}^{m_i} n_{ij}^2}{\lambda n_i^2} \right]}{\left[\sum_{i=1}^d a_i \right]^2}$$

$$V(\bar{Y}) = \frac{S_w^2 \times \text{Total of Col.10} + (S_b^2 - S_w^2) \times \text{Total of Col.11}}{(\text{Total of Col.9})^2}$$

Before starting the calculation of variance of the state level yield rate, test whether there is a significant difference between $E = S_b^2$ and $F = S_w^2$.

The following cases may be noted:-

I. When E & F are significantly different and $F > E$, Variance is given by :

$$V(\bar{Y}_s) = (F \times \frac{\sum_i a_i^2}{n_i}) / \sum_i a_i^2$$

II. When E & F are significantly different and $E > F$, the formula given below may be used.

$$V(\bar{Y}) = \frac{\left[F \sum_{i=1}^d \frac{a_i^2}{n_i} + (E - F) \sum_{i=1}^d \frac{a_i^2 \sum_{j=1}^{m_i} n_{ij}^2}{\lambda n_i^2} \right]}{\left[\sum_{i=1}^d a_i \right]^2}$$

III. When E & F are significantly different and $E > F$ and $\lambda = 2$ for all $i = 1, 2, \dots$ then the variance of the mean yield rate at State level is given by.

$$V(\bar{Y}_s) = (E \times \frac{\sum_i a_i^2}{n_i}) / \sum_i a_i^2$$

IV. When E & F are not significantly different then

$$V(\bar{Y}_s) = (\text{Pooled Variance of E and F}) \times \frac{\sum_i a_i^2}{n_i} / (\sum_i a_i)^2$$

where

pooled variance of E & F =

$$[(\text{Total of Col.13-total of Col.14}) + (\text{Total of Col.12- Total of 13})] / [\text{Total of col. 6} + \text{Total of col.7}]$$

$$= \frac{\text{Total of Col.12 - Total of Col.14}}{\text{Total of Col. 6 + Total of Col.7}}$$

Estimated Variance of the mean yield rate (Green Weight) =

$$= \left[\frac{S_w^2 \times \text{Total of Col. 10} + (S_b^2 - S_w^2) \times \text{Total of Col. 11}}{(\text{Total of Col.9})^2} \right]$$

Variance of the mean yield rate (dry weight) = Variance of average yield rate (green weight) X (Composite conversion Factor)²

$$\text{Standard Error (SE)} = \sqrt{\text{Variance}} = \text{_____ Kg/ ha.}$$

$$\% \text{ SE} = \frac{\text{SE}}{\text{Estimated Av. Yield rate}} \times 100 = \text{_____}$$

If there is 2.00 against all Distts. in Col. 8, the following formula may be used

$$V = \frac{S_b^2 \times \text{Col.10}}{(\text{Col.9})^2}$$

INTERMEDIATE TABLE – 2

WORKING SHEET FOR CALCULATION OF VARIANCE OF YIELD RATE ESTIMATE

State :

Year & Season :

Crop :

Prepared by :

Checked by :

Sl. No.	Name of the Distt.	n_i	$\sum n_{ij}^2$	m_i	m_i-1	n_i-m_i	λ_i	a_i '000' ha	$\frac{a_i^2}{n_i}$	z_i	sum of squares		Cor recti on fact or
											Crude Sum of squares	Between villages	
1	2	3	4	5	6	7	8	9	10	11	12	13	14
TO TA L													

INTERMEDIATE TABLE –3

Preparation of estimates based on Pooled Sample

State:

Year & Season:

Crop:

(I) Pooled Sample

Central sample

State Sample

Yield rate \bar{Y}_i^{\wedge} =

Yield rate \bar{Y}_2^{\wedge} =

Estimate of Variance V_1^{\wedge} =

Estimate of Variance V_2^{\wedge} =

Sample size n_1 =

Sample size n_2 =

Percentage Response R_1 =

Percentage Response R_2 =

Pooled estimate of Yield rate $\bar{Y}_p^{\wedge} = \frac{(\bar{Y}_1 \times V_2) + (\bar{Y}_2 \times V_1)}{(V_1 + V_2)}$

= _____ Kg/ha

Variance $V_p^{\wedge} = \frac{(V_1 \times V_2)}{(V_1 + V_2)}$

= _____ Kg/ha

SE = $\sqrt{\text{Variance}}$

SE

% SE = _____ x 100

Pooled estimate of Average Yield rate

(iv) CALCULATION OF AVERAGE YIELD RATE AND STANDARD ERROR

The following formulae are used while calculating the average yield rate and its variance from a pooled sample:

$$\bar{y}_s = \frac{\bar{y}_c \cdot V_s + \bar{y}_s \cdot V_c}{V_c + V_s} \dots\dots\dots (1)$$

$$V(\bar{y}_s) = \frac{V_c \cdot V_s}{V_c + V_s} \dots\dots\dots (2)$$

where \bar{y}_c is yield rate based on Central sample.

\bar{y}_s is yield rate based on State sample .

V_c is variance of \bar{y}_c .

V_s is the variance of \bar{y}_s .

The formula listed below may be used while calculating combined estimate at State level (Combining two or more categories of estimated yield rates corresponding to pre-stratification)

$$\bar{Y}_s Comb = \frac{\sum a_i \bar{y}_i}{\sum a_i}$$

and its variance is given by :

with usual notations.

$$\hat{V}(\hat{\bar{y}}) Comb = \frac{\sum_{i=1}^n \hat{a}_i^2 \hat{v}_i}{(\sum_{i=1}^n \hat{a}_i)^2}$$

Where $i = 1, 2, 3, \dots, n$ (No. of categories of pre-stratification of crops available)

a_i is the cropped area under i^{th} category. v_i is the estimate of variance of \bar{y}_i of the i^{th} category

INTERMEDIATE TABLE –4

Calculation of Test statistics : (at 5% Level)

1. Central sample

Yield rate \bar{Y}_1 =

Estimated Variance V_1 =

Sample size n_1 =

Difference $(\bar{Y}_1 - \bar{Y}_2)$ =

t_c Value =

(i) As $|t_c| > t_{n_1 + n_2 - 2} (0.25)$

(i) As $|t_c| < t_{n_1 + n_2 - 2} (0.25)$

Previous year final estimates

Yield rate \bar{Y}_2 =

Estimated Variance V_2 =

Sample size n_2 =

t - table Value =

There is no evidence to believe that the mean yield rates are equal.
(Difference between the mean yield is significant)

Difference between the mean yield is insignificant.

2. Central sample

Yield rate \bar{Y}_1 =

Estimated Variance V_1 =

Sample size n_1 =

Difference $(\bar{Y}_1 - \bar{Y}_2)$ =

t_c Value =

(i) As $|t_c| > t_{n_1 + n_2 - 2} (0.25)$

(ii) As $|t_c| < t_{n_1 + n_2 - 2} (0.25)$

Previous year CES estimates

Yield rate \bar{Y}_2 =

Estimated Variance v_2 =

Sample size n_2 =

Variance of Difference $v_1 + v_2$ =

$t_{n_1 + n_2 - 2} (0.25)$ =

There is no evidence to believe that the mean yield rates are equal at 5% level.
(Difference between the mean yield is significant)
Difference between the mean yield is insignificant at 5% level

3. Central sample

Yield rate \bar{Y}_1 =

Estimated Variance V_1 =

Sample size n_1 =

Percentage reference R_1 =

t_c Value =

(i) As $|t_c| > t_{n_1 + n_2 - 2} (0.25)$

State sample

Yield rate \bar{Y}_2 =

Estimated Variance v_2 =

Sample size n_2 =

Percentage reference R_2 =

$t_{n_1 + n_2 - 2} (0.25)$

There is no evidence to believe that the mean yield rates are equal at 5 % level.

(v) **Application of 't' test (Intermediate Table-4)**

Let \bar{Y}_1 and \bar{Y}_2 be mean yield rates obtained from two samples viz. central and state or central and Central (previous year) or ICS Pooled and CES (previous year) or Central and CES Sample (previous year), n_1 and n_2 are their sample sizes and V_1 and V_2 are estimated variances of the yield rates.
(a) The 't' statistic is given by the following formula.

$$t_c = \frac{|\bar{Y}_1 - \bar{Y}_2|}{\sqrt{V_1 + V_2}} ; n_1 \simeq n_2$$

for n_1, n_2 each independently is greater than 60. If the tabulated value is equal to or greater than ($>$) 1.96, the difference is statistically significant at 5% level of significance.

(b) In all other cases, where either or both n_1 and n_2 is/are less than 60, the 't' statistic is given by

$$t_c = \frac{|\bar{Y}_1 - \bar{Y}_2|}{\sqrt{\frac{(n_1 - v_1 + n_2 - v_2)}{(n_1 + n_2 - 2)} \times \frac{(n_1 + n_2)}{(n_1 \times n_2)}}}$$

and the tabulated value is to be obtained from the tables for the $(n_1 + n_2 - 2)$ degrees of freedom. For testing the significance, the value of 't' may be obtained from the STUDENT's 't' distribution table annexed at page 61.

(vi) **PRESENTATION OF ESTIMATES FOR APPROVAL**

After the estimates are prepared, these estimates are to be presented to higher officers for approval. While presenting these estimates, the corresponding CES files for area figures and driage ratios should also be forwarded for reference. Distinction between combined and pooled estimates should be noted clearly.

While submitting the estimate, the required information on yield rate (Kg/ha) over the previous 5 years, ancillary information on irrigation, high yielding seed variety, fertilizer, manure, pesticides etc., crop condition, non- response particulars, plot wise yield rate, and reasons for crop damage should be given in the prescribed format. The prescribed format is detailed in Intermediate Table –5.

When the estimate is presented, Superintending Officer of the concerned unit should check the correctness of each and every calculation involved and submit it to higher officers along with his comments about the reasons for increase/decrease of the estimate in the light of crop condition, input particulars available in the ancillary information.

INTERMEDIATE TABLE – 5

SUPPLEMENTRY INFORMATION

(to be attached with Final Table on Estimate)

Central / State

Prepared by :

Checked by :

Season :

State :

Crop :

1. YEAR (for last 5 years)

Sl. No.	Year	Yield rate (Kg/ha) as per	
		Final ICS (% SE)	CES (% SE)
1			
2			
3			
4			
5			

2. ANCILLARY INFORMATION

YEAR		No. of Expts. Analysed	No. of experimental plots with				
			I	Hy	F	M	Pesticides
Current Year	No.						
	%age	X					
Previous year	No.						
	%age	X					

3. CROP CONDITION

		Good	Normal	Below normal	Damaged
Current Year	No.of expts.				
	%age				
Previous year	No.of expts.				
	%age				

4. Non- response

	Number of Experiments						
	Planned	Analysed	%age analysed	Lost	Missed	Schs. rejected	Schs. Not received
Current year							
Previous year							

5. Distribution of green yield rate (in 000, gms per plot)

		Yield in plot							
		0 - 1	1 - 5	5 - 10	10 - 15	15 – 20	20 – 25	Above 25	Total
Current year	Frequency of expts.								
	%age								
	Cum %age								
Previous year	Frequency of expts.								
	%age								
	Cum %age								

6. Reason for Crop Damage and/ below normal

	Number of Experiments for which crop was damaged due to				
Code	1	2	3	4	9
	Heavy rains	Floods	Drought	Pesticides	Other reasons (specify)
Current year					
Previous year					

7. Due Date:

8. Date of submission:

NATIONAL SAMPLE SURVEY OFFICE (FIELD OPERATIONS DIVISION)
A.S WING, FARIDABAD

Statement showing the estimate of yield rate based on the sample check on crop cutting experiments under the scheme of Improvement for Crop Statistics (ICS).

State:

Year :

Season :

Crop :

Agency	No of experiments		%age response	Estimated average yield (Kg/hac.)			Percentage difference	
	Planned	Analysed		Current year	Previous year	GCEs for the year ()	(5) – (6) ----- x 100 (6)	(5) – (7) ----- x 100 (7)
1	2	3	4	5	6	7	8	9

Note : Figures within brackets in col. 5, col.6 and 7 indicate percentage standard error.

Remarks : i) The asterisk (*) mark in column 8 and column 9 indicates that the difference is statistically significant at 5% level of significance.

ii) Reasons for variations from the previous year, if any.

iii) Other remarks including relevant information about crop condition etc.

No. T-14011 / / / AS

Dated :

Forwarded to the Economic & Statistical Advisor, Ministry of Agriculture. (Deptt. Of Agriculture & Cooperation), Dte. of Economic & Statistics, Krishi Bhavan, New Delhi for necessary action.

()

Dy. Director General / Director

Copy for information : i) The DG & C.E.O., NSSO, M/o Statistics & PI, S.P. Bhavan, N. Delhi.

ii) D.D.G (NAD), CSO, M/o Statistics & PI, S.P. Bhavan, N. Delhi.

iii) C & T Unit , NSSO (FOD), Faridabad.

()

Dy. Director General / Director

STUDENT'S 't' DISTRIBUTION

Value of 'n' (degree of freedom)	value of 't' at 5 % level	Value of 'n' (Degree of freedom	Value of 't' at 5 % level
1. -----	12.706	21. ----	2.080
2. -----	4.303	22. ----	2.074
3. -----	3.182	23. ----	2.069
4. -----	2.776	24. ----	2.064
5. -----	2.571	25. ----	2.060
6. -----	2.447	26. ----	2.056
7. -----	2.365	27. ----	2.052
8. -----	2.306	28. ----	2.048
9. -----	2.262	29. ----	2.045
10. -----	2.228	30. ----	2.042
11. -----	2.201	31. ----	2.040
12. -----	2.179	32. ----	2.038
13. -----	2.160	33. ----	2.036
14. -----	2.145	34. ----	2.034
15. -----	2.131	35. ----	2.032
16. -----	2.120	36. ----	2.030
17. -----	2.110	37. ----	2.028
18. -----	2.101	38. ----	2.026
19. -----	2.093	39. ----	2.024
20. -----	2.086	40. ----	2.021
		50. ----	2.010
		60. ----	2.000
		120. ----	1.980
			1.960

Note : $n = n_1 + n_2 - 2$

The value of 't' at 5% is that value which is exceeded with probability of 0.025 in the negative direction and 0.025 in the positive direction, making the total probability $p=0.05$.

Source: RA, Fisher and F.Yates, Statistical tables for Biological, Agricultural and Medical Research.

(B) The procedure for estimation of yield rates for crop Cotton

The procedure for estimation of yield rates of Cotton is different from the estimation procedure for other crops. The selected sample villages are divided into two groups, viz. " Group A" for the inspection of all the pickings and "Group B" for the inspection of first few pickings only. 25% of the selected sample belongs to Group A and remaining to Group B. Two separate basic data sheets are prepared for Group A and Group B villages for each State. For the State where plot size is variable, the yield is recorded after

converting the yield for the standard plot size prescribed in the State. There is no distinction between central and state samples, and the estimate is to be prepared for the State as a whole clubbing both the samples after receipt of 70% response.

Let x_i refer to the total yield of Ist few (say 2 or 4) pickings in the i^{th} experiment under Group A.

x'_i refers to the total yield of Ist few (say 2 or 4) pickings in the i^{th} experiment under Group B.

n_a refers to no. of experiments analysed under Group A.

n_b refers to number of experiments analysed under Group B.

y_i refers to total yield of all pickings in the i^{th} experiment under Group A (including the yield of Ist few pickings).

Then, calculate, $R = \frac{\bar{y}}{\bar{x}}$ where $\bar{y} = \frac{\sum y_i}{n_a}$ and $\bar{x} = \frac{\sum x_i}{n_a}$

Also calculate $\bar{z} = \frac{\sum z_i}{n}$ where $n = n_a + n_b$ and $z_i = x_i + x'_i$

Where

n = Sum total of number of experiments analysed under Group 'A' (n_a) and Group 'B' (n_b).

z_i = Combined yield of Group 'A' & Group 'B'

\bar{z} = Combined average yield of Group 'A' & Group 'B'

To confirm the hypothesis that the co-efficient of co-relation (r) between the yield of Ist few pickings and the yield of all pickings is quite high, calculate " r ", only for Group A by using the following formula.

$$r = \frac{s_{xy}}{\sqrt{s_{xx} \cdot s_{yy}}}$$

Where $s_{xy} = \sum x_i y_i - \frac{\sum x_i \cdot \sum y_i}{n_a}$, $s_{xx} = \sum x_i^2 - \frac{(\sum x_i)^2}{n_a}$, $s_{yy} = \sum y_i^2 - \frac{(\sum y_i)^2}{n_a}$

In order to test the significance of the co-efficient of co-relation, apply "t-" test. The "t" statistics is given

$$\text{by } t = \frac{r\sqrt{n_a - 2}}{\sqrt{1 - r^2}}$$

which follows 't' distribution with ($n_a - 2$) degrees of freedom (d.f.) and the value of "t" may be seen in Fisher's table with ($n_a - 2$) d.f. for deciding the significance of correlation co-efficient.

The data for only those States, may be analysed further, where the value of " r " is close to unity and also t test is significant at 5% level.

The average yield rates are estimated by using Ratio Method as well as Regression Method when the test is significant at 5% level. Let us define,

$$s^2_x = \frac{s_{xx}}{n_a - 1}, s^2_y = \frac{s_{yy}}{n_a - 1}, s'_{xy} = \frac{s_{xy}}{n_a - 1}$$

The Ratio-Method estimate and its variance is given by

$$\hat{\bar{Y}}_R = R \cdot \bar{z}$$

$$V(\hat{\bar{Y}}_R) = \frac{s_y^2 - 2.R.s'_{xy} + R^2 s_x^2}{n_a} + \frac{2.Rs'_{xy} - R^2 s_x^2}{n}$$

The Regression method estimates and its variance i.e. Regression of y on x is given by

$$\hat{\bar{Y}}_{lr} = \bar{y} + \frac{s_{xy}}{s_{xx}}(\bar{z} - \bar{x})$$

$$\hat{\bar{Y}}_{lr} = \frac{s_{yx}}{n_a} + \frac{s_y - s_{yx}}{n} + \frac{s_{yx}}{\sum_i (x_i - \bar{x})} \frac{\bar{z} - \bar{x}}{x_i - \bar{x}}$$

Where $s_{y.x}^2 = \frac{1}{n_a - 2} \left[\sum_i (y_i - \bar{y})^2 - b^2 \sum_i (x_i - \bar{x})^2 \right]$

and $b = \frac{s_{xy}}{s_{xx}}$ where 'b' is regression co-efficient

The values of s_{xx} and s_{yy} are used for $\sum (x_i - \bar{x})^2$ and $\sum (y_i - \bar{y})^2$ respectively.

If the 't' test (explained above) is not significant at 5% level, the Ratio estimate & the Regression estimate will not be worked out. The estimate in this case will be average yield on the basis of the yield of all pickings in Group A villages given by \bar{y} and its standard error will be given by :

$$S.E. = \sqrt{\frac{s_y^2}{n_a}}$$

All these estimates mentioned above are in gms / plot and these are converted to Kg / hec. by using suitable conversion factor.

Note: Experiments planned under group "B" (2 or 4 pickings) but supervised inadvertently as group "A" (all pickings) experiments, need not be rejected. However, if an experiment planned under group "A" but supervised as per group "B" necessarily be rejected.

BASIC DATA SHEET FOR CALCULATION OF AVERAGE YIELD RATE

State:

Crop : COTTON

Year/Season :

Standard plot size:

group - A / group -B

Name of the District	Order of selection of village	Exp No.	% of experimental crop	Plot yield of the picking				Ancillary information (give code)						
				Gross yield @		Net yield		Seed variety HY-1 L-2	Irrigation Yes-1 No-0	Fertilizers Yes -1 No-0	Manure Yes-1 No-0	Pesticides Yes-1 No-0	Crop condition * (code)	Crop Damage due to ** (code)
				First two /four pickings	All pickings	First two /four pickings X_i / X_i'	All pickings Y_i							
1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.	15.

*= Crop Condition : Good-1, Normal-2, Below normal-3, Completely destroyed – 4.

** = Crop Damage: Not effected –0, Heavy rain-1, Flood-2, Draught-3, Pests-4, Others-9.

@ = •Two pickings in the States of A.P, Gujarat, Haryana, M.P, Maharashtra, Punjab, Rajasthan and Karnataka. •Four pickings in the States of U.P and Tamil Nadu.

• X_i - total of first two/ four pickings under group 'A'.

• X_i' - total of first two/ four pickings under group 'B'.

EXPLANATORY NOTE FOR FILLING THE BASIC DATA SHEET FOR CROP – COTTON

The general instructions given for transferring the data from schedule AS 2.0 to basic data sheet are more or less same as under other ICS crops

The following points may be noted :

1. The basic data sheet is to be prepared group wise (Group A and Group B)
2. There is no separate tabulation of data under Central and State samples. In each district, first all central sample data is entered in the basic data sheet and thereafter the data of State sample is entered.
3. Entry in Col.8 is always greater or equal to entry in Col. 7
4. Whenever data on 'B' group is entered, items 6 & 8 are not relevant.
5. After entering the data of all samples, analysis of response position may be given in the Basic Data Sheet for the state as a whole as shown below:

Number of experiments in the State					
Group-A			Group-B		
Planned	.....	-----	Planned	.....	-----
Received	.....	-----	Received	.....	-----
Lost	.....	-----	Lost	.....	-----
Missed	.....	-----	Missed	.....	-----
Rejected	.....	-----	Rejected	.....	-----
Analysed	.....	-----	Analysed	.....	-----
Schedules not received:	-----		Schedules not received		

(a) Conversion factor (yield in gms/plot to Kg/ha)

(b) Conversion (Kapas to lint)

Composite Conversion factor (a) x (b)

In Punjab State, only driage factor is also counted.

Size of plot alongwith Conversion Factor to Kg/ha	Conversion factor Kapas to lint (ginning ratio)	Composite Conversion factor
10m x 10m C.F. 0.1 (Andhra Pradesh)	0.31	0.31
10m x 5m C.F. 0.2 (Gujarat)	0.36	0.072

WORKING SHEET FOR CALCULATION OF AVERAGE YIELD RATE AND VARIANCE

STATE:

YEAR/ SEASON:

CROP:

Item No.	Notation with description	Value
1	$n_a = \text{No. of Expts. Analysed under group 'A'}$	
2	$\sum_{i=1}^{n_a} x_i = \text{Total of Col. 7 from basic data sheet}$	
3	$\sum_{i=1}^{n_a} y_i = \text{Total of Col. 8 from basic data sheet}$	
4	$\bar{x} = \frac{\text{Item 2}}{\text{Item 1}}$	
5	$\bar{y} = \frac{\text{Item 3}}{\text{Item 1}}$	
6	$R = \frac{\bar{y}}{\bar{x}} = \frac{\text{Item 5}}{\text{Item 4}}$	
7	$\sum_{i=1}^{n_a} x_i^2 = \text{sum of squares of yield of col. 7}$	
8	$\sum_{i=1}^{n_a} y_i^2 = \text{sum of squares of yield of col. 8}$	
9	$\sum_{i=1}^{n_a} x_i y_i = \text{sum of cross product of yield in col. 7 and col. 8}$	
10	$s_{xy} = \text{Item 9} - \left(\frac{\text{Item 2} \times \text{Item 3}}{\text{Item 1}} \right)$	
11	$s_{xx} = \text{Item 7} - \frac{(\text{Item 2})^2}{\text{Item 1}}$	
12	$s_{yy} = \text{Item 8} - \frac{(\text{Item 3})^2}{\text{Item 1}}$	
13	$r = \frac{s_{xy}}{\sqrt{s_{xx} \cdot s_{yy}}} = \frac{\text{Item 10}}{\sqrt{\text{Item 11} \times \text{Item 12}}}$	
14	$t = \frac{r\sqrt{n_a - 2}}{\sqrt{1 - r^2}} = \frac{\text{Item 13} \times \sqrt{n_a - 2}}{\sqrt{1 - (\text{Item 13})^2}}$	
15	$s^2_x = \frac{s_{xx}}{n_a - 1} = \frac{\text{Item 11}}{(\text{Item 1}) - 1}$	
16	$s^2_y = \frac{s_{yy}}{n_a - 1} = \frac{\text{Item 12}}{(\text{Item 1}) - 1}$	
17	$s'_{xy} = \frac{s_{xy}}{n_a - 1} = \frac{\text{Item 10}}{(\text{Item 1}) - 1}$	

18	$b = \frac{s_{xy}}{s_{xx}} = \frac{\text{Item 10}}{\text{Item 11}} \quad \text{or} \quad \frac{s'_{xy}}{s'^2_x} = \frac{\text{Item 17}}{\text{Item 15}}$	
19	$s^2_{y \cdot x} = \frac{\text{Item 12} - (\text{Item 18})^2 x (\text{Item 11})}{[(\text{Item 1}) - 2]}$	
20	$SE = \sqrt{\frac{s^2_y}{n_a}} = \sqrt{\left(\frac{\text{Item 16}}{\text{Item 1}}\right)}$	
21	$n_b =$ no. of experiments analysed in Group-B	
22	$\sum_{i=1}^{n_b} x'_i =$ Total of col. 7 of 'B' group sample	
23	$n = n_a + n_b = \text{Item 1} + \text{Item 21}$	
24	$\sum_{i=1}^n z_i = \sum x_i + \sum x'_i = \text{Item 2} + \text{Item 22}$	
25	$\bar{z} = \frac{\text{Item 24}}{\text{Item 23}}$	
26	$\bar{z} - \bar{x} = \text{Item 25} - \text{Item 4}$	
27	$\hat{\bar{Y}}_R = R \cdot \bar{z} = \text{Item 6} \times \text{Item 25}$ Estimate of yield rate based on Ratio Method	
28	$\hat{V}(\bar{Y}_R) =$ Estimated Variance based on Regression method $= \frac{s^2_y - 2.R.s'_{xy} + R^2 s'^2_x}{n_a} + \frac{2.R.s'_{xy} - R^2 s'^2_x}{n}$ $\left(\frac{\text{Item 16} - 2.\text{Item 6} . \text{Item 17} \quad (\text{Item 6}) . \text{Item 15}}{\text{Item 1}} \right)$ $+ \left(\frac{2\text{Item 6} . \text{Item 17} - (\text{Item 6})^2 . \text{Item 15}}{\text{Item 23}} \right)$	
29	$\hat{\bar{Y}}_{lr} =$ Estimate based on Regression Method $\bar{Y}_{lr} = \bar{y} + \frac{s_{xy}}{s_{xx}} (\bar{z} - \bar{x}) = \text{Item 5} + (\text{Item 18} \times \text{Item 26})$	
30	$\hat{\bar{V}}(\bar{Y}_{lr}) =$ Estimated Variance on Regression Method $V(\bar{Y}_{lr}) = \frac{s^2_{y \cdot x}}{n_a} + \frac{s^2_y - s^2_{y \cdot x}}{n} + \frac{s^2_{y \cdot x} (\bar{z} - \bar{x})^2}{\sum_i (x_i - \bar{x})^2}$ $= \frac{\text{Item 19}}{\text{Item 1}} + \frac{\text{Item 16} - \text{Item 19}}{\text{Item 23}} + \frac{\text{Item 19} \times (\text{Item 26})^2}{\text{Item 11}}$	

CHAPTER VI

TABULATION PLAN

6.1 After the scrutiny and coding of data as described in the earlier chapters, the next stages of processing of data at FOD Hqrs. are data entry, validation of data and generation of tables and annexures. Work pertaining to all these stages is carried out in the EDP unit of AS wing at Faridabad. For this purpose, scrutinised and coded schedules kept in bundles in the prescribed manner are sent to the EDP unit.

6.2 The tabulation programme is drawn up by the Working Group keeping in view the objectives of the ICS scheme. The tabulation of data from the Central and State samples is done by both NSSO (FOD) and the SASAs concerned, and, hence, copies of the Programme are forwarded to the SASAs also.

6.3 The tabulation programme for various schedules of ICS scheme along with the necessary guidelines is given in Annex-I of this chapter.

6.4 In this connection, it is relevant to mention that the data tabulated as per the programme mentioned above forms the basis of the State-wise and All India reports on the review of Crop Statistics System brought out by NSSO (FOD). In addition to it, these tables are utilised for discussions in High level Co-ordination Committees (HLCC), Zonal meetings of the SASAs etc. convened by the State governments.

LIST OF TABLES TO BE GENERATED FROM THE RESULTS OF SAMPLE CHECK UNDER ICS SCHEME ON

- ☐ ENUMERATION OF AREA,
- ☐ PAGE TOTALLING IN KHASRA REGISTER AND
- ☐ CROP CUTTING EXPERIMENTS.

BASED ON SCHEDULES AS 1.0

- | | |
|---------|---------------------------------------------------------------------------------------------------------------------------------------------------|
| A-1 | District-wise distribution of selected villages for check on enumeration of area and response achieved. |
| A-2 | District-wise distribution of selected villages according to time-lag between the year of survey and up-dating of village maps. |
| A-3 | District-wise average work-load per patwari in the selected villages. |
| A-4 | Bivariate frequency distribution of selected villages according to total number of serial/survey numbers and geographical area. |
| A-5 | District-wise distribution of selected village according to completion or otherwise of girdawari by patwaris as per the prescribed time schedule. |
| A-6 | State-wise frequency distribution of patwaris of the selected villages, according to total number of villages allotted. |
| A-7 | District-wise distribution of selected villages according to the submission of TRS statement |
| A-8 | District-wise distribution of serial/survey numbers according to various recording errors observed in the selected villages. |
| A-8(a) | Crop-wise frequency distribution of the various recording errors for the state as a whole as observed in the selected villages. |
| A-9 | District-wise frequency distribution of errors in recording irrigation particulars as observed in selected villages. |
| A-9(a) | Crop-wise frequency distribution of errors in recording irrigation particulars for the state as a whole as observed in the selected villages. |
| A-10 | District-wise frequency distribution of errors in recording variety particulars as observed in the sample. |
| A-10(a) | Crop-wise frequency distribution of errors in recording variety particulars as observed in the sample. |
| A-11 | District-wise comparison of entries by supervisor and patwari of crop areas as per irrigation and seed variety. |
| A-11(a) | Crop-wise comparison of entries by supervisor and patwari of crop areas as per irrigation and seed variety. |

- A-12 Crop areas missed by patwaris due to lack of provision in the land records manual and their effect on other crop areas/ land uses as observed in the selected villages.
- A-13 Areas under short duration crops sown and harvested in between official season and missed by patwari as observed in the sample villages.
- A-14 District-wise distribution of sample villages for which the areas under crops are not available for the previous/current year.
- A-17&18 District-wise estimates of area under different crops based on the data recorded by the supervisor / patwari.
- A-19 District-wise estimates of area under various land uses as per nine fold classification during the previous year.
- A-23 District-wise area under various land uses as per the nine fold classification during the previous year.

BASED ON SCHEDULE AS 1.1

- A-15 District-wise distribution of number of selected villages according to the response achieved in checking aggregation of area figures in Khasra Register.
- A-15(a) District-wise distribution of sample villages according to completion or otherwise of girdawari aggregation work and submission of crop abstract as observed during sample check on aggregation of area figures in Khasra Register.
- A-16 District-wise frequency distribution of sample villages according to aggregation errors and their effect on crop area.
- A-20 District-wise estimates of area on the basis of the villages totals obtained by Superintending Officer/ State Supervisor and as reported by patwari.

BASED ON SCHEDULE AS 2.0

- Y-1 Crop-wise number of experiments planned for check at harvest and the response achieved.
- Y-2 Crop-wise number of experiments missed and lost due to various reasons.
- Y-3 Crop-wise distribution of experiments which were conducted by the designated primary workers and delegated workers alongwith the details regarding their training.
- Y-4 Crop-wise distribution of experiments according to reasons for substitution of villages / survey numbers.
- Y-5 Crop-wise distribution of experiments in conduct of which different types of mistakes were observed.
- Y-6 Position of supply and use of equipment.
- Y-7 Crop-wise estimates of yield rates(Kg/ha).
- Y-8 Estimated yield rates of high yielding and other varieties of crops for irrigated and unirrigated categories
- Y-9 Crop-wise rate of application of fertilizer and differential yield rates according to inputs.
- Y-10 A comparison of crop-wise distribution of number of experiments planned according to variety, irrigation and application of fertilizers vis-a-vis those actually conducted.
- Y-11 Crop-wise frequency distribution of number of experiments as per plot yield in kg/ha.
- Y-12 Distribution of experiments according to application of seed and irrigation as reported by supervisor, primary workers and khasra register.
- Y-13 Crop-wise differential yield rate according to use of pesticides.

GUIDELINES FOR THE PREPARATION OF TABLES SHOWING RESULTS OF SAMPLE CHECKS UNDER ICS

Sl. No.	Table No.	Col. No	Source			Guidelines / Check points
			Sch/ Table No.	Block	Item/Col.	
1	2	3	4	5	6	7
1	A-1	3,4,5	1.0	EP code	on top	`a' entries = as per supervisor. `b' entries = as per patwari. Cols 3,4 and 5 will account for villages with E.P. code 1, 2 and 3 respectively.
2.	A-2	3,4,5, 6 & 7	1.0	1	Item 7.2	Table A-2 will be prepared for first season of year only. Cols 3,4,5,6, and 7 will account for villages with code 1, 2, 3, 4 and 5 respectively.
		8,9	1.0	1	Item 7.1	Cols 8 will take into account villages with code 3 and col.9 will take into account code 4 & 9.
		2,10,11, 12 & 13	1.0	1	Items 8,9	col. 2 = Col. 12 + Col. 13. Also Col.2 = subtotals of Col.3 to Col.9. The entry in Col.2 should tally with the entry given in Col.6 of TableA-1
3.	A-3	2	1.0	1	Item 6 (a)	This table will be prepared for the first season of the year only.
						Add up for all sample villages and divide total by no. of sample villages analysed. Average thus obtained i.e. quotient upto one place of decimal will be entered here.
		3	1.0	1	Item 6 (b)	-do-
		4	1.0	2	1	Add up for all Sample villages and divide total serial/survey numbers so obtained by number of sample villages analysed. Quotient in whole number will be entered here.
		5	1.0	3.2	a & b	Add up for all sample villages and divide all geographical area so obtained by number of sample villages analysed. Average thus obtained i.e. quotient upto one place of decimal will be entered here.

Sl. No.	Table No.	Col. No	Source			Guidelines / Check points
			Sch/ Table No.	Block	Item/Col.	
1	2	3	4	5	6	7

Against State Total Col. 2 to 5 Add up the relevant entries for the State total all the sample villages in the state, district-wise and divide the figure so obtained by number of sample villages analysed in the state.

4.	A-4	1 to 11	1.0	2 & 3	Item 1 b1.2 & Item 3.2 (a) bl. 3	<p>This table will be prepared for the first season of the year only.</p> <p>The entry in col.12 and in the last row against "Total" will tally with each other. Also the percentage of Col. 2 to Col. 12 in the last row and percentage of all rows in Col.13 will be calculated as per the "Total" of Col.12 as mentioned in last row.</p>
5.	A-5	3	1.0	1	Item 10(a) & 10(c)	Refers to cases where the entry in 10(c) is on or before the date given in 10(a).
		4	1.0	1	-do-	Refers to the cases where the entry in 10(c) is after the date given in item 10(a).
		5	1.0	1	Item 10(b)	Refers to cases where code 1 is given in item 10(b) and there is no entry in item 10(c)
		12	1.0	1	10(e)	Refers to code 1 in item 10(e)
		13	1.0	1	10(f)	Refers to code 1 in item 10(f)
		7 to 10 & 14 to 17	1.0	1	10(d)	Depending upon entry in item 10(d) i.e. Code 4, 5, 6,7 in thick line box against item 10(d), corresponding to Code 1,2,3 or 4 respectively. Entries in respective cols 7, 8, 9, 10 and 14,15,16,17 of Table A-5 are to be made.
		20	1.0	1	10(d)	<p>Codes for col. 7 to 10 & 14 to 17:-</p> <p>1. Occupied with other work.</p> <p>2. TRS programme was not intimated in time</p> <p>3. Other reasons, and</p> <p>4. Reasons not available</p> <p>If code 8 is given in thick box against item 10(d)</p>

Sl. No.	Table No.	Col. No	Source			Guidelines / Check points
			Sch/ Table No.	Block	Item/Col.	
1	2	3	4	5	6	7
		21	1.0	1	10(b), (c) & (d)	No entry in item 10(b) and 10(c) and 10(d).
6.	A-6	2 & 5	1.0	1	6	Cols(4) to (6) will not be applicable where TRS is not in operation. This table is to be prepared for first season of the year only.
7.	A-7	3	1.0	1	10(b), 10(c), 11(a) & 11(c)	Date recorded against item 11(c) is prior to or same as date recorded against item 11(a) and also prior to date in item 10(c) or 10(c) is blank and entry in 10(b) is " code 2" or "code 3".
		4	1.0	1	10(c) 11(a) & 11(c)	Date in 11(c) is prior to or same as date in 11(a) but on or after the date in 10(c)
		5	1.0	1	10(b), 10(c) 11(a) & 11(c)	Date in item 11(c) is prior to or equal to 11(a), entry in 10(b) is code 1 but there is no entry in 10(c)
		7	1.0	1	-do-	Date in 11(c) is after date in 11(a) but before date in 10(c) or 10(c) is blank and entry in 10(b) is code 2 or 3.
		8	1.0	1	-do-	Date in 11(c) is after date in 11(a) and also on or after date in 10(c).
		9	1.0	1	-do-	Date in 11(c) is after date in 11(a) entry in 10(b) is code 1 but there is no entry in item 10(c).
		11	1.0	1	11(b), 11(c)	Entry in 11(b) is code 1 and there is no entry in item 11(c)
		12	-	-	-	Col.(6)+Col.(10)+Col.(11)= Col.(12)
		13	1.0	1	11(d)	Entry in item 11(d) is code 1.
		14	1.0	1	11(e)	Entry in item 11(e) is code 1.
		15	1.0	1	10(b) & 11(b)	Entry in item 11(b) is 2 and entry in 10(b) is fully i.e (1).
		16	1.0	1	10(b) & 11(b)	Entry in item 11(b) is `0' and entry in 10(b) is fully (1)
		17	1.0	1	- do -	Entry in item 11(b) is `0' and entry in 10 (b) is either 2 or 3.
		19	1.0	1	11(a) to 11(c)	Items 11(a) to 11(c) are blank

**Sl.
No.**

Sl. No.	Table No.	Col. No	Source			Guidelines / Check points
			Sch/ Table No.	Block	Item/Col.	
1	2	3	4	5	6	7
10	A-9	4-18	1.0	3.3	Cols.6 & 10	A separate table will be prepared for each specified crop and other crops in the state. The information to be recorded in this table will be obtained by comparing entries in col. (6) of block 3.3 with those of col(10) block 3.3 of sch. AS 1.0. Only those schedules will be considered wherein the entries for both supervisor and patwari are available. All sl. /survey no. in which the crop is reported by supervisor and / or patwari, pure or mixed ,will be accounted- for in this table. Figures in col. (20) against a distt. as well as for the state, for a crop should tally with the corresponding entries in col.(3) of table A-8. This will also be equal to total of col.4 & 8 in table A(8). For col 2 & 3 entries will be made from Table A-8(a), col 2 & 3 respectively.
11.	A-9 (a)	4to7 9to12 14to17 19to21	A-9		Cols 4 to7, 8 to 11, 12 to 15 16 to18	State level totals for each specified crop from table A-9 will be transferred to respective cols. of this table.
12.	A-10	4-18	1.0	3.3	Col.5 & 9	A separate table will be prepared for each of the crops for which term high yielding is applicable (namely rice, Jowar, Bajra, Maize, Wheat, Cotton and sugarcane). The information in this table will be obtained on comparing entries in col. (5) and col(9) of block 3.3 of schedule AS 1.0. Only those schedules will be considered for which both patwari's and supervisor's entries are available. NR = Not reported, HY = High Yelding , L = Local

Sl. No.	Table No.	Col. No	Source			Guidelines / Check points
			Sch/ Table No.	Block	Item/Col.	
1	2	3	4	5	6	7

Note :- Figures in col.(22) against a Distt. as well as for the state for a crop should tally with the corresponding entries in col.3 of table A-8. This will also be equal to total of col. 4 and 8 in table A-8.

13. A-10 (a) 4-18 A-10 - Col. 4-18

State level totals of cols 4 to 8 of table A-10 for each crop will be transferred in the corresponding cols.4-18 of this table. Percentage of the frequencies in cols. 4-18 will be calculated from Col. 22 at state level totals for all crops and recorded below the respective frequencies.

Checkpoint % age Total of Col. 4 to 18 equals 100

14 A-11 All cols. 1.0 4 -

A separate table will be prepared for each specified and other crops. The information under different cols. will be obtained from relevant entries in block 4. For mixed crops net area under the reference crops will be entered in this table. For this table, only those schedules will be considered for which both supervisors and patwaris entries are available.

15. A-11(a) 2 to 10, 13 to 18 A-11 - -

State level entries for different crops of table A-11 will be transferred to the corresponding cols. of this table

16. A-12 1-19 1.0 5(a) -

The names of the crops for which the area has been missed are to be recorded in the heading of cols.3 to 19. On referring to the entries recorded for the patch number in block 3.3, the name of crop or utilisation under which the area is actually recorded by the supervisor will be seen and the name of these crops / utilisation will be recorded

Sl. No.	Table No.	Col. No	Source			Guidelines / Check points
			Sch/ Table No.	Block	Item/Col.	
1	2	3	4	5	6	7

						under col.1 of this table. After striking the totals of cols and rows, the percentage to the total cropped area in the sample survey numbers as per supervisor's entries in block (4) will be worked out and recorded
17	A-13	1,2 4-7	1.0	5(b)	-	For entries under col.3 of the table, percentage of areas missed to the total cropped area in the sample as per supervisor's entries in block 4 will be worked out and recorded
18.	A-14	3-24	1.0	6.1,6.2 & 6.3	-	For entries in this table the information available in block 6.1, 6.2 and 6.3 and the remarks for non-availability of information will be considered.
19.	A-15	3-9	1.1	3	Cols. 4,5,6	The entries are to be made as per recording of entries in cols. 4,5 and 6 of block 3.
20.	A-15 (a)	3-18	1.1	2	Item 1(a),(b) & (c)	The information will relate to the schedules received as given under cols. 3 to 8 of table A-15.
21.	A-16		1.1	3	Cols. 4 to 6	A separate table is to be prepared for each specified crop. Only those schedules will be taken into account for which the corresponding entries as per supervisor and as per Patwari are available.
		2 & 3	1.1	3	Cols 4 & 5	No. of villages for which entries in cols. 4 & 5 of block 3 of Sch. AS 1.1 tally will be recorded in col.2 and the cases in which difference is observed will be entered in col.3.
		6 & 7	1.1	3	Cols 6 & 5	No. of villages for which entries in cols. 5 and 6 of block 3 of schedule AS 1.1 are same will be recorded in col. 6 and the cases in which difference is observed will be entered in col. 7.

Sl. No.	Table No.	Col. No	Source			Guidelines / Check points
			Sch/Tab le No.	Block	Item/Col.	
1	2	3	4	5	6	7

					Col.5 & 4	Cases where area figures are recorded in col.4 of block 3 of schedule AS 1.1 but not reported in col.5 of bl. 3 of schedule A.S 1.1 as the crop abstract was not submitted by the time of the visit of the supervisor, will also be included in cols. 6 & 7 of this table
		10 to12	1.1	3	Col.4 to 6	The area figures reported in cols. 6, 5 and 4 will be reported in cols 10,11 and 12 respectively. For col. 11 the cases where the area figures are reported in col.4 of block 3 of schedule AS 1.1 but not reported in col.5 of block 3 of schedule AS 1.1 will also be included. In case the area under reference crop is reported in mixture, the net area under the crop will be taken into consideration.
22.	A-17/18	-	1.0	-	-	<p>Separate table will be prepared for each specified crop. When the specified crop is a constituent of recognised mixture, the net area under the crop will be obtained as per standard proportions given in block 7 of schedule AS 1.0. Estimates of area will be worked out for each category of crop (i) high yielding - irrigated. (ii) high yielding - unirrigated.(iii) Local -irrigated,(iv) local-unirrigated. Simple addition of estimates of area category-wise gives area for the specified crop. Pooling of estimates for Central and State sample is done by finding the weighted average of the two estimates taking no. of samples analysed in each agency as weights. The estimates of %SE will be worked out and given for the total estimated area under the crop for the state as a whole. Stratum-wise estimates of area under each category will be obtained as under:</p>

Sl. No.	Table No.	Col. No	Source			Guidelines / Check points
			Sch/ Table No.	Block	Item/Col.	
1	2	3	4	5	6	7

$$\hat{Y} = \frac{N_i}{n_i} \sum_{j=1}^{n_i} \left[\frac{H_{ij} \times a_{ij}}{S_{ij}} \right]$$

where

\hat{Y}_i = Estimated Area under a crop in the i^{th} stratum

a_{ij} = Total area under a crop in the selected clusters of survey numbers in j^{th} village of i^{th} stratum,

S_{ij} = Number of selected survey/serial numbers in the j^{th} sample in the i^{th} stratum,

H_{ij} = Highest survey/serial number in the j^{th} sample village in the i^{th} stratum,

n_i = Number of sample villages analysed in the i^{th} stratum and

N_i = Total number of revenue villages in the i^{th} stratum.

The estimates of area thus obtained for each stratum in district is added to get the estimate of area at district level Y_d and the total of district level estimate gives the

State level estimate of area (\hat{Y})

However, for unsurveyed villages for which total geographical area of the village is not available and selection of plots has been done by method of selection of households in the village, the village level estimate will be obtained by using the inflation factor:

$$\frac{\text{Total No. of households in a village}}{\text{No. of Sample households}} \times a_{ij}$$

where

a_{ij} = Area under the crop in the plots belonging to selected households in the j^{th} sample village of i^{th} stratum.

Sl. No.	Table No.	Col. No	Source			Guidelines / Check points
			Sch/ Table No.	Block	Item/Col.	
1	2	3	4	5	6	7

There are two sets of area estimates, A-III and A-IV based on entries made in the Khasra Register by patwari and observations of Central/ State Supervisors respectively prepared as per the formula given above.

The estimates of variance at district level is calculated from

$$V(Y_d) = \frac{N(N-n)}{n} \left[\frac{\sum_{i=1}^{K^*} \sum_{j=1}^{n_i} \hat{Y}_{ij}^2 - \left(\sum_{i=1}^{K^*} \sum_{j=1}^{n_i} \hat{Y}_{ij} \right)^2 / n}{(n-1)} \right]$$

where ,
 \hat{Y}_{ij}

\hat{y}_{ij} = estimated area under the crop in the j^{th} sample village in i^{th} stratum in the district which is given by

$$\hat{Y}_{ij} = \frac{H_{ij}}{S_{ij}} \times a_{ij}$$

K^* = the number of strata in a district in which the estimates of area under the reference crop is not zero.

$$N = \sum_{i=1}^{K^*} N_i \quad \text{and} \quad n = \sum_{i=1}^{K^*} n_i$$

The variance at state level is the sum of the variance of district level estimate.

Sl. No.	Table No.	Col. No	Source			Guidelines / Check points
			Sch/ Table No.	Block	Item/Col.	
1	2	3	4	5	6	7

The percentage standard error of the estimate of area at state level is obtained as follows:

$$\% \text{ S.E.} = \frac{\text{S.E. of the estimate}}{\text{Estimate}} \times 100$$

Where standard error is the square root of the state level variance which is the sum of variance of the district level estimates.

23	A-19	5-13	1.0	8	-	The procedure for estimation of area and standard error for each class of land use is similar to that of given for table A-17, except that for table A-17 the village value (Y _{ij}) is estimated whereas for table A-19, the village value is actual value as given in block 8 of Sch AS 1.0 for each land use. The villages having complete and correct information corresponding to col.2 of this table will be used for the estimation. This table is prepared once in 5 years.
24	A-20	3-5	1.1	3	Cols 5 & 6	In such cases where figures are reported in col.4 but not reported in col. 5 of block 3 as the crop abstract was not submitted by the time of supervisor's visit figures in col.4 will also be taken for col.5. When the specified crop is reported in mixture, net area under the crop should be worked out. The procedure for estimation of area and standard error for each crop is similar to that given for table A-17 except that for A-17 the village value (Y _{ij}) is estimated Whereas for this table the village value is the area of the village reported in block- 3 (col.6 & col.5) of Sch. AS 1.1. Based on these two sets of area figures under a crop in a village, two estimates A-I and A-II respectively are prepared.

Sl. No.	Table No.	Col. No	Source			Guidelines / Check points
			Sch/ Table No.	Block	Item/Col.	
1	2	3	4	5	6	7

25.	A-23	1 to 6 & 7 to 16 18 & 19	1.0	1, 2, 3 & 4, 8	-	Geographical area of selected serial / survey numbers as received in the box space at the bottom of page 12 of schedule AS 1.0 will be recorded in col. 17. Total area under crops as recorded in the box space at the top of page 12 i.e. block 4 of schedule AS 1.0 will be recorded in cols 18 and 19 for Kharif and Rabi seasons respectively. It is evident from the proforma for table A-23 that the entries are to be made village-wise for each stratum / Distt. Totals will be struck at the district level.
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Pooling of central sample and state sample estimates

The estimates for the two sample at State level will then be pooled together as under:

Let \hat{Y}_c be the estimate of area at State level for Central sample.

\hat{Y}_s be the estimate of area at State level for State sample.

\hat{V}_c be the estimate of variance at State level for Central sample.

\hat{V}_s be the estimate of variance at State level for State sample.

Calculate inverse of variance as e_c & e_s

$$e_c = \frac{1}{\hat{V}_c} \quad \text{and} \quad e_s = \frac{1}{\hat{V}_s}$$

The pooled estimate of area is given by

$$\hat{Y}_p = \frac{e_c \hat{Y}_c + e_s \hat{Y}_s}{e_c + e_s}$$

and an estimate of its variance by

$$\hat{V}(\hat{Y}_p) = \frac{1}{e_c + e_s}$$

This table will be prepared once in 5 years.

Sl. No.	Table No.	Col. No	Source			Guidelines / Check points
			Sch/ Table No.	Block	Item/Col.	
1	2	3	4	5	6	7
26.	Y-1	3-6	2.0	1	7 (b)	This table gives response achieved in the programme of sample check on crop cutting experiments.
27.	Y-2	2-8 10-14	2.0	1	7 (b), 7(c)	The information will be compiled on the basis of the information given in item 7(b) and 7(c) of block 1. The number of experiments against each crop and total for the state in cols 3, 9 and 15 should correspond to the experiments recorded in cols. 3, 4 and 5 respectively in table Y-1.
28	Y-3	3-14	2.0	1	8 (c) (Dark box)	An experiment will be treated as conducted by delegated primary worker if he is junior to the worker to whom the experiments are allotted.
29	Y-4	5, 7-10 6,12-15	2.0 2.0	1 2	5(b) 3	The number of experiments against each crop and total for the state in cols (3) & (4) will correspond to the experiment recorded in cols. (3) & (4) of table Y-1, cols (3) & (9), of Y-2, Col.(2) of Y-3 and cols. (3) & (4) of table Y-4 respectively.
30	Y-5	4	2.0	2	6(a) or 6(b)	Number of experiments for which code other than `0' is given in item 6(a) or 6(b) in block 2 will be recorded here.
		5	2.0	2	6(c)	Experiments with other than `0' code in item 6(c) of block 2 will be entered here.
		6	2.0	8	1(i)	Total number of experiments for which type of seed reported under col.2 and 3, 5 and 6 (as per primary worker and supervisor) differ, will be recorded
		7	2.0	8	1(iii)	
		8	2.0	8	2(i)	
		9	2.0	8	3(i)	
		10	2.0	8	4(i)	
		11	2.0	8	5(i)	
		12	2.0	3	Col. 3 & 4	
		13	2.0	3	Col. 5 & 6	
		14	2.0	4	Item 1 col.2 & 3	
		15	2.0	4	Item 2 col. 2 & 3	

Sl. No.	Table No.	Col. No	Source			Guidelines / Check points
			Sch/ Table No.	Block	Item/Col.	
1	2	3	4	5	6	7

		16	2.0	5.1	Item 4(i) Col. 2 & 3	
		17	2.0	7	Item 1 col.2 & 3	
		18	2.0	9.2	Col. 3 to 5	
		19	-	-	-	Total number of experiments for which any one of the item is missing will be recorded in this col.

31	Y-6	3-7 9-12 & 14	2.0	6	2 & 3	Against each item of equipment the entries in cols. 3, 4, 5, 6, 7, 9, 10, 11, 12 and 14 will respectively include experiments against which codes 0, 1, 2, 3, 4, 5, 6, 7, 8, and 9 are entered in cols. 2 and 3 of block 6.
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32.	Y-7	-	2.0	5.1	3(iii)	(i) For estimation of yield rate for the crop at district level in terms of green weight in grams per plot, which is simple average of sample plot yields and is given by
-----	-----	---	-----	-----	--------	---------------------------------------------------------------------------------------------------------------------------------------------------------------------------

$$\bar{Y}_{ig} = \frac{\sum_{j=1}^{m_i} \sum_{k=1}^{n_{ij}} Y_{ijk}}{n_i}$$

Where

\bar{Y}_{ig} = average yield rate for the crop at district level in terms of green weight in grams per plot

Y_{ijk} = plot yield in gms. in the k^{th} experimental plot of j^{th} sample village in the i^{th} district,

n_{ij} = number of experiments analysed in the j^{th} sample village of the i^{th} district,

n_i = number of experiments analysed in the i^{th} district, given by :-

$$\sum_{j=1}^{m_i} n_{ij}$$

m_i = number of sample villages in which experiments are analysed in the i^{th} district,

I. No.	Table No.	Col. No	Source			Guidelines / Check points
			Sch/ Table No.	Block	Item/Col.	
1	2	3	4	5	6	7

(ii) Calculate the conversion factor to convert the yield rate of green produce in grams /plot to yield rate in terms of dried produce in Kg./ha. Conversion Factor (C.F) is to be worked out by making use of the driage ratio at the state level for the previous year and the plot size. For Rice, also use the recovery ratio of rice from paddy.

iii) Obtain the estimate of yield rate at district level in terms of dried produce in kg./ha. which is given by

$$\hat{\bar{Y}}_i = \hat{\bar{Y}}_{Ig} \times C.F.$$

(iv) Obtain the estimated average yield rate at state level given by:

$$\hat{\bar{Y}} = \frac{\sum_{i=1}^d a_i \times \hat{\bar{Y}}_i}{\sum_{i=1}^d a_i}$$

Where

a_i = area under the crop in the i^{th} district

d = number of districts in the State.

The percentage standard error of the yield rate of estimate is given by

$$\frac{\text{Standard Error of the Estimate}}{\text{Estimate}} \times 100$$

Standard error is the square root of the variance of the estimated yield rate i.e. the estimated variance of estimated yield rate at state level is given by

Sl. No.	Table No.	Col. No	Source			Guidelines / Check points
			Sch/ Table No.	Block	Item/Col.	
1	2	3	4	5	6	7

$$\hat{\hat{V}}(\hat{Y}) =$$

$$\left[F \sum_{i=1}^d \frac{a_i^2}{n_i} + (E - F) \sum_{i=1}^d \frac{a_i^2 \sum_{j=1}^{m_i} n_{ij}^2}{\lambda_i n_i^2} \right]$$

$$\left[\sum_{i=1}^d a_i \right]^2$$

Where

$\hat{\hat{V}}(\hat{Y})$ = Estimated variance of the estimate of average yield at state level

$$\lambda_i = \frac{n_i^2 - \sum_{j=1}^{m_i} n_{ij}^2}{n_i (m_i - 1)}$$

E = mean square of yield between villages, which is given by

$$E = \frac{\sum_{i=1}^d \left[\sum_{j=1}^{m_i} \frac{\left(\sum_{k=1}^{n_{ij}} Y_{ijk} \right)^2}{n_{ij}} - \frac{\left(\sum_{j=1}^{m_i} \sum_{k=1}^{n_{ij}} Y_{ijk} \right)^2}{n_i} \right]}{\sum_{i=1}^d (m_i - 1)}$$

F = mean square of yield within villages, which is given by

$$F = \frac{\sum_{i=1}^d \left[\sum_{j=1}^{m_i} \sum_{k=1}^{n_{ij}} Y_{ijk}^2 - \sum_{j=1}^{m_i} \frac{\left(\sum_{k=1}^{n_{ij}} Y_{ijk} \right)^2}{n_{ij}} \right]}{\sum_{i=1}^d (n_i - m_i)}$$

Sl. No.	Table No.	Col. No	Source			Guidelines / Check points
			Sch/ Table No.	Block	Item/Col.	
1	2	3	4	5	6	7

and percentage of estimated standard error is given by

$$\sqrt{\frac{\hat{V}(\hat{\bar{Y}})}{\hat{\bar{Y}}^2}}$$

$$\% SE (\hat{\bar{Y}}) = \frac{\sqrt{\hat{V}(\hat{\bar{Y}})}}{\hat{\bar{Y}}} \times 100$$

The estimate of yield rate and its standard error will be prepared separately for central and state sample and presented in the table.

Since the value of Y_{ijk} is in terms of green produce in gms/plot, the above

formula gives $\hat{V}(\hat{\bar{Y}})$ in terms of green produce and therefore to obtain variance in terms of dry produce. This will be multiplied by $(C.F.)^2$.

Crop for which pre-stratification in the planning of experiments under ICS has been adopted according to the corresponding pre stratification under GCES in the State, the estimates of yield rate and its standard error will be prepared separately for each category of a crop. The estimates for the two or more categories of a crop at State level will be combined as under:

Let

$\hat{\bar{Y}}_1$ be the estimated average yield rate for the first category.

$\hat{\bar{Y}}_2$ be the estimated average yield rate for the second category.

A_1 be the area of the crop for the state under the first category.

A_2 be the area of the crop for the state under the second category.

Then the combined estimate of yield rate is given by

Sl. No.	Table No.	Col. No	Source			Guidelines / Check points
			Sch/ Table No.	Block	Item/Col.	
1	2	3	4	5	6	7

$$\hat{Y}_{(1+2)} = \frac{\hat{\bar{Y}}_1 A_1 + \hat{\bar{Y}}_2 A_2}{A_1 + A_2}$$

and estimate of its variance is given by

$$V[\hat{\bar{Y}}_{(1+2)}] = P_1^2 \hat{V}(\hat{\bar{Y}}_1) + P_2^2 \hat{V}(\hat{\bar{Y}}_2)$$

where

$$P_1 = \frac{A_1}{A_1 + A_2} \quad \& \quad P_2 = \frac{A_2}{A_1 + A_2}$$

$\hat{V}(\hat{\bar{Y}}_1)$ = the estimate of variance of the Ist category

$\hat{V}(\hat{\bar{Y}}_2)$ = the estimate of variance of the IInd category

Similar procedure will be followed for all types of stratification including four fold stratification.

The estimate of yield rate and its standard error will be prepared separately for central and state sample and presented in this table. The estimates for the two samples at State level will then be pooled together as under:

Let

$\hat{\bar{Y}}_c$ be the estimated average yield for central sample.

$\hat{\bar{Y}}_s$ be the estimated average yield for state sample

\hat{V}_c be the estimate of variance for the central sample

\hat{V}_s be the estimate of variance for state sample.

Sl. No.	Table No.	Col. No	Source			Guidelines / Check points
			Sch/ Table No.	Block	Item/Col.	
1	2	3	4	5	6	7

Calculate

$$e_c = \frac{1}{\hat{Y}_c} \text{ and } e_s = \frac{1}{\hat{Y}_s}$$

The pooled estimate of yield is given by

$$\hat{Y}_p = \frac{e_c \hat{Y}_c + e_s \hat{Y}_s}{e_c + e_s}$$

and an estimate of its variance by

$$V(\hat{Y}_p) = \frac{1}{e_c + e_s}$$

33.	Y-8	3-6	2.0	8	Items 1(i) 2(i)	This table is not to be generated for cotton. The yield rate required in this table for various cols are simple average based on yield of experiments with appropriate correction factors (C.F) applied. col.7 = (col.3 + Col.5) col.8 = (col.3 X Col.4 + col.5 X col.6) ÷ (col.3 + col.5) col.13 = col.9 + col.11 col.14 = (col.9 X col.10 + col.11 X col.12) ÷ (col. 9 + col.11) col.15 = col. 3 + col.9 col.16 = (col.3 X col. 4 + col.9 X col.10) ÷ (col.3 + col.9) Col. 17 = (Col. 5 + Col.11) Col.18 = (Col.5 X Col 6 + Col. 11 X col. 12) ÷ (Col.5 + Col.11) Col.19 = (Col.15 + col.17) Col. 20 =(Col.15 X Col. 16 + Col. 17 X Col. 18) ÷ (Col.15+ Col.17)
		9-12	2.0	5.1	Item 3 (iii)	
		7				
		8				
		13				
		14				
		15				
		16				
		17				
		18				
		19				
		20				
34	Y-9	All	2.0	8	(Item 3 & 4)	The table is not to be generated for crop cotton.
			2.0	5.1	(Item 3(iii)	

Sl. No.	Table No.	Col. No	Source			Guidelines / Check points
			Sch/ Table No.	Block	Item/Col.	
1	2	3	4	5	6	7
35	Y-10	3	2.0	1	7(b)	
		4 & 5	2.0	8	2(i)	Col(4) + Col.(5) = Col.(3)
		6	-	-	-	
						Col. 4
						Col.6 = ----- X 100
						Co.3
		7 & 8	2.0	8	1(i)	Col. 7 + Col. 8 = Col.3
		9	-	-	-	Col. 7
						Col.9 = ----- X 100
						Col.3
		10 & 11	2.0	8	3 (i)	Col.10 + Col.11=Col.3
		12	-	-	-	
						Col. 10
						Col.12 = ----- X 100
						Col.3
36	Y-11	1	2.0	5.1	3(iii)	This table is not to be generated for crop cotton.
		2 & 4	2.0	8	2(i)	
37	Y-12	3-20	2.0	8	1(i) & 2(i)	--
38	Y-13	-	-	-	-	This table shall be prepared by taking a simple average of the yield of all experiments using pesticides.

TABLE: A-1

**DISTRICTWISE DISTRIBUTION OF SELECTED VILLAGES FOR CHECK
ON
ENUMERATION OF AREA AND RESPONSE ACHIEVED**

STATE _____ YEAR _____ SEASON _____ SAMPLE TYPE _____

DISTRICT	NO. OF VILLAGES FOR WHICH SCHEDULES RECEIVED	NO. OF VILLAGES FOR WHICH SCHEDULE AS 1.0 IS ANALYSED				PERCENTAGE RESPONSE TO COL. (2)			
		ENTRIES TOGETHER	ENTRIES SEPARATELY	ENTRIES ONLY	TOTAL	ENTRIES TOGETHER	ENTRIES SEPARATELY	WITH ENTRIES ONLY	TOTAL
1	2	3	4	5	6	7	8	9	10
STATE									

i

1. The entry in Col 2. is based on Challan received in EDP unit from State units.
2. $\text{Col.6} = \text{Col.3} + \text{Col.4} + \text{Col.5}$
3. $\text{Col.7} = \frac{\text{Col.2}}{\text{Col.4}} \times 100$
4. $\text{Col.8} = \frac{\text{Col.2}}{\text{Col.5}} \times 100$
5. $\text{Col.9} = \frac{\text{Col.2}}{\text{Col.6}} \times 100$
6. $\text{Col.10} = \frac{\text{Col.2}}{\text{Col.6}} \times 100$
7. The entry in Col.10 should be 100

TABLE: A-2

**DISTRICTWISE DISTRIBUTION OF SELECTED VILLAGES ACCORDING TO THE
LAG BETWEEN THE YEAR OF SURVEY AND UPDATING OF VILLAGE MAPS**

STATE _____ **YEAR** _____ **SEASON** _____ **SAMPLE TYPE** _____

DISTRICT	NO. OF VILLAGES ANALYSED	NO. OF VILLAGES ACCORDING TO TIME LAG (YEARS) BETWEEN THE YEAR OF SURVEY AND UPDATING OF MAP					NO. OF VILLAGES		NO. OF VILLAGES FOR WHICH			
		1	2 TO 5	6 TO 10	11 TO 20	ABOVE 20	UNSURVEYED AND INFORMATION NOT APPLICABLE	FOR WHICH INFORMATION NOT AVAILABLE	MAPS WERE AVAILABLE WITH PATWARI			MAPS NOT AVAILABLE
									USA BLE	UN-USA BLE	Total	
1	2	3	4	5	6	7	8	9	10	11	12	13
S T A T E												
% to COL .2	100								X	X		
% of Col. 10 & 11 is with respect to Col.12						X	X	X			100	X

Note: This table will be prepared only for the first season of the year

Col.2= (Col 3 to Col .9) = col.12 + col.13

TABLE- A 3

DISTRICTWISE AVERAGE WORKLOAD PER PATWARI IN THE SELECTED VILLAGES

STATE YEAR SEASON SAMPLE TYPE

[illegible]

Note: (i) This table will be prepared only for the first season of the year.
(ii) Col. 3 is not applicable for EARAS State

TABLE -A-4**BIVARIATE FREQUENCY DISTRIBUTION OF SELECTED VILLAGES ACCORDING TO TOTAL NO. OF SERIAL/ SURVEY NUMBERS AND GEOGRAPHICAL AREA****STATE _____ YEAR _____ SEASON _____ SAMPLE TYPE _____**

CLASS INTERVAL OF SERIAL / SURVEY NUMBERS (CODE)	CLASS INTERVAL OF GEOGRAPHICAL AREA (HA)											
	UP TO 50 (0)	51 TO 100 (1)	101 TO 200 (2)	201 TO 400 (3)	401 TO 600 (4)	601 TO 800 (5)	801 TO 1000 (6)	1001 TO 3000 (7)	ABOVE 3001 (8)	NOT REPOR TED (9)	TOTAL	PERCE- NTAGE
1	2	3	4	5	6	7	8	9	10	11	12	13
UP TO 50 (0)												
51 TO 100 (1)												
101 TO 200 (2)												
201 TO 400 (3)												
401 TO 600 (4)												
601 TO 800 (5)												
801 TO 1000 (6)												
1001 TO 5000 (7)												
MORE THAN 5000 (8)												
INFORMATION NOT REPORTED (9)												
TOTAL												100
PERCENTAGE											100	X

- Note : (i) This table will be prepared only for first season
(ii) The percentage of col. 2 to 12 in the last row and the percentage of all rows in col.13 will be calculated as per the total of col.12

**DISTRICTWISE DISTRIBUTION OF SELECTED VILLAGES ACCORDING TO
COMPLETION OR OTHERWISE OF GIRDAWARI BY PATWARI AS PER THE
PRESCRIBED TIME SCHEDULE**

STATE	YEAR	SEASON	SAMPLE TYPE
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[illegible]

Note : (i) col.2=col.19+col.20+col.21 (ii) col.2 of table a-2 should tally with col.2 of table a-5

Reason code :	Occupied with other work	=	1
	TRS programme was not intimated in time	=	2
	Other reasons	=	3
	Reasons not available	=	4

(These codes correspond to pre-tabulation coding i.e. 4, 5, 6 & 7 for item 10(d) of Schedule AS 1.0)

@ = Information about completion of girdawari not available

TABLE: A-6

**FREQUENCY DISTRIBUTION OF PATWARI OF THE SELECTED VILLAGE
ACCORDING TO THE TOTAL NUMBER OF VILLAGES ALLOTTED**

STATE _____ **YEAR** _____ **SEASON** _____ **SAMPLE TYPE** _____

TOTAL			TRS		
TOTAL NO. OF VILLAGES ALLOTTED PER PATWARI	FREQUENCY	PERCENTAGE (0.0)	TOTAL NO. OF VILLAGES ALLOTTED PER PATWARI	FREQUENCY	PERCENTAGE (0.0)
1	2	3	4	5	6
1 TO 5			1		
6 TO 10			2		
11 TO 15			3		
ABOVE 15			ABOVE 3		
INFORMATION NOT AVAILABLE			INFORMATION NOT AVAILABLE		
TOTAL X		100	X		100

- Note :**
- (i) This table is to be prepared only for the first season of the year
 - (ii) Col. 4, 5, 6 are not applicable for EARAS State
(i. e. Orissa, West Bengal and Kerala States)
 - (iii) Percentage in col.3 & 6 is based on total of col.2

TABLE A-7

DISTRICTWISE DISTRIBUTION OF SELECTED VILLAGES ACCORDING TO THE

SUBMISSION OF TRS STATEMENT

STATE _____ YEAR _____ SEASON _____ SAMPLE TYPE _____

D I S T R I C T	NO. OF VI LL AG ES AN AL YS ED	NO. OF VILLAGES FOR WHICH																	
		TRS STATEMENT SUMITTED										(OUT OF COL. 12)		TRS STATEMENT NOT SUBMITTED			IN FO RM AT IO N AB OU T SU MI SS IO N OF TRS STA TT AV AI LA BLE	TRS STAT TE ME NT NOT TO BE SUBM ITTED (a) BE ING NON TRS VILLA GES (b) AS PER STATE INSTR UCTIO NS	
		IN TIME				LATE				B U T D A T E O F S U B T O T A L (6 + 10 + 11)	THOU GH GIRD WARI COM PLE TED			A S G I R D E R O W S T H E R O T A C O M P L E T E D	SUB TOT AL (COL 15+ 16+ +17)				
		BE FO RE GI RD AW ARI	AF TE R GI RD AW ARI	BUT CO ULD NOT BE COM PA RED WI TH GIR DAW RI COM PLE TI ON	SUB TO TAL (CO. 3+4 +5)	BE FO RE GI RD AW ARI	AF TE R GI RD AW ARI	BUT CO ULD NOT BE COM PA RED WI TH GIR DAW RI COM PLE TI ON	S U B T O T A L (C O. 7 + 8 + 9)										
											TRS STA TEM ENT SUB MIT TED IN STA NDA RD FO RM	D U P L I C A T E C O P Y O F S T A T E M E N T K E P T							
A S D U E C O N S I D E R O V E R																			
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Total																			
% to Col.2 (except 13 & 14)												X	X						
% to Co forCol 1 14		X	X	X	X	X	X	X	X	X	100			X	X	X	X	X	X

Note : (i) Percentages of all columns except col.13 and col.14 are with reference to col.2
(ii) Percentages of col.13 and 14 with reference to col.12

DISTRICTWISE DISTRIBUTION OF SERIAL/SURVEY NUMBERS ACCORDING TO VARIOUS RECORDING ERRORS AS OBSERVED IN THE SELECTED VILLAGES

CROP

Note:

- (I) Percentage of col.(4) and col.(8) are with reference to col.(3)
- (ii) Percentage of col.(5), (6) and col.(7) are with reference to col.(8)
- (iii) Col. (2) of table a-8 should be equal to col. (2) of A-11
- (iv) This table will be prepared only for those schedules for which EP code=1 & 2
e₀= ries for the crop are identical
- e₁= Where the supervisor reported the crop but the patwari did not report
- e₂= Where the supervisor did not report the crop but the patwari reported it
- e₃= Where the area under the crop reported by supervisor and patwari differed

CROPWISE FREQUENCY DISTRIBUTION OF SERIAL/SURVEY NUMBERS ACCORDING TO VARIOUS RECORDING ERRORS AS OBSERVED IN THE SELECTED VILLAGES

CROP	NUMBER OF VILLAGES REPORTING CROP	NUMBER OF SERIAL/ SURVEY NOS. REPORTING CROP	NUMBER OF SERIAL/ SURVEY NOS WITH.				
			NO ERRORS	ERRORS			TOTAL
			e ₀	e ₁	e ₂	e ₃	
1	2	3	4	5	6	7	8
ALL CROPS							
PERCENT AGE w.r.t. Col.3	X	100					
PERCENT AGE w.r.t. Col.8	X	X	X				100

$e_0 =$ Where the supervisor reported the crop but the patwari did not report
 $e_1 =$ Where the supervisor did not report the crop but the patwari reported it
 $e_2 =$ Where the area under the crop reported by supervisor and patwari differed

TABLE A-9

**DISTRICTWISE FREQUENCY DISTRIBUTION OF ERRORS IN
RECORDING IRRIGATION PARTICULARS AS OBSERVED IN THE
SELECTED VILLAGES**

STATE _____ YEAR _____ SEASON _____ SAMPLE TYPE _____
CROP _____

DIS- TRI- CT	NO. OF VILL- AGES REPO- RTING CROP	NO. OF SER- IAL/ SUR- VEY NOS. REPO- TING CROP	SUPERVISOR HAS ENTERED IN SURVEY NUMBERS																TO T AL OF CO LS. 4, 9 & 14	TO T AL OF CO LS. 4 TO 18
			IRR ONLY				UI ONLY				UI & IRR BOTH				NR THE CROP					
			PATWARI HAS ENTERED				PATWARI HAS ENTERED				PATWARI HAS ENTERED				PATWARI HAS ENTERED					
			I ON- LY	UI ON- LY	UI & I BO TH	NR THE CR OP	I ON- LY	UI ON- LY	UI & I BO TH	NR THE CR OP	I ON- LY	UI ON- LY	UI & I BO TH	NR THE CR OP	I ON- LY	UI ON- LY	UI & I BO TH			
			11	12	13	14	21	22	23	24	31	32	33	34	41	42	43			
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	
ST AT E																				

NR = not reported

UI = un - irrigated

I = irrigated

- Note: (i) Figures in col.20 against district as well as for the state for a crop should tally with the corresponding entries in col. (3) of table a-8. This will also be equal to total of col.(4) and col.8 in table a-8.
- (ii) Col.(2) and col.(3) of this table will be made available from the col. (2) and col.(3) of table a.8 (a) respectively.

TABLE A-9 (a)

CROPWISE FREQUENCY DISTRIBUTION OF ERRORS IN RECORDING IRRIGATION PARTICULARS AS OBSERVED IN THE SELECTED VILLAGES

STATE _____ YEAR _____ SEASON _____ SAMPLE TYPE _____
CROP _____

C R O P	NO. OF VI LL AG ES RE PO RT ING CR OP	NO. OF SER- IAL/ SUR- VEY NOS. RE PO RTI NG CR OP	SUPERVISOR HAS ENTERED IN SURVEY NUMBERS																			TO T AL OF CO LS. 4, 10 & 16	TO T AL OF CO LS. 13, 18 22 & 23 .
			IRR ONLY				UI ONLY					UI & IRR BOTH					NR THE CROP						
			PATWARI HAS ENTERED				PATWARI HAS ENTERED					PATWARI HAS ENTERED					PATWARI HAS ENTERED						
			I ON- LY 11	UI ON- LY 12	UI & I BO TH 13	NR THE CR OP 14	T O T A L (5+ 6+ 7)	I ON- LY 21	UI ON- LY 22	UI & I BO TH 23	NR THE CR OP 24	T O T A L (9+ 11+ 12)	I ON- LY 31	UI ON- LY 32	UI & I BO TH 33	NR THE CR OP 34	T O T A L (14+ 15+ 17)	I ON- LY 41	UI ON- LY 42	UI & I BO TH 43	T O T A L (19+ 20+ 21)		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
A L L C R O P S																							
% T O C O L. 24	X	100																					100

TABLE: A-10
STRICTWISE FREQUENCY DISTRIBUTION OF ERRORS IN
RECORDING VARIETY PARTICULARS AS OBSERVED IN THE
SELECTED VILLAGES

STATE _____ YEAR _____ SEASON _____ SAMPLE TYPE _____
CROP _____

DISTRICT	NO. OF VILLAGES REPORTING CROP	NO. OF SERIAL/SURVEY NOS. REPORTING CROP	SUPERVISOR HAS ENTERED IN SURVEY NUMBERS																TOTAL OF COLUMNS 4, 9 & 14	TOTAL OF COLUMNS 7, 11 & 15	TOTAL OF COLUMNS 16, 17 & 18	TOTAL OF COLUMNS 4 TO 18
			HY ONLY				L ONLY				HY & L BOTH				NR THE CRO							
			PATWARI HAS ENTERED				PATWARI HAS ENTERED				PATWARI HAS ENTERED				PATWARI HA							
			HY ON-LY	L ON-LY	HY & L BOTH	NR THE CROP	HY ON-LY	L ON-LY	HY & L BOTH	NR THE CROP	HY ON-LY	L ON-LY	HY & L BOTH	NR THE CROP	HY ON-LY	L ON-LY	HY & L BOTH					
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	



TABLE: A-10 (a)

CROPWISE FREQUENCY DISTRIBUTION OF ERRORS IN RECORDING VARIETY PARTICULARS AS OBSERVED IN THE SELECTED VILLAGES

STATE _____ YEAR _____ SEASON _____ SAMPLE TYPE _____
CROP _____

C R O P	NO. OF VILL- AGES REP OR TING CR OP	NO. OF SER- IAL/ SUR- VEY NOS. REP OR TI NG CR OP	SUPERVISOR HAS ENTERED IN SURVEY NUMBERS																TO TA L OF CO LS. 4, 9 & 14	TO TA L OF CO LS. 7, 11 & 15	TO T AL OF CO LS. 16, 17 & 18	TO T AL OF CO LS. 4 T O 18
			HY ONLY				L ONLY				HY & L BOTH				NR THE CROP							
			PATWARI HAS ENTERED				PATWARI HAS ENTERED				PATWARI HAS ENTERED				PATWARI HAS ENTERED							
			HY ON LY	L ON LY	HY & L BO TH	NR THE CR OP	HY ON- LY	L ON LY	HY & L BO TH	NR TH CR OP	HY ON- LY	L ON- LY	HY & L BO TH	NR TH CR OP	HY ON- LY	L ON- LY	HY & L BO TH					
			11	12	13	14	21	22	23	24	31	32	33	34	41	42	43					
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	
TO TA L FOR ALL CRO PS																						
PE RC EN TA GE TO CO L. 22	X	100																			100	

NR = not reported

UI = un-irrigated

I = irrigated

NOTE: %age total of col.4 to 18 equals 100

TABLE: A-11

DISTRICTWISE COMPARISION OF ENTRIES BY SUPERVISOR AND PATWARI OF CROP AREAS AS PER IRRIGATION AND SEED VARIETY

STATE _____ YEAR _____ SEASON _____ SAMPLE TYPE _____
CROP _____

D I S T R I C T	No. OF VILLA GES REPOR TING CROP			COMPARISON AS PER PARTICULARS						CO L 8-5/ 5* 100	COL 10-7/ 7 * 100	COMPARISON AS PER VARIETY PARTICULARS OF SEED						COL 16-13/ 13 * 100
				AREA UNDER CROP (0.0.HAC)								AREA UNDER CROP (0.0.HAC)						
				AS PER SUPERVI SOR			AS PER PATWARI					AS PER SUPERVI SOR			AS PER PATWARI			
	T O T	I R R	H Y	IR RI GA TE D	UN IR RI GA TE D	T O T A L	IR RI GA TE D	UN IR RI GA TE D	T O T A L			HY	L O C A L	T O T A L	HY	L O C A L	T O T A L	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19

Note: *100 denotes multiplication in numerator by 100.

Col.2: Total No. of villages reporting the respective crop

Col.3: Total No. of villages reporting the respective crop (irrigated only)

Col.4: Total No. of villages reporting the respective crop (High Yield Variety only)

TOT = Total, IRR= Irrigated, HY = High Yielding

Check Point:

Col.7=Col.15 & Col.10 =Col.18

TABLE: A-11 (a)

**CROPWISE COMPARISON OF ENTRIES BY SUPERVISOR AND PATWARI OF
CROP AREAS AS PER IRRIGATION AND SEED VARIETY**

STATE _____ **YEAR** _____ **SEASON** _____ **SAMPLE TYPE** _____
CROP _____

C R O P	No. OF VILLAGE S REPORTI NG CROP			COMPARISON AS PER PARTICULARS						CO L 8-5/ 5* 100	COL 10-7/ 7 * 100	COMPARISON AS PER VARIETY PARTICULARS OF SEED						COL 16-13/ 13 * 100
				AREA UNDER CROP (0.0.HAC)								AREA UNDER CROP (0.0.HAC)						
				AS PER SUPERVI SOR			AS PER PATWARI					AS PER SUPERVI SOR			AS PER PATWARI			
	T O T	I R R	H Y	IR RI GA TE D	UN IR RI GA TE D	T O A L	IR RI GA TE D	UN IR RI GA TE D	T O A L			HY	L O C A L	T O T A L	HY	L O C A L	T O T A L	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
T O T A L F O R A L L C R O P S																		

Note: *100 denotes multiplication in numerator by 100.

Col.2: Total no. of villages reporting the respective crop

Col.3: Total no. of villages reporting the respective crop (irrigated only)

Col.4: Total no. of villages reporting the respective crop (high yield variety only)

Tot = total, Irr= irrigated, HY = high yielding

TABLE : A-12

**CROP AREA MISSED BY PATWARI DUE TO LACK OF PROVISION IN THE LAND
RECORD MANUAL AND THEIR EFFECT ON THE CROP AREAS/LAND USES AS
OBSERVED IN THE SELECTED VILLAGES**

STATE _____ YEAR _____ SEASON _____ SAMPLE TYPE _____

(I) TOTAL CROPPED AREA IN THE SELECTED SL. NOS.

(II) REASON CODE FOR IGNORING CROP AREA: 1/2/3 *

CROP/ UTILIS ATION S UNDE R WHIC H THE AREA ARE ACTU ALLY RECO RDED	AREA MISSED (0.00 HAC) UNDER CROP																		% TO CR OP ED AR EA IN SE LE CT ED SU RV EY NU MB ER S
	T O T A L	011	012	031	032	051	052	061	062	111	112	122	141	142	152	222	991	992	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
TOT AL																			
% TO CROP AREA IN SELEC TED SURVE Y NOS.																			

* Separate tables are to be prepared for the reason code as mentioned below:

(i) Crops grown in village site =1

(ii) Crops sown as minor constituents in mixture =2

(iii) Crops grown in area newly formed or in govt. land by encroachment =3

AREA UNDER SHORT DURATION CROPS SOWN AND HARVESTED BETWEEN OFFICIAL SEASONS AND MISSED BY PATWARI AS OBSERVED IN THE SAMPLE VILLAGES

TOTAL CROPPED AREA IN THE SELECTED SURVEY NUMBERS:

[illegible]

TABLE: A-14

**DISTRICTWISE DISTRIBUTION OF SAMPLE VILLAGES FOR WHICH THE AREAS
UNDER CROPS ARE NOT AVAILABLE FOR PREVIOUS/ CURRENT YEAR**

STATE _____ **YEAR** _____ **SEASON** _____ **SAMPLE TYPE** _____

D I S T R I C T	N O O F V I L L A G E S A N A L Y S E D	NO. OF VILLAGES FOR WHICH FIGURES FOR PREVIOUS YEAR ARE NOT AVAILABLE														NO. OF VILLAGES FOR WHICH AREA FIGURES ARE NOT AVAILABLE FOR CURRENT YEAR FOR THE REASONS @							
		FOR SELECTED CLUSTERS						FOR VILLAGE AS A W HOLE															
		FOR THE REASONS @						FOR THE REASONS @															
		0	1	2	4	6	8	0	1	2	3	4	6	7	8	0	1	2	3	4	6	7	8
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
TOT AL FOR STA TE																							
% TO CO L.2	100																						

Note: @	System of girdawari does not exist	0
	Girdawari not done for previous/current year	1
	Khasra register/other records/statement (specify) not available	2
	Girdawari completed but jinswar/trs statement not prepared	3
	Reasons for non availability of information not known	4
	Not applicable as for Kerala, Orissa and Hilly district of Uttaranchal	6
	Aggregation figures not available at village level for Kerala and Orissa	7
	Any other reasons (specify)	8

TABLE: A-15

**DISTRICTWISE DISTRIBUTION OF NO. OF SELECTED VILLAGES ACCORDING TO
THE RESPONSE ACHIEVED IN CHECKING AGGREGATION OF AREA FIGURES IN
KHASRA REGISTER**

STATE _____ **YEAR** _____ **SEASON** _____ **SAMPLE TYPE** _____

DISTRICT	NUMBER OF VILLAGES PLANNED	NUMBER OF VILLAGES FOR WHICH SCHEDULES AS 1.1 ARE RECEIVED WITH ENTRIES UNDER COLS. OF BLOCK 3							SCHEDULES NOT RECEIVED
		COL 4, 5 & 6	COL 4 & 6 ONLY	COL 5 & 6 ONLY	COL 6 ONLY	COL 5 ONLY	NO ENTRY UNDER COL 4, 5 & 6	TOTAL	
1	2	3	4	5	6	7	8	9	10
STATE TOTAL									
% TO COL. 9								100	X

TABLE-15 (a)

DISTRICTWISE DISTRIBUTION OF SAMPLE VILLAGES ACCORDING TO COMPLETION OR OTHERWISE OF GIRDAWARI AGGREGATION WORK AND SUBMISSION OF CROP ABSTRACT AS OBSERVED DURING SAMPLE CHECK ON AGGREGATION OF AREA FIGURES IN KHASRA REGISTER

STATE _____ YEAR _____ SEASON _____ SAMPLE TYPE _____

DIS T RIC T	NO. OF VI LL- AG ES FO R HI CH SC H- DU LE AS 1.1 RE CE IV ED	NUMBER OF VILLAGES FOR WHICH												INFORMATION ABOUT COMPLETION OF GIRDAWARI NOT AVAILABLE			
		GIRDAWARI COMPLETED								GIRDAWARI NOT COMPLETED							
		AGGREGATION DONE				AGGREGATION NOT DONE											
		CR OP AB ST RA CT SUB MI TT ED	CR OP AB ST RA CT NO T SU B MI TT ED	INF OR MAT ION ABO UT SUB MI SSIO N OF CRO P ABS T RAC T NOT AVA IL ABL E	S U B O T T A L	C R O P ST RA B S NO T R SU C T S U B M I T T E D	CR OP AB ST RA CT NO T SU B MI TT ED	INFO R MATI ON ABO UT SUBM I SSION OF CROP ABST RACT NOT AVAI L ABLE	S U B O T T A L	CR OP AB ST RA CT SU BM I TT ED	CR OP AB ST RA CT NO T SU B MI TT ED	INF OR MAT ION ABO UT SUB MI SSIO N OF CRO P ABS T RAC T NOT AVA IL ABL E	S U B O T T A L	CR OP AB ST RA CT SU BM I TT ED	CR OP AB ST RA CT NO T SU B MI TT ED	INF OR MAT ION ABO UT SUB MI SSIO N OF CRO P ABS T RAC T NOT AVA IL ABL E	S U B O T T A L
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
TO TA L FO R ST AT E																	

TABLE: A-16

**DISTRICTWISE FREQUENCY DISTRIBUTION OF SAMPLE VILLAGES ACCORDING
TO AGGREGATION ERRORS AND THEIR EFFECT ON CROP AREA**

STATE _____ YEAR _____ SEASON _____ SAMPLE TYPE _____

DISTRICT	NO. OF VILLAGES COMPARING AREA AS AGGREGATED BY AND REPORTED BY PATWARI			PERCENTAGE OF CASES WHERE ERROR WAS OBSERVED (Col.3/Col.4 x 100)	NO. OF VILLAGES COMPARING AREA AS AGGREGATED BY SUPERVISOR AND AS REPORTED BY PATWARI			PERCENTAGE OF CASES WHERE ERROR WAS OBSERVED (Col.7/Col.8 x 100)	TOTAL AREA IN SAMPLE VILLAGE (HA)			PERCENTAGE DIFFERENCE (COL.11-COL.10/COL.10x 100)
	TALLYING	DIFFERENCE	TOTAL		TALLYING	DIFFERENCE	TOTAL		AS AGGREGATED BY SUPERVISOR	AS REPORTED BY PATWARI	AS AGGREGATED BY PATWARI	
1	2	3	4	5	6	7	8	9	10	11	12	13
STATE												

TABLE A-17/18

**DISTRICTWISE ESTIMATE OF AREA UNDER DIFFERENT CROPS BASED ON THE
DATA RECORDED BY THE SUPERVISOR/ PATWARI**

STATE _____ YEAR _____ SEASON _____ SAMPLE TYPE _____
CROP _____

[illegible]

I = irrigated

UI = Un- irrigated

HY = High Yield

* 100 denotes multiplication in Numerator by 100

TABLE A-19

DISTRICTWISE ESTIMATE OF AREA UNDER VARIOUS LAND USE AS PER NINE FOLD CLASSIFICATION DURING THE PREVIOUS YEAR

STATE _____ **YEAR** _____ **SEASON** _____ **SAMPLE TYPE** _____

DI ST RI CT	NO. OF VILLAGES			ESTIMATES OF AREA (IN HECT.) UNDER									
	AN AL YS ED	NOT ANALYSED		FORE STS	LAND PUT TO NON AGRI CULT URAL USES	OTHE R FALL OWS	BA RR EN & UN CU LT UR AB LE LA ND	PER MAN ENT PAS TUR ES & OTH ER GRA ZIN G LAN D	CUL TUR ABL E WAS TE	MIS C. TRE ES /CR OPS & GRO OVS	CUR REN T FAL LOW S	NET AR EA SO WN	TOTA L GEOG RAPH ICAL AREA
		DUE TO NON REC EIPT OF INFO RMA TION	DISCR EPAN T INFO RMAT ION										
1	2	3	4	5	6	7	8	9	10	11	12	13	14
TO TA L FO R ST AT E													
PE RC EN TA GE S.E.													

Note: This table is required to be prepared once in 5 years

TABLE A-20

**DISTRICTWISE ESTIMATES OF AREA ON THE BASIS OF THE VILLAGE TOTALS
OBTAINED BY SUPERVISORS AND AS REPORTED BY PATWARI**

STATE _____ YEAR _____ SEASON _____ SAMPLE TYPE _____

CROP _____

DISTRICT	NO. OF SAMPLE VILLAGES ANALYSED	ESTIMATED AREA IN HECTARES		CORRECTION FACTOR TO ADJUST FOR AGGREGATION ERRORS COL.4/ COL.3
		AS PER SUPERVISOR	AS PER PATWARI	
1	2	3	4	5
TOTAL FOR STATE				
PERCENTAGE S.E.				

TABLE -A-23

**DISTRICTWISE AREA UNDER VARIOUS LAND USES AS PER THE NINE-FOLD
CLASSIFICATION DURING THE PREVIOUS YEARS**

STATE _____ YEAR _____ SEASON _____ SAMPLE TYPE _____

D I S T R I C T	S T A T E	V I L L A G E O F S E L E C T I O N	FOR VILLAGE															FOR CLUS TERS TOTAL AREA UNDER CROPS (000 Ha)	
			W H E T H E R S A M P L E V I L L A G E C A D A S T A R A L L Y S U R V E Y E D: F U L L Y /P A R T I A L L Y/ N O T S U R V E Y E D	H I G H E S T S L./ S U R V E Y N O.	AREA (0.00 HECTARES) UNDER													K H A R I F	R A B I
					GEO GRAPHICAL AREA		F O R E S T	A R E A U N D E R N O N A G R I C U L T U R A L U S E S	O T H E R F A L L O W S	B A R R E N & U N C U L T U R A B L E L A N D	P E R M A N E N T P A S T U R E S & O T H E R G R A Z I N G L A N D	C U L T U R A B L E W A S T E	M I S C. T R E E S A N D G R O V E S	C U R R E N T F A L L O W S	N E T A R E A S O W N	G E O G R A P H I C A L A R E A O F S E L E C T E D S U R V E Y N O S.			
					AS P E R B L O C K 3.2 I T E M (a)	AS P E R B L O C K-8 (TOT ALO F I T E M 1TO 9 COL.4 OF SCH. A.S 1.0)													
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	

Note : This table is required to be prepared once in 5 years

TABLE Y-1

**CROP WISE NUMBER OF EXPERIMENTS PLANNED FOR CHECK AT HARVEST
AND RESPONSE ACHIEVED**

STATE _____ **YEAR** _____ **SEASON** _____ **SAMPLE TYPE** _____

CROP	PLANNED	NUMBER OF EXPERIMENTS				
		CHECKED		LOST	REJECTED FOR ANALYSIS	FOR WHICH SHEDULES NOT RECEIVED
		AT HARVEST	AT POST HARVEST			
1	2	3	4	5	6	7
TOTAL FOR ALL CROP						
PERCETAGE TO COL. (2)	100					

Note: The entry in col.2, 6 & 7 are based on challan received in EDP unit from state unit

TABLE Y-2

CROPWISE NUMBER OF EXPERIMENTS MISSED AND LOST DUE TO VARIOUS REASONS

STATE _____ YEAR _____ SEASON _____ SAMPLE TYPE _____

CROP	NO. OF EXPERIMENTS		NO. OF EXPERIMENTS MISSED DUE TO REASONS						NO. OF EXPERIMENTS LOST DUE TO REASONS						TOTAL MISSED & LOST COL. 9 + COL 15
	PLAN N - ED	CHECKED AT HARVEST	1	2	3	4	9	TOT AL	1	2	3	4	9	TOT AL	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
TOTAL FOR ALL CROPS															
PERCENTAGE TO COL. (2)															

Reason code for missing the check in crop cutting experiments:

1. Date of harvest/change in the date of harvest was not intimated
2. Date of harvest/change in the date of harvest was intimated late
3. Supervisor could not reach the village in time
4. In case of over lapping dates of harvest in villages allotted to Supervisor, proper arrangement/adjustment could not be made.
9. Other reasons.

Reason code for loss of experiments:

1. Cultivator harvested the field prior to the date fixed for harvest
2. Primary worker did not conduct the experiment
3. Delay in selection of survey numbers/replacement of villages
4. Selection of survey numbers on inspection was found wrong and correctly selected field were found harvested
9. Other reasons.

TABLE Y 3

CROPWISE DISTRIBUTION OF EXPERIMENTS WHICH WERE CONDUCTED BY THE DESIGNATED PRIMARY WORKERS AND DELEGATED WORKERS ALONG WITH THE DETAILS REGARDING THEIR TRAINING

STATE _____ YEAR _____ SEASON _____ SAMPLE TYPE _____

CROP	TOT AL NO. OF EXPTS CHEC K ED AT HARV EST & POST HARV EST	NO. OF EXPERIMENTS CONDUCTED BY											
		NON-DESIGNATED EQUIPMENT /SENIOR PERSON				DELEGATED WORKERS JUNIORS				DESIGNATED PERSONS (NO CHANGE IN PRIMARY WORKERS)			
		TRAI- N ED	UN- TRAI N ED	TRAI ING PART ICUL A RS NOT AVA ILA BLE	TOT AL	TRAI N ED	UN TRAI N ED	TRA IN ING PART ICUL A RS NOT AVA ILAB LE	TOT AL	TRAI N ED	UN TRAI N ED	TRA IN ING PART ICUL A RS NOT AVA ILA BLE	TOT AL
1	2	3	4	5	6	7	8	9	10	11	12	13	14
TOTAL FOR ALL CROPS													
%AGE TO COL. (2)													

Col.2= (Col.3+Col.4) of Y-1= (Col.3+Col.9) of Y-2

TABLE Y-4

**CROPWISE DISTRIBUTION OF EXPTS. ACCORDING TO REASONS FOR
SUBSTITUTION OF VILLAGES/SURVEY NUMBER**

[illegible][illegible]

Note: (*)

1. Crop not sown
 2. Entire crop harvested in the village
 3. Records not available
9. Others

(@)

1. Crop harvested prior to selection
2. Crop harvested before the date fixed
3. Field partially harvested affecting the location of experimental plot
9. Others.

TABLE Y 5

**CROPWISE DISTRIBUTION OF EXPERIMENTS ON THE CONDUCT OF WHICH
DIFFERENT TYPES OF MISTAKES WERE OBSERVED**

STATE _____ YEAR _____ SEASON _____ SAMPLE TYPE _____

CROP	NO. OF EXPTS CHEC KED AT HARV EST / POST HARV EST	NO. OF EXPTS FOR WHI CH NO MIST AKE OBSE - RVED e ₀	NO. OF EXPERIMENTS FOR WHICH DIFFERENT TYPES OF MISTAKES WERE OBSERVED															
			e ₁	e ₂	e ₃	e ₄	e ₅	e ₆	e ₇	e ₈	e ₉	e ₁₀	e ₁₁	e ₁₂	e ₁₃	e ₁₄	e ₁₅	e ₁₆
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
TOTAL																		
PERCENTAGE TO COL. 2																		

e₀= No error

e₁= Error in selection of survey/Sub Survey nos.

e₂= Error in selection of field within the survey/
Sub-Survey no.

e₃= Error in reporting seed variety

e₄= Error in reporting of seed rate

e₅= Error in reporting irrigation particulars

e₆= Error in reporting application of fertilizers

e₇= Error in reporting application of manures

e₈= Error in reporting application of pesticides

e₉= Error in measurement of field

e₁₀= Error in checking random

e₁₁= Error in location of plot sub-survey nos.

e₁₂= Error in plot dimension

e₁₃=Error in weighment of produce

e₁₄= Inadequate arrangement for storing the produce for
driage

e₁₅ = Error in reporting proportion of experimental crops
in mixture/wrong reporting of constituents in mixture
and

e₁₆= Any one of the item missing

TABLE Y 6

POSITION OF SUPPLY AND USE OF EQUIPMENT

STATE _____ **YEAR** _____ **SEASON** _____ **SAMPLE TYPE** _____

CROP	ITEM OF EQUIP- MENT	NO. OF EXPTS. SUPERVISED (HARVEST/POST HARVEST) WAS												INFOR- MATI- ON ABOUT SUPPL Y NOT AVAIL- ABLE	TOT AL OF COLS. 8. 13 & 14
		SUPPLIED						NOT SUPPLIED							
		AN D US ED	BUT USED LOCALL Y PROCUR -ED ONE		BUT NOT USED THO- UGH REQ- UIR- ED	BUT NOT REQU -IRED TO BE USED	TOT -AL	USED LOCALL Y PROCUR ED ONE		AND ALSO NOT USED THO- UGH REQU -IRED	AS NOT REQ - UIR- ED	TO TA L			
			ST- AN- DA- RD	NO N ST A- ND A- RD				STA ND ARD	N O N ST A N D A R D						
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
CROP 1:	TAPE BALANC E WEIGHT PEGS														
CROP 2:	TAPE BALANC E WEIGHT PEGS														
CROP n:	TAPE BALANC E WEIGHT PEGS														
FOR ALL CROPS	TAPE BALANC E WEIGHT PEGS														

Note:

In total line for col. 3 to col. 14 give percentage with respect to col. 15 in brackets alongwith no. of experiments

Col.15= Col.2 of Y-5

TABLE Y 7

CROPWISE ESTIMATES OF YIELD RATE (Kg./Ha)

STATE _____ YEAR _____ SEASON _____ SAMPLE TYPE _____

[illegible]

TABLE Y 8

ESTIMATED YIELD RATE OF HIGH YIELDING AND OTHER VARIETIES OF CROP FOR IRRIGATED AND UNIRRIGATED CATEGORIES

STATE	YEAR	SEASON	SAMPLE TYPE
-------	------	--------	-------------

[illegible]

Note: To be prepared for all crops except Cotton based on the simple arithmetic mean of the yield reported for experiments supervised at harvest stage only.

TABLE Y-9 (i)

CROPWISE RATE OF APPLICATION OF FERTILIZERS AND DIFFERENTIAL YIELD RATES ACCORDING TO INPUTS

STATE _____ YEAR _____ SEASON _____ SAMPLE TYPE _____

CROP	EXPTS. CHECKED AT HARVEST STAGE		EXPTS TREATED WITH FERTILIZERS ONLY		EXPERIMENTS WITH FERTILIZERS							
	NUMBER	YIELD RATE	NUMBER	YIELD RATE	NO. OF EXPERIMENTS				YIELD RATE	RATE OF APPLICATION (Kg / Hac)		
					N	P	K	EXCL-USIVE TOTAL		N	P	K
1	2	3	4	5	6	7	8	9	10	11	12	13
TOTAL FOR STATE												

- Note:**
1. This table is not to be generated for cotton crop.
 2. Yield rate will be obtained as simple averages
 3. Col. (16) = Col. (14) + Col. (20)
 4. Col. (9) = Col. (4) + Col. (20)
 5. Col. (2) = Col. (16) + Col. (18) = Col. (9) + Col. (26) = Col. (22) + Col. (24)

TABLE Y 9 (ii)

**CROPWISE RATE OF APPLICATION OF FERTILIZERS AND DIFFERENTIAL YIELD RATE
ACCORDING TO INPUTS**

STATE _____ **YEAR** _____ **SEASON** _____ **SAMPLE TYPE** _____

CRO P	EXPTS. TREATED WITH MANURES ONLY		EXPTS. TREATED WITH MANURES		EXPTS. NOT TREATED WITH MANURES		EXPTS. TREATED WITH (BOTH) FERTILIZE RS AND MANURES		EXPTS. NOT TREATED WITH FERTILIZERS OR MANURES		EXPTS. TREATED WITH FERTIL IZERS OR MANURES OR BOTH		EXPTS. NOT TREATED WITH FERTILIZERS	
	NU MB ER	YIE LD RAT E	NUM BER	YI E LD RA TE	NUM BER	YIE LD RA TE	NUM BER	YIE LD RA TE	NUM BER	YIE LD RA TE	NUM BER	YIEL D RATE	NUM BER	YIE LD RATE
1	14	15	16	17	18	19	20	21	22	23	24	25	26	27
TOT AL FOR STA TE														

- Note:**
- 1. This table is not to be generated for cotton crop.**
 - 2. Yield rate will be obtained as simple averages**
 - 3. Col. (16) = Col. (14) + Col (20)**
 - 4. Col. (9) = Col. (4) + Col (20)**
 - 5. Col. (2) = Col. (16) + Col (18) = Col. (9) + Col. (26) = Col. (22) + Col (24)**

**A COMPARISON OF CROPWISE DISTRIBUTION OF NO. OF EXPERIMENTS PLANNED
ACCORDING TO VARIETY, IRRIGATION AND APPLICATION OF FERTILIZERS VIS-
A-VIS THOSE ACTUALLY CONDUCTED.**

[illegible]

ASM-III

TABLE Y 11

**CROPWISE FREQUENCY DISTRIBUTION OF NUMBER OF EXPERIMENTS AS PER
PLOT YIELD IN Kg/Hac.**

STATE _____ YEAR _____ SEASON _____ SAMPLE TYPE _____

CROP-----

CLASS INTERVAL OF PLOT YIELD IN Kg/Ha.	NUMBER OF EXPERIMENTS				
	IRRIGA TED	%AGE TO TOTAL	TOTAL UN- IRRIGATED	%AGE TO TOTAL	TOTAL
1	2	3	4	5	6

Less than 01
 01 to 50
 51 to 100
 101 to 200
 201 to 300
 301 to 400
 401 to 500
 501 to 600
 601 to 700
 701 to 800
 801 to 900
 901 to 1000
 1001 to 1100
 1101 to 1200
 1201 to 1300
 1301 to 1400
 1401 to 1500
 1501 to 1600
 1601 to 1700
 1701 to 1800
 1801 to 1900
 1901 to 2000
 Above 2000

 MEAN (Kg/Hac) =
 STANDARD DEVIATION (Kg/Hac) =
 COEFFICIENT OF VARIATION =

Note:

- (i) Calculation of mean, standard deviation and coefficient of variation are to be done separately for col. (2) , col. (4) and col. (6)
- (ii) This table is not generated for cotton.

TABLE Y- 12

DISTRIBUTION OF EXPERIMENTS ACCORDING TO APPLICATION OF SEED AND IRRIGATION AS REPORTED BY SUPERVISION, PRIMARY WORKER AND KHASRA REGISTER

STATE _____ YEAR _____ SEASON _____ SAMPLE TYPE _____

CR OP	NO. OF EXP TS. CHE CKE D AT HAR VEST AND POS T HAR VEST T	NO. OF EXPERIMENTS AS PER REPORTING OF ANCILLARY DATA																	
		SEED VARIETY (CODES)									IRRIGATION PARTICULARS (CODES)								
		1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	7	8	9
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20

NOTE:

Seed variety

Irrigation

CODE PW SUP RECORDS

1	H	H	H
2	H	H	L
3.	H	L	H
4.	H	L	L
5.	L	H	H
6	L	H	L
7.	L	L	H
8	L	L	L
9	COMPARISON NOT POSSIBLE		

H= High Yielding, L = Local

CODE PW SUP RECORDS

1	I	I	I
2	I	I	UI
3	I	UI	I
4	I	UI	UI
5	UI	I	I
6	UI	I	UI
7	UI	UI	I
8	UI	UI	UI
9	COMPARISON NOT POSSIBLE		

I = Irrigated, UI = Un-irrigated

TABLE : Y 13

CROPWISE DIFFENTIAL YIELD RATES ACCORDING TO USE OF PESTICIDES

STATE _____ YEAR _____ SEASON _____ SAMPLE TYPE _____

CROP	EXPERIMENTS AT HARVEST STAGE		EXPERIMENTS TREATED WITH PESTICIDES		EXPERIMENTS TREATED PESTICIDE NOT WITH	
	NUMBER	YIELD RATES	NUMBER	YIELD RATES	NUMBER	YIELD RATES
1	2	3	4	5	6	7
TOTAL FOR ALL CROPS						

Note:
This table shall be prepared by taking simple average of the yield of all experiments using pesticides (like table Y-8 and Y-9).

CHAPTER–VII

Functioning of the EDP Unit

7.1 About EDP Setup

The EDP Unit of AS Wing Faridabad is equipped with latest computer and software programmes. It also has various stand-alone PCs with different configurations along with printers to fulfill the requirement. The application software has been developed in Foxbase by the in house experts. The programmes are modified as and when the need arises.

The PCs installed in various rooms of the Officers and other places connected through LAN. There is an Internet facility available through the 256 kbps Broadband.

7.2 Preparation before Data Entry

After the receipt of schedules in the AS wing, Faridabad, the schedules are distributed to the concerned state units which in turn make an account of the schedules received in Control registers and scrutinize the same. After scrutiny of the schedules according to the set scrutiny programme, the same are coded as per the coding programme. On completion of these operations the filled in schedules are forwarded to the EDP unit in bundles as per the prescribed procedure along with Challan. The schedules in the bundles are verified against the Challan and particulars of the bundles are also entered into Registers. The schedules are then distributed to the DEOs for data entry work.

7.3 Data Layouts

The data as available in AS schedules are entered into computers through different record layouts namely RC-1,RC-2 and RC-3 for schedule 1.0 and RC-

7.7 Field Structures of DBF for Data entry work:-

Table-1

Field structure of Sch. AS 1.0

Schedule 1.0					Record type 1	DBF Structure	rc1.dbf
Field	Field Name	Type	Width	Dec	Description of item		Schedule Reference
1	RC	Numeric	1		Record code		Always "1"
2	ST	Numeric	1		Sample type		left corner box on top
3	YR	Numeric	4		Year		above boundary line
4	SESON	Numeric	1		Season		left corner box on the top
5	NOVP	Numeric	3		No. of villages planned		Challan Form
6	NOVCOD	Numeric	3		No. of villages received by cut off date		Challan Form
7	STAT	Numeric	2		State code		Block-1, item-1
8	DIST	Numeric	2		Distt. Code		Block-1, item-2
9	STRA	Numeric	2		Stratum code		Block-1, item-3 (b)
10	VILL	Numeric	2		Village code		Block-1, item-4 (b)
11	EPC	Numeric	1		E.P. Code		3rd box on the top of sch.
12	NOVPC	Numeric	5	2	No. of village in Patwari circle		Block-1, item 6(a)
13	NOVTRS	Numeric	2		No. of TRS vill. In Patwari circle		Block-1, item 6 (6)
14	CADC	Numeric	1		Cadastrally Surveyed Code		Block-1, Item-7.1 in the box
15	TLC	Numeric	1		Time lag code		Block-1, Item-7.2 in the box
16	MAC	Numeric	1		Map available code		Block-1, item-8
17	MUC	Numeric	1		Map usable code		Block-1, item-9
18	DDG	Numeric	4		Due date of Girdawari		Block-1, item-10(a)
19	SGC	Numeric	1		Stage of girdawari completion		Block-1, item-10(b)
20	GCC	Numeric	1		Girdawari completion code		Block-1, item-10(d)
21	LFOG	Numeric	1		Latest form of Girdawari		Block-1, item-10(e)
22	ROG	Numeric	1		Record of girdawari		Block-1, item-10(f)
23	DDTRS	Numeric	4		Due date of submission of TRS statements		Block-1, item-11(a)
24	TRSSC	Numeric	2		TRS crop statement sub. Code		Block-1, item-11(c)
25	TRSSF	Numeric	1		TRS in standard form		Block-1, item-11(d)
26	DCKC	Numeric	1		Duplicate copy kept code		Block-1, item-11(e)
27	HSSN	Numeric	6		Highest survey serial numbers		Block-2, item-1
28	GEOA	Numeric	9	2	Geographical area		Block-3, item-3.2
29	TCROPA	Numeric	7	2	Total cropped area		Right box above block -4
30	TNSSN	Numeric	2		Total no. of selected survey/serial no.		Left box below Block-4
31	TGEOASN	Numeric	7	2	Total cropped area if selected serial no.		Right box below Block-4
32	RC61	Numeric	1		Reason code for Block 6.1		Left box below Block-6
33	RC62	Numeric	1		Reason code for Block 6.2		Central box below block -6
34	RC63	Numeric	1		Reason code for Block 6.3		Right box below block -6
35	REJ	Numeric	1		Schedule Rejected		Challan Form
			84				

Schedule 1.0 Record type 2 DBF Structure rc2.dbf						
Field	Field Name	Type	Width	Dec	Description of item	Schedule Reference
1	RC	Numeric	1		Record code	Always "2"
2	ST	Numeric	1		Sample type code	left box on the top
3	YR	Numeric	4		Year code	above boundary line
4	SESON	Numeric	1		Season code	left box below ST box
5	STAT	Numeric	2		State code	Block-1, item-1
6	DIST	Numeric	2		District code	Block-1, item-2
7	STRA	Numeric	2		Stratum code	Block-1, item-3
8	VILL	Numeric	2		Village code	Block-1, item-4(b)
9	EPC	Numeric	1		Entry particular code	Third box on the top of the schedule
10	HSSN	Numeric	6		Highest survey/sl. no.	Block-2, item-1
11	TNSSN	Numeric	2		Total no. of selected sr./survey no.	left box below the boundary of block-4
12	CROP	Numeric	2		Crop code	Block-4, col.7, 1st two digit
13	VARC	Numeric	1		Variety code	Block-4, col.7, 3rd digit
14	ARSU	Numeric	7	2	Net area reported by supervisor (UI)	Block-4, col.-8
15	ARSI	Numeric	7	2	Net area reported by supervisor (I)	Block-4, col.-9
16	ARPU	Numeric	7	2	Net area reported by patwari (UI)	Block-4, col.-10
17	ARPI	Numeric	7	2	Net area reported by patwari (I)	Block-4, col.-11
			55			

Schedule 1.0 Record type 3 DBF Structure rc3.dbf						
Field	Field Name	Type	Width	Dec	Description of item	Schedule reference
1	RC	Numeric	1		Record code	Always "3"
2	ST	Numeric	1		Sample type code	left box on top
3	YR	Numeric	4		Year code	above the boundary
4	SESON	Numeric	1		Season code	left box below ST
5	STAT	Numeric	2		State code	Block-1, item-1
6	DIST	Numeric	2		District code	Block-1, item-2
7	STRA	Numeric	2		Stratum code	Block-1, item-3
8	VILL	Numeric	2		Village code	Block-1, item-4(b)
9	SN	Numeric	2		Serial no.	Block3.3, left margin of schedule
10	CROP	Numeric	2		Crop code	Block-3.3, col. 12
11	VARC	Numeric	2		Vaiety code	Block-3.3, col. 13
12	IRRC	Numeric	2		Irrigation code	Block-3.3, col. 14
13	ERC	Numeric	1		Error code	Block-3.3, col. 15
			24			

Field structure of Sch. AS 2.0

Schedule 2.0						Record type 7	DBF Structure	rc7.dbf
Field	Field Name	Type	Width	Dec	Description of item	Schedule Reference		
1	RC	Numeric	1		Record code	Always "7"		
2	ST	Numeric	1		Sample type	Box at the left hand		
3	YR	Numeric	4		Year code	Right hand top		
4	SESON	Numeric	1		Season code	Upper box on right		
5	CROP	Numeric	2		Crop code	Lower box on right hand top		
6	NEXP	Numeric	3		No. of expt. Planned	Above the box at ST		
7	NEXNR	Numeric	2		No. of expt. not reced.	Above the box at ST		
8	CONFAC	Numeric	5		Conversion factor	Right hand top		
9	STAT	Numeric	2		State code	Block-1, item-1		
10	DIST	Numeric	2		District code	Block-1, item-2		
11	VILL	Numeric	2		Village code	Block-1, item-4(b)		
12	RSV	Numeric	1		Reason code for subs.	Block-1, item-5(b)		
13	EXPNO	Numeric	1		Experiment number	Block-1, item-7(a)		
14	STAGIN	Numeric	1		Stage of inspection	Block-1, item-7(b)		
15	REXML	Numeric	1		Reason code for expt. Missed/lost	Block-1, item-7 ©		
16	CCE	Numeric	1		Code for conductionof expts.	Block-1, item-8 ©		
17	CFC	Numeric	1		Code for consulation	Block-2, item-1		
18	RCSSN	Numeric	1		Reason code for subs. of survey nos.	Block-2, item-3		
19	E1	Numeric	1		Error E-1	Block 2, item-6 (a) or(b) code in cell		
20	E2	Numeric	1		Error E-2	Block-2, item 6© code in cell		
21	E9	Numeric	1		Error E-9	Block-3, item-1, col. 4, code in box		
22	E10	Numeric	1		Error E-10	Block-3, item-1,col. 6, code in cell		
23	E11	Numeric	1		Error E-11	Block-4, item-1, col. 2/3		
24	E12	Numeric	1		Error E-12	Block-4,item-2, col. 2/3		
25	ADH	Numeric	4		Actual date of harvesting	Block-5.1, item-1,(b)		

41	IRRP	Numeric	1		Irrigation particular	Block-8, item2((i), col. 4-7 (code in box)
42	NIRR	Numeric	1		No. of irrigation	Block-8, item-2(ii), col. 3/6, (supervisor entry)
43	FERTC	Numeric	1		Fertilizer code	Block-8, item-3(i), col.3/5, supervisor entry
44	E6	Numeric	1		Error E-6	Block-8, item-3(i), code in the box
45	QTN	Numeric	4		Quantity of "N"	Block-8, item-3 (c), col. 3/5
46	CODN	Numeric	1		Code for N	Block-8, item-3 (c), code in the box
47	QTP	Numeric	4		Quantity produce	Block-8, item-3(c) col. 3/5
48	CODP	Numeric	1		Code for P	Block-8, item-3(c) , code in the box
49	QTK	Numeric	4		Quantity of "K"	Block-8, item-3(c), col. 3/5
50	CODK	Numeric	1		Code for K	Block-8, item-3 (c), code in the box
51	MANUR	Numeric	1		Manures	Block-8, item-4(i), col. 3/5 (supervisor entry)
52	E7	Numeric	1		Error E-7	Block-8, item-4(i), col. 2/5 in the box
53	PEST	Numeric	1		Pesticide code	Block-8, item-5, col. 3/5, (supervisor entry)
54	E8	Numeric	1		Error E-8	Block-8, item-5, col. 2/4, code in box
55	E15	Numeric	1		Error E-15	Block-9.2, col. 4, code in box
56	REJ	Numeric	1		For rejected experiments	Key in 1
57	CROPER	Numeric	3		Percentage proportion of specified crop	Block-9.2 item-1, col. 5
58	CROPCON	Numeric	1		Crop condition code	Block-9.1, col. 3/col. 5
59	AFFECT	Numeric	1		Affected code	Block-9.1, col. 3/col. 5
			103			

CHAPTER- VIII

Preparation of Season-wise, State-wise Status Reports

8.1 The NSSO Working Group on Agricultural Statistics in its 8th meeting held on 14th July, 1976 recommended that a Report on the Status of Estimation of Agricultural production for each state and at All India level may be prepared by NSSO (FOD) on the basis of the findings of ICS data for each season and for the whole year respectively. Accordingly, State-wise and All India Status Reports are being prepared from the year 1973-74 onwards.

8.2 The status reports for each season and for each state contain full account of the present position of estimation of agricultural production, the procedures followed for enumeration of area and yield, deficiencies observed in the system of crop statistics and the steps to be taken for improving the system of collection of agricultural statistics. The report for each state also gives (a) the position of training of state staff entrusted with the Crop cutting experiments, the equipment supplied to them, the adequacy of experiments planned under CES, the response rate, timeliness of crop enumeration, timeliness of submission of TRS statements with/without completion of girdawari, transcription and recording errors by primary workers, aggregation errors, adherence to prescribed procedures by the primary workers while conducting the crop cutting experiments, delegation of work by the primary workers, provision of estimates for the yield etc.

8.3 As per the tabulation programme (discussed in detail in Chapter VI), findings under ICS scheme also form the basis for preparation of Annexes. Annexes are nothing but presentation of ICS findings in a more concise form at State level on the lines of tables at Distt. level. Guidelines for preparation of Annexes for State-wise Status reports from Tables (both A & Y series) are given in **Annex-V**

STATEWISE STATUS REPORT
(DETAILS OF ANNEXURES AND THEIR SOURCE)

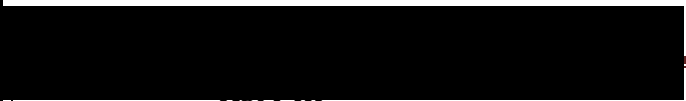
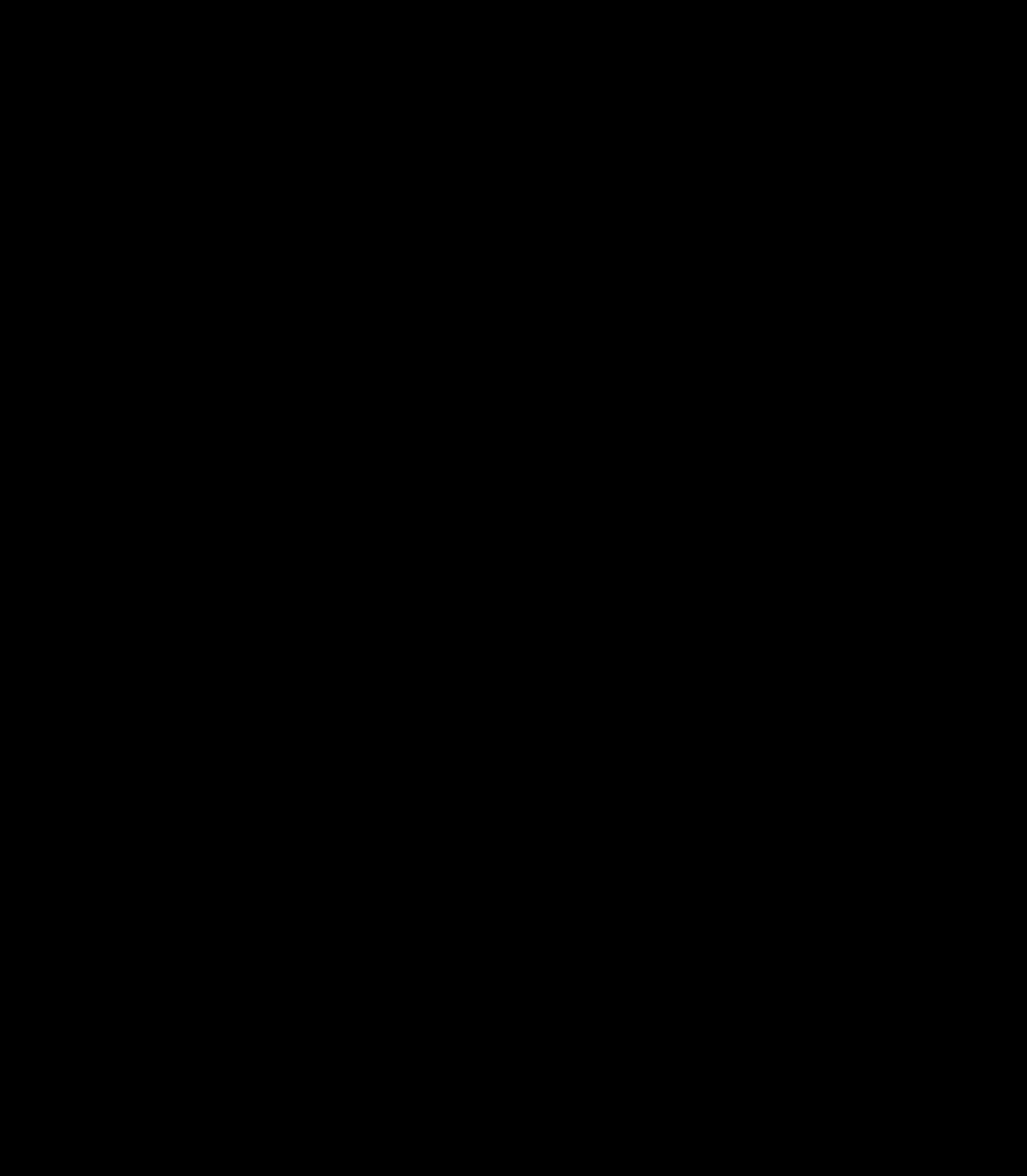
Sl. No.	ANNEX No.	TITLE OF THE ANNEXURE	SOURCE
1.	I	Response in Sample check on enumeration of area	EDP Table A-1 & Cols.2,3&4 control chart col.5,6,7&8
2	II	Information regarding up-dating of village maps and their usability	EDP Table A-2 (Pooled sample)
3.	III	Work load of Patwari	EDP Table A-3 (Pooled sample)
4.	IV(a)	Number and percentage of patwaris of the selected villages according to the total number of villages allotted	EDP Table A-6 (Pooled sample)
5.	IV(b)	Distribution of sample villages according to sl./sub survey Nos. and geographical area	EDP Table A-4 (Pooled sample)
6.	V	Timeliness in completion of TRS area enumeration (No. of villages)	EDP Table A-5
7.	VI	Timeliness in submission of TRS Statement	EDP Table A-7
8.	VII (a)	Availability of figures of crop area for the previous year and current year (Kharif and Rabi)	EDP Table A-14 (Pooled sample)
9.	VII (b)	Discrepancies in recording of crops and crop areas	EDP Table A-8(a)
10.	VIII	Impact of discrepancies in recording area under crops	EDP Table A-11 (a)
11.	IX	Discrepancies in recording irrigation Particulars	EDP Table A-9(a)
12.	X	Impact of discrepancies in recording area under crops(irrigated)	EDP Table A-11 (a)
13.	XI	Discrepancies in recording variety particulars of seed	EDP Table A-10(a)
14.	XII	Impact of discrepancies in recording area under crops(seed)	EDP Table A-11 (a)

Sl. No.	ANNEX No.	TITLE OF THE ANNEXURE	SOURCE
15.	XIII	Response achieved under page totalling of Khasra Register	EDP Table A-15
16.	XIV	Number and percentage of sample villages according to errors	EDP Table A-16
17.	XV	Impact of discrepancies in aggregation of area at village level (pooled sample)	EDP Table A-16
18.	XVI	Training of CES Primary Workers	Reports received from Regional offices and SASA.
19.	XVII	Crop-wise response and level of precision under CES	CES table recd from SASA
20.	XVIII	Supervision of Experiments under CES	CES Appendix d ₁ and CES Appendix F
21.	XIX	Sample Check on Crop cutting experiments under ICS	EDP Table Y-1
22.	XX	Cropwise response in sample check on crop cutting experiments	EDP Table Y-1
23.	XXI	Substitution of sampling units in cropestimation surveys	EDP Table Y-4 (Pooled sample)
24.	XXII	Departure from prescribed procedure in conducting crop cutting experiments and Discrepancies in reporting ancillary particulars (no. and %age)	EDP Table Y-5
25.	XXIII	Supply and use of equipment for the conduct of crop cutting experiments	EDP Table Y-6
26.	XXIV	Delegation of work and conduct of crop cutting experiments by un-trained workers.	EDP Table Y-3
27.	XXV	Comparison of estimates of average yield of crops covered under ICS with CES	ICS & CES Estimates
28.	XXVI	Sample check on aggregation of area figures above village level	Sch. 1.2 (T), (D) & (S)

Guidelines for preparation of State Status Report Annexures from EDP Tables (A & Y series)

Sl. No.	Annex		Source				Remarks
	Annex No.	Item No./ Col. No.	Tables		Schedule AS 1.0		
			Table No.	Col. No.	Block No.	Item/Col. No.	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1	I	2 & 4	A-1	-	-	-	As per control register/ challan (Cut off date from Time schedule). % of Col. 3 & 4 based on Col.2 and Col.5,6,7 & 8 based on Col.3 (For Annex- I)
		3		2	1	EP Code	
		5		6 & 10			
		6		3 & 7			
		7		4 & 8			
		8		5 & 9			
2	II	1(a)	A -2 (Pooled Sample)	3 + 4	1	7.1 & 7.2 (Dark boxes)	*Percentage of items 1 (a) to 1 (e) , 2 (a) & 2 (b) based on No.of villages analysed.
		1(b)		5			
		1(c)		6			
		1(d)		7			
		1(e)		8 + 9			
		2(a)		12	Item 8 & 9	*Percentage of items 2 a (i) & (ii) based on item 2 (a) of Annex-II	
		2 a (i)		10			
		2 a (ii)		11			
		2(b)		13			
3	III	2 to 5	A -3 (Pooled Sample)	2 to 5	1	6 (a) & 6 (b)	% of col. 3 in Annex. III is with respect to col.2 of Annexure -III
4	IV (a) (Not applicable for Kerala)	3	A 6 (Pooled Sample)	2	1	6 (a) & 6 (b)	* Percentage in col. 4 & 7 in Annex. IV (a) to be based on total pooled sample analysed.
		5		4			
		6		5			
5	IV (b) (Not applicable for Kerala)	3	A 4 (Pooled Sample)	Col.12 Corresponding individual Vertical Totals	2	Item 1	* Percentage of col. 4 & 7 in Annex. IV(b) are to be based on pooled sample analysed.
		6		Last but One row Corresponding individual Horizontal totals	3.2		
		4		Col.13 Corresponding individual Vertical Entries			
		7		Last row corresponding individual horizontal entries			

* Annex II, III, IV (a) & IV (b) are prepared only for the 1st season of the of the Agricultural Year.



Sl. No.	Annex		Source				Remarks
	Annex No.	Item No./ Col. No.	Tables		Schedule AS 1.0		
			Table No.	Col. No.	Block No.	Item/Col. No.	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
9	VII (b)	2	A-8 (a)	3	3.3	Col.15	Percentage (3 to 7) based on Col.2
		3		4			
		4		5			
		5		6			
		6		7			

Sl. No.	Annex		Source				Remarks
	Annex No.	Item No./ Col. No.	Tables		Schedule AS 1.0		
			Table No.	Col. No.	Block No.	Item/Col. No.	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
13	XI	2	A 10 (a)	3	3.3	Col.13	Percentage based on Col.2 Checkpoint Col.11 and Col. 16 of Annex should be equal
		3		4			
		4		9			
		5		14			
		6		19			
		7		5+6+7			
		8		8+10+11			
		9		12+13+15			
		10		16+17+18 Or 21			
		11		Col. 22-19			
		12		8+12+16			
		13		5+13+17			
		14		6+10+18			
		15		7+11+15 Or Col.20			
		16		Col. 22-19			
14	XII	2	A-11 (a)	ST1	4	Col.7, (HYV) Col.8 to 11	
		3		ST1			
		4		ST1			
		5		ST2			
		6		ST2			
		7		ST2			
		8 = 2+5		ST3			
		9 = 3+6		ST3			
		10 = 4+7		ST3			

Sl. No.	Annex		Source				Remarks
	Annex No.	Item No./ Col. No.	Tables		Schedule AS 2.0		
			Table No.	Col. No.	Block No.	Item/Col. No.	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
15	XIX	Item 1 to 6	Y-1	2 to 7	1	7 (b)	For all crops together
16	XX	Col.2 to 7	Y-1	2 to 7	1	7 (b)	For each crop separately
17	XXI	3 to 6	Y-4 (Pooled)	7 to 10	1	5 (b)	For each crop Separately
		7 to 10		12 to 15	2	3	
18	XXII	Item 1	Y-5	Col. 2	All relevant blocks given in tabulation programme write up		
		Item 2		Col.3			
		Item 3 & 4		Col.4 to16			
		Item 5, 6 & 7		Col.17 to 19			
19	XXIII	2 to 5 6 to 9	Y-6	13 (Total) Total of Col.8-Total	6	Col.2 & 3	Percentage based on No. of experiments analysed (Harvest & Post Harvest)

-6-
CES TABLES

	Annex		Source		Remarks
Sl.No.	Annex No.	Col. No.	Table No.	Col. No.	
24	XXV	3 & 4	Estimate File of ICS	Col.2	
		5	CES	Col.4	
		6	Appendix D-1	Col.9	
25	XVI	4, 5 & 8	Training Reports (Form T) submitted by Regional Offices		
		3	CES Training report (Appendix-B)	2	
		6		6	
		7		7	
26	XVII	2	Appendix d-1	2	
		3		3	
		5		4 & 9	
27	XVIII	2	CES Appendix D-1	2	
		3	Appendix F	8	
		4	Appendix F	6	
28	XVIII				1.2 (T, D & S)

STATE :

ANNEX-I

**RESPONSE IN SAMPLE CHECK ON ENUMERATION OF AREA
FOR THE YEAR 20 - 20 AND 20 -20**

SEASON- YEAR/ AGENCY	NO. OF VILLAGES PLANNED	NO. & (%) OF VILLAGES FOR WHICH SCHEDULES WERE RECEIVED		NO. & (%) OF SCHEDULES ANALYSED			
				TOTAL	WITH 'a' & 'b' ENTRIES TOGETHER	WITH 'a' & 'b' ENTRIES SEPARATELY	WITH 'a' ENTRIES..... ONLY
		TOTAL RECEIVED	RECEIVED BY CUT OFF DATE				
1	2	3	4	5	6	7	8

SEASON-YEAR

CENTRAL:

STATE:

POOLED:

SOURCE : CONTROL REGISTER AND EDP TABLE A-I

COL. 2,3 & 4 FROM CONTROL REGISTER.

Col.5 = Col.6+Col.7+Col.8

% of Col. 5 to Col.8 is based on Col.3

The entry in Col 2. is based on Challan received in EDP unit from State units.

STATE:

ANNEX - II

**INFORMATION REGARDING UPDATING OF VILLAGE MAPS AND THEIR USABILITY
DURING 20 -20 AND 20 - 20 .**

SEASON:

NUMBER OF YEARS SINCE UPDATED	NUMBER AND PERCENTAGE OF VILLAGES	
	(CURRENT YEAR)	(LAST (YEAR)
1	2	3
1 (a) 1-5		
(b) 6-10		
(c) 11-20		
(d) MORE THAN 20 YEARS		
(e) INFORMATION NOT AVAILABLE		
2 AVAILABILITY OF MAPS WITH PATWARI	X	X
(a) MAPS AVAILABLE		
(i) USABLE MAPS		
(ii) UNUSABLE MAPS		
(b) MAPS NOT AVAILABLE		

NOTE: THIS ANNEX IS TO BE PREPARED FOR FIRST SEASON ONLY

SOURCE : EDP TABLE, A-2 (Pooled Sample)

CHECK POINTS :

- 1) TO CHECK WHETHER THE % ARE CALCULATED FROM NO. OF VILLAGES ANALYSED FOR ITEMS 1 (a) to 1 (e), 2 (a) & 2 (b).
- 2) TO CHECK WHETHER % IN ITEM 2 a (i), 2 a (ii) HAVE BEEN CALCULATED FROM ITEM 2 (a)
- 3) TO CHECK WHETHER % TOTALS OF ITEMS 1(a) TO 1 (e) IS 100%. ALSO TOTAL % OF ITEMS 2 (a) & 2 (b) (EXCLUDING 2 (a) i AND 2(a) ii) SHOULD BE 100 %

STATE :

ANNEX –III

AVERAGE WORKLOAD OF PATWARI DURING 20 - 20 AND 20 - 20

YEAR:	NO. OF VILLAGES PER PATWARI			
	TOTAL	TRS (NO. AND % TO TOTAL)	SURVEY/ SUB-SURVEY NUMBERS PER VILLAGE	GEOGRAPHICAL AREA (HA) PER VILLAGE
1	2	3	4	5

NOTE : THIS ANNEX IS TO BE PREPARED FOR THE FIRST SEASON ONLY

SOURCE : EDP TABLE A-3 (POOLED SAMPLE)

CHECK POINT :

- FIGURES IN COL. 2 TO 5 IN ANNEX III ARE SIMPLE AVERAGE OF CORRESPONDING FIGURES OF BOTH SAMPLE TYPE (I & II) OF TABLE A-3**

STATE:

ANNEX. IV (A)

**NUMBER AND PERCENTAGE OF PATWARIS OF THE SELECTED VILLAGES
ACCORDING TO THE TOTAL NUMBER OF VILLAGES ALLOTTED
DURING 20 -20 AND 20 - 20**

SL. NO.	TOTAL			TRS		
	TOTAL NO. OF VILLAGES ALLOTTED PER PATWARI (IN THE RANGE OF)	FREQUENCY	PERCENT	TOTAL NO. OF VILLAGES ALLOTTED PER PATWARI	FREQUENCY	PERCENT
1	2	3	4	5	6	7

NOTE: THIS ANNEX IS TO BE PREPARED FOR THE FIRST SEASON ONLY

SOURCE: EDP TABLE A-6 (POOLED SAMPLE)

CHECK POINTS:

**PERCENTAGE IN COL. 4 & COL. 7 OF ANNEX IV (a) ARE CALCULATED FROM
FREQUENCY TOTAL OF TABLE A-6 OF POOLED SAMPLE**

STATE:

ANNEX. IV (B)

**DISTRIBUTION OF SAMPLE VILLAGES ACCORDING TO SURVEY/SU - SURVEY
NOS. AND GEOGRAPHICAL AREA DURING 20 - 20 AND 20 -20**

Sl.No.	DISTRIBUTION OF VILLAGES ACCORDING TO SURVEY/SUB-SURVEY NO.			DISTRIBUTION OF VILLAGES ACCORDING TO GEOGRAPHICAL AREA		
	CLASS INT. (SURVEY/SUB- SUR- VEY NOS.)	NO. OF VILLAGES	(%) (0.00)	CLASS INT. GEOGRAPHICAL AREA (HA.)	NO. OF VILLAGES	(%) (0.00)
1	2	3	4	5	6	7

20 - 20

1.	up to 50	up to 50
2.	51 to100	51 to 100
3.	101 to 200	101 to 200
4.	201 to 400	201 to 400
5.	401 to 600	401 to 600
6.	601 to 800	601 to 800
7.	801 to 1000	801 to 1000
8.	1001 to 5000	1001 to 3000
9.	above 5000	above 3000
10.	not reported	not reported

TOTAL:

**THIS ANNEX IS TO BE PREPARED FOR THE FIRST SEASON ONLY
SOURCE : EDP TABLE A-4. (POOLED SAMPLE)**

CHECK POINTS :

1. COL. 3 OF ANNEX IV (b) = VERTICAL TOTALS OF COL.12 OF TABLE-A-4 (FOR BOTH SAMPLE TYPES)
2. COL. 6 OF ANNEX IV (b) = HORIZONTAL TOTALS FOR COL 2. TO COL.12 OF TABLE-A-4 (FOR BOTH SAMPLE TYPES)

STATE:

**TIMELINESS IN COMPLETION OF T.R.S.AREA ENUMERATION (NO.OF VILLAGES)
DURING 20 -20 AND 20 -20**

SEASON- YEAR/ AGENCY	NUMBER (PERCENTAGE) OF VILLAGES WHERE				
	GIRDAWARI COMPLETED	GIRDAW -ARI PARTIA - LLY COMPLE -TED	GIRDA - WARI NOT YET START- ED	INFOR- MATION ABOUT COPIET -ION OF GIRDA - ARI NOT AVAILA- BLE	SYST

STATE:

STATE:

ANNEX VII (a)

**AVAILABILITY OF FIGURES OF CROP AREA DURING
20 - 20 AND 20 - 20**

(POOLED)

SEASON / YEAR	NO. OF VILLAGES ANALYSED	NO. (PERCENTAGE) OF VILLAGES FOR WHICH CROP AREA FIGURES WERE NOT AVAILABLE		
		FOR CURRENT YEAR	FOR PREVIOUS YEAR	
		FOR VILLAGES AS A WHOLE	FOR SAMPLE CLUSTERS	FOR VILLAGES AS A WHOLE
1	2	3	4	5

SEASON-YEAR

SOURCE: EDP TABLE, A-14 (POOLED SAMPLE)

STATE:

ANNEX.- VII (b)

DISCREPANCIES IN RECORDING OF CROPS AND CROP AREAS DURING
20 - 20 AND 20 - 20

SEASON/ YEAR/ AGENCY	TOTAL	NO. (PERCENTAGE) OF SURVEY / SUB-SURVEY NUMBERS				
		WHERE CROP AREA TALLIED	WHERE DISCREPANCIES OBSERVED			
			CROP REPORTED BY SUPERVISOR BUT NOT REPORTED BY PATWARI	CROP REPORTED BY PATWARI BUT NOT REPORTED BY SUPERVISOR	CROP AREA REPORTED BY SUPERVISOR AND PATWARI DIFFERED	TOTAL COLS. 4+5+6
e ₀			e ₁	e ₂	e ₃	
1	2	3	4	5	6	7

SEASON-YEAR

CENTRAL:

STATE:

POOLED:

SOURCE: EDP TABLE, A-8 (a)

CHECK POINTS :

1. TOTAL (%) OF COL.3 & 7 SHOULD BE EQUAL TO THAT OF COL.2
2. TOTAL (%) OF COL.4, 5 & 6 SHOULD BE EQUAL TO THAT OF COL.7

STATE:

ANNEX -VIII

IMPACT OF DISCREPANCIES IN RECORDING AREA UNDER CROPS FOR
THE YEAR 20 - 20 AND 20 - 20

SEASON-YEAR/ CROP	AREA IN HECTARES AS OBSERVED IN SAMPLE CLUSTERS						IMPACT OF DISCREP- ANCIES (b-a)/a *100 (POOLED SAMPLE ONLY)
	CENTRAL SAMPLE		STATE SAMPLE		POOLED SAMPLE		
	AS PER SUPERVI-- SOR ‘a’	AS PER PATWARI ‘b’	AS PER SUPERVI- SOR ‘a’	AS PER PATWARI ‘b’	AS PER SUPERVI- SOR ‘a’	AS PER PATWARI ‘b’	
1	2	3	4	5	6	7	8

SEASON:

CROP:

CROP:

CROP:

CROP:

CROP:

OTHERS:

SOURCE: EDP TABLE, A-11 (a)

STATE

ANNEX- IX

**DISCREPANCIES IN RECORDING IRRIGATION PARTICULARS DURING
20 - 20 AND 20 - 20**

YEAR/ SEASON/ AGENCY	NO. OF SURV - EY / SUB- SURV - EY NUM - BERS	NO AND PERCENTAGE OF SURVEY/SUB SURVEY NUMBER IN WHICH PARTICULARS TALLIED				NO AND PERCENTAGE OF SURVEY/ SUB-SURVEY NUMBERS IN WHICH PARTICULARS NOT TALLIED									
		'T'	'UI'	'I & UI'	TOT- AL	SUPERVISOR					PATWARI				
						'T'	'UI'	'I & UI'	'NR '	TOT- AL	'T'	'UI'	'I & UI'	'NR'	T O T - A L
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16

YEAR:

SEASON:

CENTRAL:

STATE:

POOLED:

 SOURCE : EDP TABLE, A-9 (a)

STATE:

ANNEX- X

**IMPACT OF DISCREPANCIES IN REOCRding AREA UNDER CROPS (IRRIGATED)
DURING 20 –20 AND 20 – 20 .**

SEAS ON/ YEAR CROP	AREA IN HECTARES AS OBSERVED IN SAMPLE CLUSTERS									IMPA - CT OF DISCR -EPAN - CIES (b-a/a) *100 (POOL -ED) SAMP - LE ONLY
	CENTRAL SAMPLE			STATE SAMPLE			POOLED SAMPLE			
	NO. OF VILLA - GES REPO - RTING CROP	AS PER SUPE - RVIS - OR 'a'	AS PER PATW - ARI 'b'	NO. OF VILLA - GES REPO - RTING CROP	AS PER SUPE - RVIS - OR 'a'	AS PER PATW - ARI 'b'	NO. OF VILLA - GES REPO - RTING CROP	AS PER SUPE - RVIS - OR 'a'	AS PER PATW - ARI 'b'	
1	2	3	4	5	6	7	8	9	10	11

SEASON-YEAR

CROP:

CROP:

CROP:

CROP:

OTHERS:

SOURCE : EDP TABLE, A-11(a)

STATE:

ANNEX-XI

**DISCREPANCIES IN RECORDING SEED VARIETY PARTICULARS DURING
20 -20 AND 20 -20 .**

YEAR/ SEASON/ AGENCY	NO. OF SURV - EY/ SUB- SURV - EY NUM - BERS	NO. AND PERCENTAGE OF SURVEY/ SUB SURVEY NUMBERS IN WHICH PARTICULARS TALLIED				NO. AND PERCENTAGE OF SURVEY/ SUB SURVEY NUMBERS IN WHICH PARTICULARS NOT TALLIED									
						SUPERVISOR					PATWARI				
		HY	L	HY & L	TOTAL	HY	L	HY & L	NR	TOTAL	HY	L	HY & L	NR	TOTAL
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16

SEASON:

YEAR:

CENTRAL:

STATE:

POOLED:

SOURCE: EDP TABLE, A-10 (a)

STATE:

ANNEX –XII

**IMPACT OF DISCREPANCIES IN RECORDING AREA UNDER CROP
(HIGH YIELDING VARIETY OF SEED) 20 -20 AND 20 – 20**

SEASON-YEAR/ CROP	AREA IN HACTARES AS OBSERVED IN SAMPLE CLUSTERS									IMPA-CT OF DISCR - EPANC -IES “b-a/a” * 100 (POOL - ED SAMP- LE ONLY)
	CENTRAL SAMPLE			STATE SAMPLE			POOLED SAMPLE			
	NO. OF VILLA -GES REPO - RTING CROP	AS PER SUPER - VISOR ‘a’	AS PER PATW - ARI ‘b’	NO. OF VILLA - GES REPO - RTING CROP	AS PER SUPER -VISOR ‘a’	AS PER PATW - ARI ‘a’	NO. OF VILLA - GES REPO - RTING CROP	AS PER SUPER -VISOR ‘a’	AS PER PATW - ARI ‘b’	
1	2	3	4	5	6	7	8	9	10	11

SEASON-YEAR

CROP:

CROP:

CROP:

CROP:

OTHERS:

SOURCE: EDP TABLE, A-11(a)

STATE:

ANNEX- XIII

**RESPONSE ACHIEVED UNER PAGE TOTALLING OF KHASRA REGISTER
DURING 20 - 20 AND 20 - 20**

SEASON- YEAR/ AGENCY	CURRENT YEAR			PREVIOUS YEAR		
	PLANNED	TOTAL ANALYSED	RESPONSE (%)	PLANNED	TOTAL ANALYSED	RESPONSE (%)
1	2	3	4	5	6	7

SEASON-YEAR

CENTRAL:

STATE:

POOLED:

SOURCE: EDP TABLE, A-15

STATE:

ANNEX-XIV

**NUMBER AND PERCENTAGE OF SAMPLE VILLAGES ACCORDING TO ERRORS
DURING 20 - 20 AND 20 - 20**

SEASON- YEAR/ CROP	VILLAGES WHERE THE AREA AS AGGREGATED BY SUPERVISOR AND AS REPORTED BY PATWARI DIFFERED					
	CENTRAL		STATE		POOLED	
	TOTAL	DIFFERED NO.(%)	TOTAL	DIFFERED NO. (%)	TOTAL	DIFFERED NO. (%)
1	2	3	4	5	6	7

SEASON:

CROP:

CROP:

CROP:

CROP:

SOURCE: EDP TABLE, A-16

STATE:

ANNEX- XV

**IMPACT OF DISCREPANCIES IN AGGREGATION OF AREA AT VILLAGE LEVEL
(POOLED SAMPLE ONLY) DURING 20 - 20 AND 20 - 20**

SEASON/ CROP	YEAR (CURRENT)			YEAR (PREVIOUS)		
	TOTAL AREA IN SAMPLE VILLAGE IN HA.			TOTAL AREA IN SAMPLE VILLAGE IN HA.		
	AS AGGREGATED BY SUPERVISOR 'a'	AS REPORTED BY PATWARI 'b'	$\frac{b - a}{a} \times 100$	AS AGGREGATE D BY SUPERVISOR 'a'	AS REPORTED BY PATWARI 'b'	$\frac{b - a}{a} \times 100$
1	2	3	4	5	6	7

SEASON:

CROP:

CROP:

CROP:

CROP:

CROP:

SOURCE: EDP TABLE, A-16

STATE:

ANNEX - XVI

TRAINING OF PRIMARY WORKERS DURING 20 - 20 AND 20 - 20

YEAR/ SEASON	AGENCY	NO. OF CES TRAINING CENTRES			ATTENDANCE IN TRAINING CENTRES		
		ARRANGED BY SASA	COVERED BY NSSO		TOTAL CALLED	TOTAL TRAINED	NO. OF PRIMARY WORKERS TRAINED BY NSSO
			AS TRAIN- ING OFFICER	AS OBSER- VER			
1	2	3	4	5	6	7	8

SEASON:

YEAR:

SOURCE : TRAINING REPORTS OF CES – APPENDIX-B & TRAINING REPORTS (FORM T) RECEIVED FROM R.O. NSSO (FOD)

Check Points:

- 1) If there is an entry in Col.4, ensure entry in Col.8 also.**
- 2) Check if Col. (4+5) \leq Col.3**
- 3) Check if Col. 7 \leq Col.6**

STATE:

ANNEX – XVII

**CROPWISE RESPONSE AND LEVEL OF PREVISION ON ESTIMATES UNDER CES
DURING 20 - 20 AND 20 - 20**

SEASON/ CROP	YEAR (CURRENT)				YEAR (PREVIOUS)			
	RESPONSE			ESTIM- ATED YIELD %AGE S.E.	RESPONSE			ESTIM- ATED YIELD %AGE S.E.
	NO. OF EXPERIMENTS		%AGE RESP - ONSE		NO. OF EXPERIMENTS		%AGE RESP - ONSE	
	PLANNED	ANALYSED			PLANNED	ANALYSED		
1	2	3	4	5	6	7	8	9

STATE:

ANNEX. XVIII

SUPERVISION OF EXPERIMENTS UNDER CES DURING 20 - 20 AND 20 - 20

SEASON- YEAR/ CROP	NO. OF EXPTS. PLANNED	NO. OF EXPERIMENTS SUPERVISED BY			
		STATISTICAL AGENCY		OTHER AGENCY	
		TOTAL (%)	AT HARVEST (%)	TOTAL (%)	AT HARVEST (%)
1	2	3	4	5	6

SEASON-YEAR

CROP:

SOURCE: CES SUPERVISION TABLE RECEIVED FROM SASA. (APPENDIX -F)

STATE:

ANNEX. XIX

SAMPLE CHECK ON CROP CUTTING EXPERIMENTS DURING 20 - 20 AND 20 -20

SL. NO.	ITEM	NUMBER (PERCENTAGE) OF EXPERIMENTS		
		SEASON		
		KHARIF		
		CENTRAL	STATE	POOLED
1	2	3	4	5

YEAR : 20 - 20

1. PLANNED
2. CHECKED AT HARVEST
STAGE (PERCENTAGE)
3. CHECKED AT POST-
HARVEST STAGE (PERCENTAGE)
4. LOST (PERCENTAGE)
5. REJECTED FOR ANALYSIS
(PERCENTAGE)
6. FOR WHICH SCHEDULES NOT
RECEIVED (PERCENTAGE)

SOURCE: EDP TABLE Y-1

STATE:

ANNEX - XX

**CROPWISE RESPONSE IN SAMPLE CHECK ON CROP CUTTING EXPERIMENT
DURING 20 - 20 AND 20 - 20**

SEASON/ CROP/ AGENCY	NUMBER OF EXPERIMENTS											
	YEAR (CURRENT)						YEAR (PREVIOUS)					
	PLA- NN- ED	CHEC- KED AT HARV- EST STAGE (%)	CHEC- KED AT POST HARV- EST STAGE (%)	LOST (%)	REJ- ECT- ED FOR ANA- LYS -IS (%)	FOR WHIC H SCH. NOT RECE- IVED NO. (%)	PLA- NN- ED	CHEC- KE AT HARV- EST STAGE (%)	CHEC- KED AT POST HARV- EST STAGE (%)	LOST (%)	REJ- ECT- ED FOR ANA- LYS -IS (%)	FOR WHIC H SCH. NOT RECE- IVED NO. (%)
1	2	3	4	5	6	7	8	9	10	11	12	13

SEASON:

CROP:

CENTRAL
(%)
STATE
(%)
POOLED
(%)

CROP:

CENTRAL
(%)
STATE
(%)
POOLED
(%)

CROP:

CENTRAL
(%)
STATE
(%)
POOLED
(%)

SOURCE: EDP TABLE, Y-1

STATE:

ANNEX - XXI

**SUBSTITUTION OF SAMPLING UNITS IN CROP ESTIMATION SURVEY
DURING 20 - 20 AND 20 - 20**

Sl. No	SEASON-YEAR CROP (POOLED)	NO. & (%) OF EXPERIMENTS FOR WHICH SUBSTITUTION WAS DONE IN RESPECT OF							
		SELECTED VILLAGES DUE TO REASON CODE (@)				SELECTED SURVEY NOS. DUE TO REASON CODE (\$)			
		1	2	3	9	1	2	3	9
1	2	3	4	5	6	7	8	9	10

SEASON-YEAR

1. CROP:
2. CROP:
3. CROP:
4. CROP:
5. CROP:

TOTAL

REASON CODE (@)

- 1- CROP NOT SOWN
2- ENTIRE CROP HARVESTED IN THE VILLAGE
3- RECORDS NOT AVAILABLE
9-OTHERS

REASON CODE (\$)

- 1-CROP HARVESTED PRIOR TO SELECTION .
2-CROP HARVESTED BEFORE THE DATE FIXED.
3-FIELD PARTIALLY HARVESTED AFFECTING THE LOCATION OF EXPERIMENTAL
PLOT.
9- OTHERS.
-

SOURCE: EDP TABLE, Y- 4 (POOLED SAMPLE)

Percentage of Col.3 TO 10 are based on CoL. (3+4) of Table Y-4

STATE:

ANNEX - XXII

**DEPARTURE FROM PRESCRIBED PROCEDURE IN CONDUCT OF EXPERIMENTS AND
DISCREPANCIES IN REPORTING ANCILLARY INFORMATION
DURING 20 - 20 AND 20 - 20 .**

SEASON:

PARTICULARS	YEAR: (CURRENT)			YEAR : (PREVIOUS)		
	CENTRAL	STATE	POOLED	CENTRAL	STATE	POOLED
1	2	3	4	5	6	7

1. NO. (%) OF EXPTS. CHECKED.
2. NO. (%) OF EXPTS. WITHOUT ERROR E_0
3. NO. (%) OF EXPTS. FOR WHICH DEPARTURE
FROM INSTRUCTION IN CONDUCT OF EXPTS .
WAS OBSERVED IN RESPECT OF :

- I SELECTION OF SURVEY NO. E_1
- II SELECTION OF FIELD WITHIN SURVEY NO. E_2
- III MEASUREMENT FIELD E_9
- IV CHOOSING RANDOM NO. FOR
LOCATION PLOT E_{10}
- V LOCATING PLOT E_{11}
- VI DIMENSION OF PLOT E_{12}
- VII WEIGHMENT OF PRODUCE E_{13}

4. NO. (%) OF EXPTS. WITH DISCREPANT
REPORTING OF ANCILLARY PARTICULARS

1. SEED VARIETY E_3
- II. SEED RATE E_4
- III. IRRIGATION PARTICULARS E_5
- IV. APPLICATION OF FERTILIZERS E_6
- V. APPLICATION OF MANURES E_7
- VI. APPLICATION OF PESTICIDES E_8

5. NO. (%) OF EXPTS. WHERE ARRANGEMENT
FOR DRIAGE WAS MADE INADEQUATE E_{14}

6. NO. (%) OF EXPTS. WITH INCORRECT
REPORTING OF CONSTITUENTS IN CROP
MIXTURE E_{15}

7. ANY ONE OF THE ITEM IS MISSING E_{16}

SOURCE: EDP TABLE Y-5

% age of all items have been taken with respect to Col.2 of TableY-5

STATE:

ANNEX – XXIII

**SUPPLY AND USE OF EQUIPMENT FOR THE CONDUCT OF CROP CUTTING
EXPERIMENTS DURING 20 -20 AND 20 – 20 .**

SEASON- YEAR/ AGENCY	NO. & (%) OF EXPERIMENTS FOR WHICH							
	THE PRIMARY WORKERS WERE FOUND NOT SUPPLIED WITH				THE PRIMARY WORKERS WERE FOUND NOT USING THE SUPPLIED EQUIPMENT			
	TAPE	BALANCE	WEIGHTS	PEGS	TAPE	BALANCE	WEIGHTS	PEGS
1	2	3	4	5	6	7	8	9

SEASON-YEAR

CENTRAL

STATE

POOLED

SOURCE: EDP TABLE, Y-6

STATE:

ANNEX – XXIV

**DELEGATION OF WORK AND CONDUCT OF CROP CUTTING EXPERIMENTS BY
UNTRAINED WORKERS DURING 20 - 20 AND 20 - 20**

SL. NO	SEASON-YEAR CROP/ AGENCY	NSSO ANALYSIS		SASA ANALYSIS	
		NO. & (%) OF EXPERIMENTS		NO. & (%) OF EXPERIMENTS	
		FOR WHICH FIELD WORK WAS DELEGATED	CONDUCTED BY UNTRAINED WORKERS	FOR WHICH FIELD WORK WAS DELEGATED	CONDUCTED BY UNTRAINED WORKERS
1	2	3	4	5	6

1. CROP:
CENTRAL
STATE
POOLED
2. CROP:
CENTRAL
STATE
POOLED
3. CROP:
CENTRAL
STATE
POOLED
4. CROP:
CENTRAL
STATE
POOLED
5. CROP:
CENTRAL
STATE
POOLED

SOURCE: EDP TABLE , Y – 3

1. Percentage of Col.3 of Annex XXIV is w.r.to Col.2 of Table Y-3 OR COL.(3+4) (Cropwise) of Annex XX
2. Percentage of Col.4 of Annex XXIV is w.r.to Col.2 of Table Y-3 or Col.(3+4) of Annex XX

STATE:

ANNEX-XXV

**COMPARISON OF ESTIMATES OF AVERAGE YIELD OF CROPS COVERED
UNDER ICS WITH CES DURING 20 - 20 AND 20 - 20**

SEASON/ CROP	AGENCY	YEAR (CURRENT)					YEAR (PREVIOUS)				
		ICS		CES		% DIFFER TO COL. 3 -5 -----X100 5 (POOLED ONLY)	ICS		CES		% DIFFER TO COL. 8 - 10 -----X100 10 (POOLED ONLY)
		AVER- AGE YIELD (KG. / HA.)	% SE	AVER- AGE YIELD (KG. / HA.)	% SE		AVER- AGE YIELD (KG. / HA.)	% SE	AVER- AGE YIELD (KG. / HA.)	% SE	
1	2	3	4	5	6	7	8	9	10	11	12

SEASON:

CROP:

CROP:

CROP:

CROP:

CROP:

CROP:

SOURCE: ESTIMATE ICS AND CES

STATE:

ANNEX – XXVI

**SAMPLE CHECK ON AGGREGATION OF AREA FIGURES ABOVE VILLAGE
LEVEL DURING SURVEY PERIOD 20 -20**

Particulars/ Specified ICS Crops	No. of cases checked for consistency								
	Tehsil level			District level			State level		
	No. of Sch. receiv ed C/S	Checked by Super- visory officer	Where differe nce observ ed	No. of Schs. recei ved C/S	Checked by Super- visory officer	Where difference observed	No. of Schs. receiv ed C/S	Checked by Super- visory officer	Where difference observed
1	2	3	4	5	6	7	8	9	10
Geogra- phical area									
Crops									

C = Central

S = State

CHAPTER-IX

ALL INDIA STATUS REPORT (DETAILS OF ANNEXURES AND THEIR SOURCE)

Sl. NO	ANN. NO.	TITLE OF ANNEXURE	SOURCE	TYPE OF SCH.
1	2	3	4	5
1.	I	Response in sample check on Enumeration of area	Ann.I of Vol-II.	1.0
2.	II	Timeliness in completion of Girdawari	Ann.V of Vol-II.	1.0
3.	III	Timeliness in submission of TRS statements	Ann.VI of Vol-II.	1.0
4.	IV	Updation of village maps & their usability	Ann.II of Vol.-II	1.0
5.	IV (a)	Percentage of Survey Nos. in which errors in recording crop area were observed	Ann.VII of Vol-II.	1.0
6.	IV (b)	Impact of recording errors	Ann.VIII of Vol-II.	1.0
7.	IV (c)	Discrepancies in recording Irrigation particulars	Ann.IX of Vol-II.	1.0
8.	IV (d)	Discrepancies in recording Variety particulars of seed	Ann.XI of Vol.-II	1.0
9.	V	Response in page totalling of Khasra register	Ann.XIII of Vol-II.	1.1
10.	V (a)	Percentage of cases where inaccuracies in aggregation of crop area were observed	Ann.XIV of Vol-II.	1.1
11.	V (b)	Impact of Aggregation errors	Ann.XV of Vol-II.	1.1
12.	VI	Response in Sample check on crop cutting experiments	Ann.XIX of Vol.-II	2.0
13.	VII	Distribution of number of experiments conducted according to important inputs	EDP Tables Y-10	2.0
14.	VIII	Incidence of errors in conducting crop cutting experiments	Ann.XXII of Vol-II.	2.0
15.	IX	Supply & use of equipments for crop cutting experiments	Ann.XXIII of Vol-II.	2.0
16.	X	Delegation of work & conduct of crop cutting experiments	Ann.XXIV of Vol.-II	2.0
17.	XI	Substitution of sampling units in Crop Estimation Surveys (Pooled)	Ann.XXI of Vol.-II	2.0

(Contd.....)

1	2	3	4	5
18.	XII	Comparison of estimates of crop areas based on ICS, TRS & Final estimates in r/o Paddy (Kh & Sum), Jowar (Kh & Rabi), Bajra, Maize, Ragi, Cotton, Ground Nut, Sugarcane, Wheat, Barley, Gram & Rape & Mustard	EDP tables A-17/18, TRS data from Shastri BN, & Final estimates from Krishi BN New Delhi	1.0 & 1.1
19.	XIII	Comparison of percentage area under different inputs as estimated under ICS & TRS in r/o Paddy (Kh & Sum), Jowar (Kh & Rabi), Bajra, Maize, Ragi, Cotton, Ground Nut, Sugarcane, Wheat, Barley, Gram & Rape & Mustard	EDP tables A-17/18, TRS data from Shastri BN, New Delhi	1.0
20.	XIV	Comparison of Estimates of Yield rates under ICS & TRS in r/o Paddy (Kh & Sum), Jowar (Kh & Rabi), Bajra, Maize, Ragi, Cotton, Ground Nut, Sugarcane, Wheat, Barley, Gram & Rape & Mustard	Ann.XX & XXV of Vol.-II and Table 5 of CES review	2.0
21.	XV	Estimates of Yield rates according to Irrigation & Seeds in r/o Paddy (Kh & Sum), Jowar (Kh & Rabi), Bajra, Maize, Ragi, Cotton, Ground Nut, Sugarcane, Wheat, Barley, Gram & Rape & Mustard	EDP Tables Y-8	2.0
22.	XVI	Estimates of Yield rates according to Irrigation & Seeds in r/o Paddy (Kh & Sum), Jowar (Kh & Rabi), Bajra, Maize, Ragi, Cotton, Ground Nut, Sugarcane, Wheat, Barley, Gram & Rape & Mustard	EDP Tables Y-9 (i) & Y – 9 (ii)	2.0

***REVIEW OF CROP STATISTICS SYSTEM IN
INDIA THROUGH THE SCHEME FOR
IMPROVEMENT OF CROP STATISTICS
(AISR)***

Important instructions regarding ICS

&

**Detailed Procedure for preparation of
various Annexes (I-XVI)**

Guidelines for preparation of working sheets for various Annexure of All India Status Report (AISR)

Detailed information presented in various Annexures of AISR is based on consolidation of the information available in the relevant annexures of season-wise, state-wise status reports (SSR). Consolidation of the information is done through working sheets. The details for posting entries under various cols. of the **Working sheet only**, one to one relation between the columns of the working sheet and those of the relevant annexure of SSR or tables generated in EDP unit and also their correspondence with cols. of AISR Annexes are given below annex-wise:-

Annex-I: Response in sample check in area enumeration (AS 1.0)

Source: Annex -I of State Status Report (SSR)

Sl. No.	Col. No of Annexure of AISR	Col. No of working sheet of AISR Annexure to be posted	Col No. of Annx.- I of SSR to be referred
1	2	3	4
1.	Col. 4 (Sample size)	Col. No. 3 (Agency wise Sample size)	Col. No. 2 (Agency wise villages planned)
2.	-	Col. No. 4 ,7, 10 & 13 (Agency wise, Season-wise villages Planned)	Col. No. 2 (Agency wise villages planned)
3.	-	Cols. No.,5, 8, 11 and 14 (Agency wise, Season wise response)	Col. No. 3 (Agency wise, Season wise total schedules received)
4.	Col. 5, 6, 7, & 8	Col. 6, 9, 12.& 15 (Percentage) *	-

Note: Response constitutes total number of schedules received minus blank schedules received, if any.

$$* \text{ Percentage response} = \frac{\text{Total No. of schedules received}}{\text{Villages planned}} \times 100$$

All India Pooling in working sheet:

I. Total No. of Villages planned (Sample size) at all India level is the sum of No. of Villages planned for all States agency-wise

II. Percentage response = $\frac{\text{Total No. of schedules received}}{\text{Villages planned}} \times 100$

Annex.-II: Timeliness in completion of Girdawari (AS 1.0)

Source: Annex-V of State Status Report (SSR)

Sl. No.	Col. No of Annexure of AISR	Col. No of working sheet of AISR Annexure to be posted	Col No. of Annx.- V of SSR to be referred
1	2	3	4
1.	-	Col.No.5,12,20 & 27 (Girdawari Completion in Time, Agency & Season wise)	Col. No. 2 (Girdawari Completion in Time).
2.	-	Col. No. 7, 14, 22 & 29 (Late Completion, Agency & Season-wise)	Col. No. 3 (Late Completion of Girdawari)
3.	-	Cols. No. 9, 16, 24 and 31 (Not Completed, Agency & Season-wise)	Total of Col. No.5 & 6 (Girdawari not completed)
4.	-	Col. No. 4,11,19 & 26 (Agency & Season-wise)	Col.No.9 (No. of villages analysed)
5.	Col.No.4,7, 10 & 13	Col.6,13,21 & 28 (In time) (Through formula for calculation of percentage)*	-
6.	Col.No 5,8,11 & 14	Col.8,15,23 & 30 (Late) (Through formula for calculation of percentage)*	-
7.	Col.No 6,9,12 & 15	Col.10,17,25 & 32 (Not Completed) (Through formula for calculation of percentage)*	-

No. of villages (in which Girdawari completion)
(In time/ Late/ Not completed till visit)

* Percentage = $\frac{\text{No. of villages (in which Girdawari completion)}}{\text{No. of villages Analysed}} \times 100$

All India Pooling in working sheet:

I To obtain figures at all India level calculate the sum of corresponding Cols. under “No. of Villages analysed” , (In time/ Late/ Not completed till visit) No. of villages for which Girdawari completion for all the States, season-wise and agency-wise

No. of villages (in which Girdawari completion)
(In time/ Late/ Not completed till visit)

II. Percentage = $\frac{\text{No. of villages (in which Girdawari completion)}}{\text{No. of villages Analysed}} \times 100$

Note : It is not necessary that Total percentage of Cols.of different status of Girdawari should come to 100% because items such as (1) Date of completion of Girdawari not known (2) Information N.A. (3) System does not exist are not compiled or reflected in Annex – II of AISR.

Table-1 of Writeup Workload of Patwari (AS 1.0)

Source : **Annex -III of State Status Report (SSR)**

Sl. No.	Col. No of Annexure of AISR	Col. No of working sheet of AISR Annexure to be posted	Col No. of Annx.- III of SSR to be referred
1	2	3	4
1.	-	Col. 3 (Actual No..of villages for Kharif season & Pooled sample only)	Col. No. 5 of Annex-I (No. of villages analysed)
2.	Col.No.3 (Entries automatically transferred)	Col.4 (Actual No..of villages for Kharif season & Pooled sample only)	Col.No.2 (Total No. of Villages to be rounded off)
3.	Col.No.4 (Entries automatically transferred)	Col.5 (Actual No..of villages for Kharif season & Pooled sample only)	Col.3 (Survey / Subsurvey Nos. '000' per village)
4.	Col.No.5 (Entries automatically transferred)	Col.6 (Actual No..of villages for Kharif season & Pooled sample only)	Col.3 (Geographical area (000 hac. Per village)

All India Pooling:

- I. To obtain figure under **All India pooling** the formulae to be used are as given below:

$$\text{Col 3.of Annexure (AISR)} = \frac{\text{Total No. of Villages of Col.7 of all the States (Working Sheet)}}{\text{Total No. of Villages analysed of Col.3 (Working Sheet)}}$$

$$\text{Col 4.of Annexure (AISR)} = \frac{\text{Total No. of Villages of Col.8 of all the States (Working Sheet)}}{\text{Total No. of Villages analysed of Col.3 (Working Sheet)}}$$

$$\text{Col 5.of Annexure (AISR)} = \frac{\text{Total No. of Villages of Col.9 of all the States (Working Sheet)}}{\text{Total No. of Villages analysed of Col.3 (Working Sheet)}}$$

Annex.-IV: Information regarding updation of village Maps (AS 1.0)

Source : **Annex -II of State Status Report (SSR)**

Sl. No.	Col. No of Annexure of AISR	Col. No of working sheet of AISR Annexure to be posted	Col No. of Annx.- II of SSR to be referred
1	2	3	4
1.	-	Col. 3 (For Kharif season & Pooled sample only)	Col. No. 5 of Annex-I (No. of villages analysed)
2.	Col.No.3 (Through Formula for calculating percentage)*	Col.4 (For Kharif season & Pooled sample only)	Item 1 (d) i.e. (No. of villages where maps updated more than 20 years back)
3.	Col.No.4 (Through Formula for calculating percentage)*	Col.5 (For Kharif season & Pooled sample only)	Item 2 (a) - I No. of villages where Maps available with Patwari (usable)
4.	Col.No.5 (Through Formula for calculating percentage)*	Col.6 (For Kharif season & Pooled sample only)	Item 2 (a) - II No. of villages where Maps available with Patwari (un-usable)
5.	Col.No.6 (Through Formula for calculating percentage)*	Col.7 (For Kharif season & Pooled sample only)	Item 2 (b) - No. of villages where Maps not available with Patwari

No. of villages for different cases of map availability
(entered in Cols. 4 to 7 of working sheet)

$$\text{*Percentage} = \frac{\text{No. of villages for different cases of map availability (entered in Cols. 4 to 7 of working sheet)}}{\text{No. of villages Analysed}} \times 100$$

All India Pooling in working sheet:

- I. To obtain figures under All India pooling, calculate the sum of corresponding cols. over all the states.

No. of villages for different cases of map availability
(entered in Cols. 4 to 7 of working sheet)

II.
$$\text{Percentage} = \frac{\text{No. of villages for different cases of map availability (entered in Cols. 4 to 7 of working sheet)}}{\text{No. of villages Analysed}} \times 100$$

Annex-IV (b)-Impact of recording Errors (AS 1.0)

Source: Annex– VIII of State Status Report

Sl. No.	Col. No of Annexure of AISR	Col. No of working sheet of AISR Annexure to be posted	Col No. of Annx- VIII of SSR to be referred
1	2	3	4
1.	Col. 4 to Col.18 (Through Formula for calculating Ratio)*	Col.3 to Col.33 (Crop-wise, season wise for Central & State sample figures only to be entered for Supervisor & Patwari. The pooled figures will be sum of Central & State samples figures)	Col. No. 2 for Supervisor (a) entry for Central Sample
2.	-		Col. No. 3 for Patwari (b) entry for Central Sample
3.	-		Col. No. 4 for Supervisor (a) entry for State Sample
4.	-		Col. No. 5 for Patwari (b) entry for State sample

* Ratio =
$$\frac{\text{Patwari's entries (b)}}{\text{Supervisors' entries (a)}}$$

All India Pooling in working sheet:

- I. Calculate simple total of 'a' & 'b' entries of each Column over the States (Crop, Agency & Season-wise)
- II. Ratio =
$$\frac{\text{Patwari's entries (b)}}{\text{Supervisors' entries (a)}}$$

Annex-IV (c) Discrepancies in recording Irrigation particulars (AS 1.0)

Source: Annex – IX of State Status Report (SSR)

Sl. No.	Col. No of Annexure of AISR	Col. No of working sheet of AISR Annexure to be posted (Season wise & Central & State samples only)	Col No. of Annx- IX of SSR to be referred (Season wise & Central & State samples only)
1	2	3	4
1.	-	Col.4 – Survey/ Sub survey Nos.	Col.2
2.	Col.5 (Through Formula for calculating percentage)	Col.5 - Irr. (No.of Survey/ Sub survey Nos Tallied)	Col.3
3.	Col.6 (Through Formula for calculating percentage) *	Col.6 – UI (No.of Survey/ Sub survey Nos Tallied)	Col.4
4.	-	-	Col.5 (Entry not required)
5.	Col.7 (Through Formula for calculating percentage) *	Col.7 = Col.5+Col.6 of working sheet	Col.6 (Not to be entered)
6.	Col.8 (Through Formula for calculating percentage) *	Col.8 – Irr. (No.of Survey/ Sub survey Nos Not Tallied) (Supervisor)	Col.7
7.	Col.9 (Through Formula for calculating percentage) *	Col.9 – UI (No.of Survey/ Sub survey Nos Not Tallied) (Supervisor)	Col.8
8.	-	-	Col.9 (Entry not required)
9.	Col.10 (Through Formula for calculating percentage) *	Col.10 – NR (No.of Survey/ Sub survey Nos Not Tallied) (Supervisor)	Col.10
10.	Col.11 (Through Formula for calculating percentage) *	Col.11 – Col.8+Col.9+Col.10 of working sheet	Col.11 (Not to be entered)
11.	Col.12 (Through Formula for calculating percentage) *	Col.12 – Irr. (No.of Survey/ Sub survey Nos Not Tallied) (Patwari)	Col.12
12.	Col. 13 (Through Formula for calculating percentage) *	Col.13 - UI (No.of Survey/ Sub survey Nos Not Tallied) (Patwari)	Col.13
13.	-	-	Col.14 (Entry not required)
14.	Col.14 (Through Formula for calculating percentage) *	Col.14 – NR (No.of Survey/ Sub survey Nos Not Tallied) (Patwari)	Col.15
15.	-	Col.15 – Col.12+Col.13+Col.14 of working sheet	Col.16

No. of Survey Nos. in each Col.

* Percentage = $\frac{\text{No. of Survey Nos. in each Col.}}{\text{Total Survey Nos. (from Col.4 of w/sheet)}} \times 100$

Irr.= Irrigated, UI = Un-Irrigated

It is not necessary that Total in Col.7, 11 & 15 of AISR Annexure should come to 100% because figures of I & UI (Both) are not included.

All India Pooling in working sheet:

I. Calculate total of entries of each of the Cols. over all the States, season-wise and agency-wise

No. of Survey Nos. in each Col.

II. Percentage = $\frac{\text{No. of Survey Nos. in each Col.}}{\text{Total Survey Nos. (from Col.4 of w/sheet)}} \times 100$

Annex-IV (d) Discrepancies in recording Irrigation particulars (AS 1.0)

Source: Annex – XI of State Status Report (SSR)

Sl. No.	Col. No of Annexure of AISR	Col. No of working sheet of AISR Annexure to be posted (Season wise & Central & State samples only)	Col No. of Annx- IX of SSR to be referred (Season wise & Central & State samples only)
1	2	3	4
1.	-	Col.4 – Survey/ Sub survey Nos.	Col.2
2.	Col.5 (Through Formula for calculating percentage)	Col.5 - HYV (No.of Survey/ Sub survey Nos Tallied)	Col.3
3.	Col.6 (Through Formula for calculating percentage) *	Col.6 – Local (No.of Survey/ Sub survey Nos Tallied)	Col.4
4.	-	-	Col.5 (Entry not required)
5.	Col.7 (Through Formula for calculating percentage) *	Col.7 = Col.5+Col.6 of working sheet	Col.6 (Not to be entered)
6.	Col.8 (Through Formula for calculating percentage) *	Col.8 – HYV (No.of Survey/ Sub survey Nos Not Tallied) (Supervisor)	Col.7
7.	Col.9 (Through Formula for calculating percentage) *	Col.9 – Local (No.of Survey/ Sub survey Nos Not Tallied) (Supervisor)	Col.8
8.	-	-	Col.9 (Entry not required)
9.	Col.10 (Through Formula for calculating percentage) *	Col.10 – NR (No.of Survey/ Sub survey Nos Not Tallied) (Supervisor)	Col.10
10.	Col.11 (Through Formula for calculating percentage) *	Col.11 – Col.8+Col.9+Col.10 of working sheet	Col.11 (Not to be entered)
11.	Col.12 (Through Formula for calculating percentage) *	Col.12 – HYV. (No.of Survey/ Sub survey Nos Not Tallied) (Patwari)	Col.12
12.	Col. 13 (Through Formula for calculating percentage) *	Col.13 - Local (No.of Survey/ Sub survey Nos Not Tallied) (Patwari)	Col.13
13.	-	-	Col.14 (Entry not required)
14.	Col.14 (Through Formula for calculating percentage) *	Col.14 – NR (No.of Survey/ Sub survey Nos Not Tallied) (Patwari)	Col.15
15.	-	Col.15 – Col.12+Col.13+Col.14 of working sheet	Col.16

No. of Survey Nos. in each Col.

* Percentage = $\frac{\text{No. of Survey Nos. in each Col.}}{\text{Total Survey Nos. (from Col.4 of w/sheet)}} \times 100$

HYV= High Yielding variety, L= Local

It is not necessary that Total in Col.7, 11 & 15 of AISR Annexure should come to 100% because figures of HYV & L (Both) are not included.

All India Pooling in working sheet:

II. Calculate total of entries of each of the Cols. over all the States, season-wise and agency-wise
No. of Survey Nos. in each Col.

III. Percentage = $\frac{\text{Total Survey Nos. (from Col.4 of w/sheet)}}{\text{Total Survey Nos. (from Col.4 of w/sheet)}} \times 100$

Annex-V Response in Page totaling of Khasra Register (AS 1.1)

Source: Annex – XIII of State Status Report (SSR)

Sl. No.	Col. No of Annexure of AISR	Col. No of working sheet of AISR Annexure to be posted	Col No. of Annx.-XIII of SSR to be referred
1	2	3	4
1.	Col. 4 (Sample size)	Col. No. 3 (Agency wise Sample size)	Col. No. 2 (Agency wise villages planned)
2.	-	Col. No. 4, 7, 10 & 13 (Agency wise, Season-wise villages Planned)	Col. No. 2 (Agency wise villages planned)
3.	-	Cols. No. 5, 8, 11 and 14 (Agency wise, Season wise response)	Col. No. 3 (Agency wise, Season wise villages analysed)
4.	Col. 5, 6, 7, & 8	Col. 6, 9, 12.& 15 (Percentage)*	-

$$\text{*Percentage response} = \frac{\text{No. of Villages analysed}}{\text{No. of villages planned}} \times 100$$

All India Pooling in working sheet:

I To obtain figure under All India pooling calculate the sum of each col. for the all the states agency and season-wise

II. Percentage response =
$$\frac{\text{No. of Villages analysed}}{\text{No. of villages planned}} \times 100$$

Annex-V (a) Percentage of cases where inaccuracies in aggregation of area were observed (AS 1.1)

Source: Annex – XIV of State Status Report (SSR)

Sl. No.	Col. No of Annexure of AISR	Col. No of working sheet of AISR Annexure to be posted	Col No. of Annx.- XIV of SSR to be referred
1	2	3	4
1.	-	Col. No. 3,6,9 & 12 (Central & State samples, season wise, Total villages for all crops to be entered)	Col. No. 2 & 4 (Central & State samples, season wise, Total villages for all crops)
2.	-	Col. No. 4 ,7, 10 & 13 (Central & State samples, season wise, Total villages for all crops to be entered where area differed)	Col. No. 3 & 5 (Central & State samples, season wise, Total villages in which difference in area was found for all crops)
3.	Col. 4, 5, 6 & 7 (Entries automatically transferred, Agency & season wise)	Cols. No.5, 8, 11 and 14 (Percentage through Formula) *	-

No. of Villages Differed in each Col.

$$* \text{ Percentage response} = \frac{\text{No. of Villages Differed in each Col.}}{\text{Total Number of villages}} \times 100$$

Note: Pooled figures are obtained on adding Central and State sample figures in working sheet

All India Pooling in working sheet:

I. To obtain figure under All India pooling calculate the sum of each col. for the all the states agency and season-wise

$$\text{II. Percentage response} = \frac{\text{No. of Villages Differed in each Col.}}{\text{Total Number of villages}} \times 100$$

Annex-V (b) Impact of Aggregation of Errors (AS 1.1)

Source: Annex – XV of State Status Report (SSR)

Sl. No.	Col. No of Annexure of AISR	Col. No of working sheet of AISR Annexure to be posted	Col No. of Annx- XV of SSR to be referred
1	2	3	4
1.	Col. 3 to Col.17 (Through Formula for calculating Ratio) *	Col.3 to Col.33 (Crop-wise & season wise figures only to be entered for Supervisor (a) & Patwari (b))	Col. No. 2 (for Supervisor (a))
2.	-		Col. No. 3 (for Patwari (b))

$$* \text{ Ratio} = \frac{\text{Patwari's entries (b)}}{\text{Supervisors entries (a)}}$$

All India Pooling:

- I. To obtain figure under All India pooling calculate the sum of 'a' & 'b' entries of each col. for the all the states season-wise
- II.
$$\text{Ratio} = \frac{\text{Patwari's entries (b)}}{\text{Supervisors entries (a)}}$$

Annex.-VI: Response in sample check on Crop Cutting Experiments (AS 2.0)

Source : Annex -XIX of State Status Report (SSR)

Sl. No.	Col. No of Annexure of AISR	Col. No of working sheet of AISR Annexure to be posted	Col No. of Annx.- XIX of SSR to be referred
1	2	3	4
1.	Col. 4, 6, 8 & 10 (Planned)	Col. No. 3, 5, 7 & 9 (Seasonwise, Central & State sample villages planned to be entered)	Col. No. 3 & 4 , Item 1.(Central & State sample villages planned)
2.	Col. 5, 7, 9 & 11 (Response) (Through Formula for calculating percentage) *	Col. No. 4 ,6, 8 & 10 (Seasonwise, Central & State sample villages checked at harvest stage to be entered)	Col. No. 3 & 4 , Item 2.(Central & State sample villages checked at harvest stage)
3.	-	Pooled Figures are calculated by adding Central & State figures	

$$* \text{ Percentage} = \frac{\text{No. of experiments analysed (at harvest Stage)}}{\text{No. of C.C. Experiments planned}} \times 100$$

All India Pooling in working sheet:

I. To obtain figure under All India pooling calculate the sum of No. of C.C.xperiments each col. for the all the states agency and season-wise

$$\text{II. Percentage} = \frac{\text{No. of experiments analysed (at harvest Stage)}}{\text{No. of C.C. Experiments planned}} \times 100$$

Annex.-VII: Distribution of number of experiments conducted according to important inputs (AS 2.0)

Source : Y-10 Table (Crop wise) received from EDP unit

Sl. No.	Col. No of Annexure of AISR	Col. No of working sheet of AISR Annexure to be posted	Col No. of Y-10 table to be referred
1	2	3	4
1.	Col. No.5 Crop code wise, Agency (Central, State & Pooled) and season wise percentage for Irrigated to be entered in percentage for “H)	Not required	Col. No.6 Item (Total Checked) (Crop wise, Agency (Central, State & Pooled) and season wise percentage for Irrigated)
2.	Col. No.5 Crop code wise, Agency (Central, State & Pooled) and season wise percentage for Irrigated to be entered in percentage for “H)		Col. No.6 Item (Total Planned) (Crop wise, Agency (Central, State & Pooled) and season wise percentage for Irrigated)
3.	Col. 6 (Crop code wise, Agency (Central, State & Pooled) and season wise percentage for High Yielding variety to be entered in percentage for “H”)		Col. No.9 Item (Total Checked) (Crop code wise, Agency (Central, State & Pooled) and season wise percentage for High Yielding variety)
4.	Col. 6 (Crop code wise, Agency (Central, State & Pooled) and season wise percentage for High Yielding variety to be entered in percentage for “T”)		Col. No.9 Item (Total Planned) (Crop code wise, Agency (Central, State & Pooled) and season wise percentage for High Yielding variety)
5.	Col. 7 (Crop code wise, Agency (Central, State & Pooled) and season wise percentage for Fertilisers to be entered in percentage for “H”)		Col. No. 12 Item (Total Checked) (Crop code wise, Agency (Central, State & Pooled) and season wise percentage for Fertilisers)
6.	Col. 7 (Crop code wise, Agency (Central, State & Pooled) and season wise percentage for Fertilisers to be entered in percentage for “T”)		Col. No. 12 Item (Total Planned) (Crop code wise, Agency (Central, State & Pooled) and season wise percentage for Fertilisers)

“H” = Experiments checked at Harvest & Post Harvest stage

“T” = Total (Harvest + Missed + Lost)

Annex.-VIII: Incidence of Errors in Crop cutting experiments (AS 2.0)

Source : Annex -XXII of State Status Report (SSR)

Sl. No.	Col. No of Annexure of AISR	Col. No of working sheet of AISR Annexure to be posted	Col No. of Annx.- XXII of SSR to be referred
1	2	3	4
1.	-	Col.4 (No.of C.C. expts. analysed to be entered- Item -1)	Item. No.1-Col.2 & 3 (Central & State samples and seasonwise) Pooled figures not be entered
2.	COL.5 – (* e ₀) (Through Formula for calculating percentage)*	COL.5 – (* e ₀)	e ₀ = Item.- 2 (Col.2 & 3) (Experiments without error)
3.	COL.6 – (* e ₁) (Through Formula for calculating percentage)*	COL.6 – (* e ₁)	e ₁ = Item.3 – I (Col.2 & 3)
4.	COL.7 – (* e ₂) (Through Formula for calculating percentage)*	COL.7 – (* e ₂)	e ₂ = Item.3 – II (Col.2 & 3)
5.	COL.8 – (* e ₃) (Through Formula for calculating percentage)*	COL.8 – (* e ₃)	e ₉ = Item.3- III (Col.2 & 3)
6.	COL.9 – (* e ₄) (Through Formula for calculating percentage)*	COL.9 – (* e ₄)	e ₁₀ + e ₁₁ + e ₁₂ = SL.3 – IV + V +VI (Col.2 & 3)
7.	COL.10 – (* e ₅) (Through Formula for calculating percentage)*	COL.10 – (* e ₅)	e ₁₃ = Item.3 – VII (Col.2 & 3)
8.	COL.11 – (* e ₆) (Through Formula for calculating percentage)*	COL.11 – (* e ₆)	e ₃ + e ₄ + e ₅ + e ₆ + e ₇ + e ₈ = Item.4 – Total of I to VI (Col.2 & 3)
9.	COL.12 – (* e ₇) (Through Formula for calculating percentage)*	COL.12 – (* e ₇)	e ₁₄ + e ₁₅ = Item.5 + Item.6 (Col.2 & 3)
10	COL.13 – (* e ₈) (Through Formula for calculating percentage)*	COL.13 – (* e ₈)	e ₁₆ = Item.7 (Col.2 & 3)

Note: 1. No. of experiments to be entered in respective Cols. in working sheet (Season-wise & Agency-wise

2. Pooled Figures for all the Columns are obtained by adding Central & State sample figures

No. of experiments of each Column

$$\text{* Percentage} = \frac{\text{-----}}{\text{No. of C.C. Experiments Analysed (at harvest \& post harvest Stage)}} \times 100$$

* e₁= Error in selection of survey/sub-survey nos.

* e₂= Error in selection of field within survey/sub-survey nos.

* e₃= Error in measurement of field

* e₄= Error in selection of random nos.,location and marking of plots

* e₅= Error in weightment of produce

* e₆= Error in reporting ancillary information

* e₇= Inadequate arrangements for storing of produce for driage and incorrect reporting of constituents in mixture

* e₈= Others.

All India Pooling in working sheet:

I. To obtain figures at all India level, calculate total of entries of each of the Cols. over all the States, season-wise and agency-wise

No. of experiments of each Column

II. Percentage = $\frac{\text{-----}}{\text{No. of C.C. Experiments Analysed (at harvest \& post harvest Stage)}} \times 100$

Annex.-IX: Supply and Use of equipments for Crop cutting experiments (AS 2.0)

Source : Annex -XXIII of State Status Report (SSR)

Sl. No.	Col. No of Annexure of AISR	Col. No of working sheet of AISR Annexure to be posted	Col No. of Annx.- XXIII of SSR to be referred
1	2	3	4
1.	-	Col.4 (No.of C.C. expts. analysed to be entered)	Sl. No.1-Col.2 & 3 of Annex – XXII (Central & State samples and seasonwise) Pooled figures not to be entered
2.	COL.5 (Through Formula for calculating percentage)*	COL.5 – Tape	Col.2 - Tape
3.	COL.7 (Through Formula for calculating percentage)*	COL.7 – Balance	Col.3 - Balance
4.	COL.8 (Through Formula for calculating percentage)*	COL.8 – Weight	Col.4 – Weight
5.	COL.6 (Through Formula for calculating percentage)*	COL.6 – Pegs	Col.5 - Pegs
6.	COL.9 (Through Formula for calculating percentage)*	COL.9 – Tape	Col.6 - Tape
7.	COL.11 (Through Formula for calculating percentage)*	COL.11 – Balance	Col.7 - Balance
8.	COL.12 (Through Formula for calculating percentage)*	COL.12 – Weight	Col.8 – Weight
9.	COL.10 (Through Formula for calculating percentage)*	COL.10 – Pegs	Col.9 - Pegs

Note: 1. No. of experiments to be entered in respective Cols. in working sheet (Season-wise & Agency-wise

2. Pooled Figures for all the Columns are obtained by adding Central & State sample figures

No. of experiments of each Column

* Percentage = $\frac{\text{No. of experiments of each Column}}{\text{No. of C.C. Experiments Analysed (at harvest \& post harvest Stage)}} \times 100$

No. of C.C. Experiments Analysed (at harvest & post harvest Stage)

All India Pooling in working sheet :

I To obtain figures at all India level, calculate total of entries of each of the Cols. over all the States, season-wise and agency-wise

No. of experiments in each Col.

II. Percentage = $\frac{\text{No. of experiments in each Col.}}{\text{No. of C.C. Experiments Analysed (at harvest \& post harvest Stage)}} \times 100$

No. of C.C. Experiments Analysed (at harvest & post harvest Stage)

Annex-X: Delegation of work and conduct of crop cutting experiments by untrained workers (AS 2.0)

Source : Annex –XXIV of State Status Report (SSR)

Sl. No.	Col. No of Annexure of AISR	Col. No of working sheet of AISR Annexure to be posted	Col No. of Annx.- XXIV of SSR to be referred
1	2	3	4
1.	-	Col.3 (No.of Expts. Analysed (Autumn))	Sl. No.1-Col.2 & 3 of Annex – XXII (Central & State samples and seasonwise) Pooled figures not to be entered
2.	COL.4 (Through Formula for calculating percentage) *	Col.4 (Autumn)	Col.3 (No. of expts. Delegated)
3.	COL.5 (Through Formula for calculating percentage)*	COL.5 (Autumn)	Col.4 (Untrained workers)
4.		Col.6 (No.of Expts. Analysed (Winter))	Sl. No.1-Col.2 & 3 of Annex – XXII (Central & State samples and seasonwise) Pooled figures not to be entered
5.	COL.6 (Through Formula for calculating percentage)*	COL.7 (Winter)	Col.3 (No. of expts. Delegated)
6.	COL.7 (Through Formula for calculating percentage)*	COL.8 (Winter)	Col.4 (No. of expts. conducted by untrained workers)
7.		Col.9 (No.of Expts. Analysed (Rabi))	Sl. No.1-Col.2 & 3 of Annex – XXII (Central & State samples and seasonwise) Pooled figures not to be entered
8.	COL.8 (Through Formula for calculating percentage)*	COL.10 (Rabi)	Col.3 (No. of expts. Delegated)
9.	COL.9 (Through Formula for calculating percentage)*	COL.11 (Rabi)	No. of expts. conducted by untrained workers
10.	-	Col.12 (No.of Expts. Analysed (Summer))	Sl. No.1-Col.2 & 3 of Annex – XXII (Central & State samples and seasonwise) Pooled figures not to be entered
11.	COL.10 (Through Formula for calculating percentage)*	COL.13 (Summer)	Col.3 (No. of expts. Delegated)
12.	COL.11 (Through Formula for calculating percentage)*	COL.14 (Summer)	Col.4 No. of expts. conducted by untrained workers

Note: 1. No. of experiments to be entered in respective Cols. in working sheet (Season-wise & Agency-wise)

2. Pooled Figures for all the Columns are obtained by adding Central & State sample figures

No. of experiments of each Column

$$\text{* Percentage} = \frac{\text{No. of C.C. Experiments Analysed (at harvest \& post harvest Stage)}}{\text{No. of experiments of each Column}} \times 100$$

All India Pooling in working sheet :

I To obtain figures at all India level, calculate total of entries of each of the Cols. over all the States, season-wise and agency-wise

No. of experiments in each Col.

II. Percentage = $\frac{\text{No. of experiments in each Col.}}{\text{No. of C.C. Experiments Analysed (at harvest \& post harvest Stage)}} \times 100$

Annex.-XI: Substitution of Sampling units in Crop Estimation Surveys (AS 2.0)

Source : Annex –XXI of State Status Report (SSR)

Sl. No.	Col. No of Annexure of AISR	Col. No of working sheet of AISR Annexure to be posted	Col No. of Annx.- XXI of SSR to be referred
1	2	3	4
1.	-	Col.3 (No.of C.C.Expts. analysed)	Sl. No.1-Col.2 & 3 of Annex – XXII (Seasonwise Pooled Figures)
2.	Col.4 (Through Formula for calculating percentage) @	Col.4 – Reason code 1 *	Col.3 of Annex 21
3.	Col.5 (Through Formula for calculating percentage) @	Col.5 – Reason code 2 *	Col.4 of Annex 21
4.	Col.6 (Through Formula for calculating percentage) @	Col.6 – Reason code 3 *	Col.5 of Annex 21
5.	Col.7 (Through Formula for calculating percentage) @	Col.7 – Reason code 9 *	Col.6 of Annex 21
6.	Col.8 (Through Formula for calculating percentage) @	Col.8 - Reason code 1 \$	Col.7 of Annex 21
7.	Col.9 (Through Formula for calculating percentage) @	Col.9 – Reason code 2 \$	Col.8 of Annex 21
8.	Col.10 (Through Formula for calculating percentage) @	Col.10 – Reason code 3 \$	Col.9 of Annex 21
9.	Col.11 (Through Formula for calculating percentage) @	Col.11 – Reason code 9 \$	Col.10 of Annex 21

*

1. Crop not sown

2. Entire crop harvested in the village.

3. Records not available

9. Others

\$

1. Crop harvested prior to selection.

2. Crop harvested before the date fixed.

3. Field partially harvested affecting the location of experimental plot.

9. Others.

Note: 1. No. of experiments to be entered in respective Cols. in working sheet (Season-wise & Agency-wise

2. Pooled Figures for all the Columns are obtained by adding Central & State sample figures

No. of experiments of each Column

@ Percentage = $\frac{\text{No. of experiments of each Column}}{\text{No. of C.C. Experiments Analysed (at harvest \& post harvest Stage)}} \times 100$

All India Pooling in working sheet:

I To obtain figures at all India level, calculate total of entries of each of the Cols. over all the States, season-wise and agency-wise

No. of experiments in each Col.

II. Percentage = $\frac{\text{No. of experiments in each Col.}}{\text{No. of C.C. Experiments Analysed (at harvest \& post harvest Stage)}} \times 100$

Annex-XII: Comparison of estimates of Area based on ICS, TRS & Final estimates (AS 1.0 & AS 1.1)

Source:

- (a) Tables A-17/18 received from EDP unit (AS 1.0)
- (b) Tables A-20 received from EDP unit (AS 1.1)
- (c) TRS information collected in prescribed format {(Ratio Method) obtained from DES, M/o Agri. New Delhi)}
- (d) Final Estimates collected from DES, M/o Agri. New Delhi

Sl. No.	Col. No of Annexure of AISR	Col. No of working sheet of AISR Annexure to be posted	Col No. of EDP Table or SSR to be referred
1	2	3	4
1.	-	Col.3. (No. of villages analysed AS 1.1))	Col. 3 of Annex-XIII of SSR
2.			

Annex-XIII: Comparison of Percentage Area under different inputs under ICS and TRS (AS 1.0)

Source:

1. Tables A-17/18 received from EDP unit (AS 1.0) {Supervisor's entries only to be taken i.e Col.2 to Col.6 }
2. TRS information collected in prescribed format {(Ratio Method) obtained from Shastri Bhawan, New Delhi)}

Sl. No.	Col. No of Annexure of AISR	Col. No of working sheet of AISR Annexure to be posted	Col No. of EDP table or SSR or TRS format to be referred
1	2	3	4
1.	-	Col.3 & 4 . (No. of villages analysed for Central & State samples AS 1.0))	Col. 5 of Annex-I of SSR
2.	-	Col.5 (Pooled figure is simple total of Central & State figures)	-
3.	Col.4 (Irrigated –HYV) (Through Formula for calculating percentage) @	Col.6 & 7 (Irrigated Area under HYV category for Central & State sample in '000' hac)	Col. 2 of EDP Table A-17/18
4.	-	Col. 8 (Pooled Area calculated through formula) *	-
5.	-	Col.9 = Col.5 x Col.8	-
6.	Col.5 (Irrigated –Local) (Through Formula for calculating percentage) @	Col.10 & 11 (Irrigated Area of Local category for Central & State sample in '000' hac)	Col.4 of EDP Table A-17/18
7.	-	Col. 12 (Pooled Area calculated through formula) *	-
8.	-	Col.13 = Col.5 x Col.12	
9.	Col.6 (Irrigated –Total) (Through Formula for calculating percentage) @	Col.14,15 & 16 (Agency wise simple total of Area of HY & L for Irrigated category)	
10.		Col.17 = Col.5 x Col.16	
11.	Col.7 (Un-Irrigated –HYV) (Through Formula for calculating percentage) @	Col.18 & 19 (Un-Irrigated Area of HYV category for Central & State sample in '000' hac)	Col. 3 of EDP Table A-17/18
12.	-	Col. 20 (Pooled Area calculated through formula) *	
13.	-	Col.21 = Col.5 x Col.20	
14.	Col.8 (Un-Irrigated –Local) (Through Formula for calculating percentage) @	Col.22 & 23 (Un- Irrigated Area of Local category for Central & State sample in '000' hac)	Col. 5 of EDP Table A-17/18
15.	-	Col. 24 (Pooled Area calculated through formula) *	
16.		Col.25 = Col.5 x Col.24	
17.	Col.9 (Un-Irrigated Total) (Through Formula for calculating percentage) @	Col.26, 27 & 28 Agency wise simple total of Area of HY & L for Un- Irrigated category)	
18.		Col.29 = Col.5 x Col.28	
19.	Col.10 (Grand Total for all inputs & Variety wise) (Through Formula for calculating percentage) @	Col. 30, 31 & 32 Agency wise simple total of Area for all categories of the crop	Col. 6 (Grand Total)
20.		Col.33 = Col.5 x Col.32	
21.	Col.11 to Col.17 (Variety wise through Formula for calculating percentage) @	Not required	Col.4 to Col.10 (TRS data collected from DES, M/o Agri.New Delhi as per TRS format enclosed

Calculation of State-wise Pooled entries:

- a) * {No. of Villages analysed for Central Sample x Area for Central sample + No. of Villages analysed for State Sample x Area for State sample} / No. of villages analysed (Pooled)

Calculation of variety

Percentage (ICS) Col.4 ('D' of Main Annexre) = (Irr-HYV)	Col.9 ('Z' of working sheet) ----- x 100 Col.33 ('AX' of working sheet)
Percentage (ICS) Col.5 ('E' of Main Annexre) = (Irr-Local)	Col.13 ('AD' of working sheet) ----- x 100 Col.33 ('AX' of working sheet)
Percentage (ICS) Col.6 ('F' of Main Annexre) = (Irr-HYV+Local)	Col.17 ('AH' of working sheet) ----- x 100 Col.33 ('AX' of working sheet)
Percentage (ICS) Col.7 ('G' of Main Annexre) = (Un-irr-HYV)	Col.21 ('AL' of working sheet) ----- x 100 Col.33 ('AX' of working sheet)
Percentage (ICS) Col.8 ('H' of Main Annexre) = (Un-irr-Local)	Col.25 ('AP' of working sheet) ----- x 100 Col.33 ('AX' of working sheet)
Percentage (ICS) Col.9 ('I' of Main Annexre) = (Un-irr-HYV+Local)	Col.29 ('AT' of working sheet) ----- x 100 Col.33 ('AX' of working sheet)
Percentage (ICS) Col.10 ('J' of Main Annexre) = (Grand Total for all categories)	Col.33 ('AX' of working sheet) ----- x 100 Col.33 ('AX' of working sheet)

Calculation of variety-wise percentage of TRS Area Estimates

Percentage (TRS) Col.11 ('K' of Main Annexre) = (Irr-HYV)	Col.4 ('BB' of TRS Format) ----- x 100 Col.10 ('BH' of TRS Format)
---------------------------------------------------------------	----------------------------------------------------------------------------

$$\text{Percentage (TRS) Col.16 ('P' of Main Annexre) (Un-irr-HYV+Local)} = \frac{\text{Col.9 ('BG' of TRS Format)}}{\text{Col.10 ('BH' of TRS Format)}} \times 100$$

$$\text{Percentage (TRS) Col.17 ('Q' of Main Annexre) (Grand Total for all categories)} = \frac{\text{Col.10 ('BH' of TRS Format)}}{\text{Col.10 ('BH' of TRS Format)}} \times 100$$

TRS Format

Sr. no.	State	season	Irrigated			Unirrigated			GRAND TOTAL
			HYV	Local	Total	HYV	Local	Total	
1	2	3	4	5	6	7	8	9	10
CROP									

All India Pooling in working sheet:

1. Calculate simple total of figures in Cols. 9, 13, 17, 21, 25, & 29 (Villages analysed Pooled x Area pooled) and calculate percentage in the main Annex as per formula given above for ICS.
2. Calculate simple total of figures in Cols. 9, 13, 17, 21, 25, & 29 (Villages analysed Pooled x Area pooled) and calculate percentage in the main Annex as per formula given above for ICS. This is to be done for those States only where TRS estimates are available for category: Irrigated and Un-Irrigated.
3. Calculate simple total of figures in Cols. 9, 13, 17, 21, 25, & 29 (Villages analysed Pooled x Area pooled) and calculate percentage in the main Annex as per formula given above for ICS. This is to be done for those States only where TRS estimates are available for category: HYV and Local Varieties.
4. Also calculate simple total of variety-wise entries for each col. of TRS Format and calculate percentage in the main Annex as per formula given above for TRS.

Annex-XIV: Comparison of estimates of Yield Rates under ICS and CES (AS 2.0)

Source: (a) Annex - XX and XXV of SR Vol-II

(b) Table 5 of CES Review

Sl. No.	Col. No of Annexure of AISR	Col. No of working sheet of AISR Annexure to be posted	Col No. of SSR or CES Tables to be referred
1	2	3	4
1.	Col.4	Col.3 (No.of C.C.Expts. Planned to be entered for Central & State samples) Crop-wise Pooled figures are obtained by simple total of Central & State sample figures	Col. 2 of Annex-XX of SSR (No.of C.C.Expts. Planned crop-wise for Central & State samples)
2.	Col.5	Col.4 (No.of C.C.Expts. Analysed to be entered for Central & State samples) Crop-wise Pooled figures are obtained by simple total of Central & State sample figures	Col. 3 of Annex-XX of SSR (No.of C.C.Expts. Analysed crop-wise for Central & State samples)
3.	Col.6	Col.5 (Agency, Crop & Season-wise Average Yield of ICS to be entered)	Col. 3 of Annex-XXV of SSR (Agency, Crop & Season-wise Average Yield of ICS)
4.	Col.7	Col.6 (Agency, Crop & Season-wise % SE of ICS to be entered)	Col. 4 of Annex-XXV of SSR (Agency, Crop & Season-wise % SE of ICS)
5.	Col.8 (against pooled sample)	Col.7 (No.of Expts. Planned under CES to be entered for pooled sample)	Col.4 of CES Intermediate Table-V (Crop-wise pooled No. of expts.Planned)
6.	Col.9 (against pooled sample)	Col.8 (No.of Expts. Analysed under CES to be entered for pooled sample)	Col.5 of CES Intermediate Table-V (Crop-wise pooled No. of expts.analysed)
7.	Col.10 (against pooled sample)	Col.9 (Estimated Average Yield of CES to be entered for pooled sample)	Col.7 of CES Table-V
8.	Col.11 (against pooled sample)	Col.10 (% SE of CES to be entered for pooled sample)	Col.8 of CES Table-V
9.	Col.12 (against pooled sample)	(Col.5 – Col.9) Col.11= ----- x100 Col.9	-
10.	Col.13	Col.12 = $CV = \sqrt{\text{No. Of Expts. Analysed (ICS) i.e.Col.4} \times 100}$	
11.		Col.13 = ICS pooled area to be entered in '000' hac.	Col.7 of AISR Annex-XII (Pooled area)
12.		Col.14 = Square Col.13 i.e Pooled ICS area	-
13.		Col.15= Col.13 x Col.5 (Pooled Area x Pooled Estimated yield)	
14.		Col.16= $(\text{Col.13} \times \text{Col.5} \times \text{Col.6})^2 / 10000$ (ICS Pooled Area x Pooled Estimated yield x %SE) ² / 10000	
15.		Col.17 = CES area to be entered in '000' hac.	Col.2 of CES Table-V
16.		Col.18 = Square Col.13 i.e Pooled CES area	-
17.		Col.19= Col.17 x Col.9 (Pooled Area x Pooled Estimated yield)	
18.		Col.20= $(\text{Col.17} \times \text{Col.9} \times \text{Col.10})^2 / 10000$ (CES Pooled Area x Pooled Estimated yield x %SE) ² / 10000	

All India Pooling in working sheet:

1. To calculate pooled figures for number of experiments Planned & Analysed for each crop, sum all the pooled entries for each State (i.e. for Col.3, 4, 7 & 8)

2. To calculate pooled figures for each crop for Estimated yield (ICS) at All India level (Col.5), sum over pooled figures of Col.15 & Col.13 over all the States and divide All India Figures in Col.15 by All India figures in Col.13 i.e.

$$\frac{\text{All India Figures in Col.15}}{\text{All India figures in Col.13}}$$

3. To calculate pooled figures for each crop for Estimated yield (CES) at All India level (Col.9), sum over pooled figures of Col.19 & Col.17 over all the States and divide All India Figures in Col.19 by All India figures in Col.17 i.e.

$$\frac{\text{All India Figures in Col.19}}{\text{All India figures in Col.17}}$$

4. To calculate % SE for each crop (ICS) at All India level (Col.6), calculate simple total of entries in Col.16 & Col.14 over all the States and divide All India Figures of Col.16 by All India figures in Col.14, square root the same and again divide by All India figures of Col.5.

$$\%SE \text{ (Col.6)} = \frac{\sqrt{\text{Col.16} \div \text{Col.14}}}{\text{Col.5}}$$

5. To calculate % SE for each crop (CES) at All India level (Col.10), calculate simple total of entries in Col.20 & Col.18 over all the States and divide All India Figures of Col.20 by All India figures in Col.18, square root the same and again divide by All India figures of Col.9.

$$\%SE \text{ (Col.10)} = \frac{\sqrt{\text{Col.20} \div \text{Col.18}}}{\text{Col.9}}$$

6. All India Col. 11 = $\frac{\text{Col.5} - \text{Col.9}}{\text{Col.9}} \times 100$

7. All India Col.12 = $\sqrt{\text{Col. 4} \times \text{Col.6}}$
[Square root of No. of Experiments analysed (ICS) x % SE (ICS)]

Annex-XV: Estimates of Yield Rates according to Irrigation and Seed under ICS (AS 2.0)

Source : Y-8 Tables received from EDP unit

Sl. No.	Col. No of Annexure of AISR	Col No. of Y-8 table to be referred
1	2	4
1	Col 5.(Crop &Seasonwise entries to be done for Central & State Samples)	Col.3 Crop & Agency-wise No. of C.C.Expts. (Irrigated - HYV)
2	Pooled sample figures are simple total of Central & State sample figures	
3	Col 6.(Crop &Seasonwise entries to be done for Central & State Samples)	Col.4 Yield Rate Kg/hac. (Irrigated - HYV)
4	Pooled sample figures are calculated through Formula 1*	
5	Col 7.(Crop &Seasonwise entries to be done for Central & State Samples)	Col.5 Crop & Agency-wise No. of C.C.Expts. (Un-Irrigated - HYV)
6	Pooled sample figures are simple total of Central & State sample figures	
7	Col 8.(Crop &Seasonwise entries to be done for Central & State Samples)	Col.6 Yield Rate Kg/hac. (Un-Irrigated - HYV)
8	Pooled sample figures are calculated through Formula 1*	
9	Col 9 =Col.5+Col.7	
10	Col.10 = Central & State sample figures are calculated through Formula 2* and Pooled sample figures are calculated through Formula 1*	
11	Col 11.(Crop &Seasonwise entries to be done for Central & State Samples)	Col.9 Crop & Agency-wise No. of C.C.Expts. (Irrigated - Other Varieties)
12	Pooled sample figures are simple total of Central & State sample figures	
13	Col 12.(Crop &Seasonwise entries to be done for Central & State Samples)	Col.10 Yield Rate Kg/hac. (Irrigated - Other Varieties)
14	Pooled sample figures are calculated through Formula 1*	
15	Col 13.(Crop &Seasonwise entries to be done for Central & State Samples)	Col.11 Crop & Agency-wise No. of C.C.Expts. (Un-Irrigated - Other Varieties)
16	Pooled sample figures are simple total of Central & State sample figures	
17	Col 14.(Crop &Seasonwise entries to be done for Central & State Samples)	Col.12 Yield Rate Kg/hac. (Un-Irrigated - Other Varieties)
18	Pooled sample figures are calculated through Formula 1*	
19	Col 15= Central & State sample figures are calculated through Formula 2* and Pooled sample figures are calculated through Formula 1*	
20	Col 16= Central & State sample figures are calculated through Formula 2* and Pooled sample figures are calculated through Formula 1*	
21	Col 17.(Crop &Seasonwise entries to be done for Central & State Samples)	Col.15 Crop & Agency-wise No. of C.C.Expts. (Irrigated - HYV & Other Varieties)
22	Pooled sample figures are simple total of Central & State sample figures	
23	Col 18.(Crop &Seasonwise entries to be done for Central & State Samples)	Col.16 Yield Rate Kg/hac. (Irrigated - HYV & Other Varieties)
24	Pooled sample figures are calculated through Formula 1*	
25	Col 19.(Crop &Seasonwise entries to be done for Central & State Samples)	Col.17 Crop & Agency-wise No. of C.C.Expts. (Un-Irrigated - HYV & Other Varieties)
26	Pooled sample figures are simple total of Central & State sample figures	
27	Col 20.(Crop &Seasonwise entries to be done for Central & State Samples)	Col.18 Yield Rate Kg/hac. (Un-Irrigated - HYV & Other Varieties)
28	Pooled sample figures are calculated through Formula 1*	
29	Col 21 =Col.17+Col.19 Sum Total of Irr. & Un-Irr.No. of experiments	
30	Col.22 Central & State sample figures are calculated through Formula 2* and Pooled sample figures are calculated through Formula 1*	

- Formula 1= {No. of C.C Experiments for Central Sample x Yield for Central sample} + {No. of C.C Experiments for State Sample x Yield for State sample}/ No. of Expts. (Pooled) for each input

- **Formula 1= {No. of C.C Experiments for Irrigated x Yield for Irrigated } + {No. of C.C Experiments for un-irrigated x Yield for Un-Irrigated}/ Total No. of Expts. Irrigated+Un-Irrigated**

All India Pooling in AISR:

For Crop cutting Experiments:

- I. Calculate total of entries of all the Cols. relating to C.C.experiments for all the States, Season-wise, Crop-wise and Agency-wise

For Yield Rate Calculation:

- II. Calculate Total of No. of Experiments x Yield Rate Crop-wise, Agency-wise and State-wise for all seasons taken together. Add all this at all India level and divide by the Total No. of Experiments (All India) for each input.

Annex.-XVI: Estimates of Yield Rates according to use of Fertiliser and Manure under ICS (AS 2.0)

Source : Y-9 (i) & (ii) Tables received from EDP unit

Sl. No.	Col. No of Annexure of AISR	Col No. of Y-9 (i) & (ii) Tables to be referred
1	2	4
1	Col 5.(Crop &Seasonwise entries to be done for Central & State Samples)	Col.4 Crop & Agency-wise No. of C.C.Expts. (Fertilisers only)
2	Pooled sample figures are simple total of Central & State sample figures	
3	Col 6.(Crop &Seasonwise entries to be done for Central & State Samples)	Col.5 Yield Rate Kg/ha. (Fertilisers only)
4	Pooled sample figures are calculated through Formula 1*	
5	Col 7.(Crop &Seasonwise entries to be done for Central & State Samples)	Col.14 Crop & Agency-wise No. of C.C.Expts. (Manures only)
6	Pooled sample figures are simple total of Central & State sample figures	
7	Col 8.(Crop &Seasonwise entries to be done for Central & State Samples)	Col.15 Yield Rate Kg/hac. (Manures only)
8	Pooled sample figures are calculated through Formula 1*	
9	Col 9.(Crop &Seasonwise entries to be done for Central & State Samples)	Col.20 Crop & Agency-wise No. of C.C.Expts. treated with both Fertilisers & Manures)
10	Pooled sample figures are simple total of Central & State sample figures	
11	Col 10.(Crop &Seasonwise entries to be done for Central & State Samples)	Col.21 Yield Rate Kg/hac treated with both Fertilisers & Manures)
12	Pooled sample figures are calculated through Formula 1*	
13	Col 11.(Crop &Seasonwise entries to be done for Central & State Samples)	Col.22 Crop & Agency-wise No. of C.C.Expts. not treated with both Fertilisers or Manures)
14	Pooled sample figures are simple total of Central & State sample figures	
15	Col 12.(Crop &Seasonwise entries to be done for Central & State Samples)	Col.23 Yield Rate Kg/hac not treated with both Fertilisers or Manures)
16	Pooled sample figures are calculated through Formula 1*	
17	Col 13.(Pooled No. of Expts. Through formula i.e. Col.5+Col.7+Col.9+Col.11)	
18	Pooled sample figures are simple total of Central & State sample figures	
19	Col 14.(Pooled Yield Kg/hac. Through formula*)	
20	Pooled sample figures are calculated through Formula 2*	

1. Formula for Pooled Agency = {No. of C.C Experiments for Central Sample x Yield for Central sample} + {No. of C.C Experiments for State Sample x Yield for State sample} / No. of Expts. (Pooled) for each input

2. Formula= {Col.5 x Col.6} + {Col.7 x Col.8} + {Col.9 x Col.10} + {Col.11 x Col.12} / Col.13 Crop, Agency & Seasonwise

All India Pooling in AISR:

For Crop cutting Experiments:

I Calculate total of entries of all the Cols. relating to C.C.experiments for all the States, Season-wise, Crop-wise and Agency-wise

For Yield Rate Calculation:

II Calculate Total of No. of Experiments x Yield Rate Crop-wise, Agency-wise and State-wise for all seasons taken together. Add all this at all India level and divide by the Total No. of Experiments (All India) for each input.

IMPORTANT INSTRUCTIONS WHILE PREPARING THE REVIEW OF CROP STATISTICS SYSTEM IN INDIA THROUGH SCHEME FOR IMPROVEMENT OF CROP STATISTICS

- **All posting work to be done in the Working Sheet specially designed for the purpose of Annex so that formulae entered in Main annex may not be disturbed.**
 - **From the year 1998-99, four new annexes i.e. Annex IV, IV(c), IV (d) & V have been added alongwith 4 new crops (Cotton, Groundnut, Sugarcane and Rapeseed & Mustard).**
 - **AISR is being prepared for one-year only w.e.f. 1998-99 to keep uniformity.**
 - **Data for Central, State & pooled samples have been given for all the annexes except Annexes IV, V (b), and XI**
 - **Always take back up of work done in Pen drive every day.**
 - **Three new States viz. Chhattisgarh, Jharkhand and Uttranachal have been introduced w.e.f 2001-2002 under ICS scheme**
-

RESPONSE IN SAMPLE CHECK ON ENUMERATION OF AREA DURING YEAR							
Sr. No.	State	A G E N C Y	Sample Size	Percentage Response			
				Kharif		Rabi	Summer
				Autumn	Winter		
1	2	3	4	5	6	7	8

Annex-I (Working Sheet)

State	Agency	Sample Size	Autumn			Winter			Rabi			Summer		
			No. of villages planned	Schs.recd		No. of villages planned	Schs.recd		No. of villages planned	Schs.crecd		No. of villages planned	Schs. recd	
				No.	%		No.	%		No.	%		No.	%
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15

Source Annex-I of State Status Report (SSR)

TIMELINESS IN COMPLETION OF GIRDAWARI DURING YEAR.....														
S. No .	State	Percentage of villages where Girdawari was completed during												
		A G E N C Y	Autumn			Winter			Rabi			Summer		
			In time	Late	Not com- pleted till visit	In time	Late	Not com- pleted till visit	In time	Late	Not com- pleted till visit	In time	Late	Not com- pleted till visit
1	2	3	4											

ANNEX-III

TIMELINESS IN SUBMISSION OF TRS STATEMENT DURING -----					
Sl. No.	State	S E A S O N	A G E N C Y	Percentage of Villages for which	
				TRS Statement submitted	TRS Statement not Submitted
				Without compl- eting Girdawari	

**INFORMATION REGARDING UPDATION OF VILLAGE
MAPS AND THEIR USABILITY DURING -----**

Sl.No	State	Percentage of villages in which			
		Maps updated for more than 20 years	Availability of Maps		Maps not available
			Usable	unusable	
1	2	3	4	5	6

Annex –IV (Working Sheet)

Sl.No	State	No. of Villages analysed An-1 (Col.5)	Number of villages in which			
			Maps updated for more than 20 years	Availability of Maps		Maps not available
				Usable	unusable	
1	2	3	4	5	6	7

Source: Annex-II of State Status Report (SSR)

PERCENTAGE OF SURVEY NUMBERS IN WHICH ERRORS IN RECORDING CROP AREAS WERE OBSERVED DURING -----																		
Sl. No.	State	A G E N C Y	Percentage of survey numbers with different types of errors in enumeration of area during															
			KHARIF								RABI							
			AUTUMN				WINTER				RABI				SUMMER			
			e ₀	e ₁	e ₂	e ₃	e ₀	e ₁	e ₂	e ₃	e ₀	e ₁	e ₂	e ₃	e ₀	e ₁	e ₂	e ₃
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19

Annex – IV (a) (Working Sheet)

State	A G E N C Y	Number of survey numbers with different types of errors in enumeration of area during															
		AUTUMN				WINTER				RABI				SUMMER			
		e ₀	e ₁	e ₂	e ₃	e ₀	e ₁	e ₂	e ₃	e ₀	e ₁	e ₂	e ₃	e ₀	e ₁	e ₂	e ₃
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18

Source Annex-VII (b) of State Status Report (SSR)

IMPACT OF ERRORS IN RECORDING CROP AREA DURING-----

Sl. No.	State	A G E N C Y	Ratio of Patwari's entries and that of Supervisor in sample clusters for area														
			Paddy			Jowar		Bajr a	Mai ze	Ra gi	Cot ton	Gro und nut	Sugar- cane	Wheat	Barley	Gram	Ra pe & Mu s.
			A u t.	Win t.	Sum .	Kha rif	Rabi										
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18

Working Sheet Annex-IV (b)

State		Ratio of Patwari's entries (b) entries and that of Supervisor(a) entries in sample clusters for area															
		Paddy						Jowar				Bajra		Maize		Ragi	
		Autumn		Winter		Summer		Kharif		Rabi							
		S	P	S	P	S	P	S	P	S	P	S	P	S	P	S	P
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18

Working Sheet Annex-IV (b) Contd.....

State Cotton Groundnut Sugarcane Wheat Barley Gram R & M

ANNEX - IV(C)

DISCREPANCIES IN RECORDING IRRIGATION PARTICULARS DURING -----														
S.No.	State	Season	A G E N C Y	Percentage of survey numbers in which particulars										
				Tallied			Not Tallied							
							Supervisor				Patwari			
				Irr	UI	Total	Irr	UI	NR	Total	Irr	UI	NR	Total
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15

Annex – IV (c) (Working Sheet)

State	Season	A G E N C Y	Total Survey/ Sub survey Nos. Col.2 of Ann.9	Number of survey numbers in which particulars										
				Tallied			Not Tallied							
							Supervisor				Patwari			
				Irr	UI	Total	Irr	UI	NR	Total	Irr	UI	NR	Total
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15

Source Annex-IX of State Status Report (SSR)

RESPONSE IN PAGE TOTALLING OF KHASRA REGISTER DURING -----							
Sr. No.	State	A G E N C Y	Sample Size	Percentage Response			
				Kharif		Rabi	Summer
				Autumn	Winter		
1	2	3	4	5	6	7	8

Annex- V (Working Sheet)

State	A G E N C Y	Sample Size	No. of villages planned	No. of Sch. Analysed	%	No. of villages planned	No. of Sch. Analysed	%	No. of villages planned	No. of Sch. Analysed	%	No. of villages planned	No. of Sch. Analysed	%
			Autumn			Winter			Rabi			Summer		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15

Source Annex-XIII of State Status Report (SSR)

**PERCENTAGE OF CASES WHERE INACCURACIES IN AGGREGATION
OF CROP AREA WERE OBSERVED DURING -----**

Sr. No.	State	A G G R E G A T I O N	Percentage of cases for which crop abstract were inconsistent with Khasra Ragister for crop areas			
			Kharif		Rabi	Summer
			Autumn	Winter		
1	2	3	4	5	6	7

Annex- V (a) (Working Sheet)

State	Agency	Autumn			Winter			Rabi			Summer		
		Number of Villages where area											
		Total	Differed	%	Total	Differed	%	Total	Differed	%	Total	Differed	%
1	2	3	4	5	6	7	8	9	10	11	12	13	14

Source Annex-XIV of State Status Report (SSR)

IMPACT OF AGGREGATION ERRORS DURING -----

Sl. No.	State	Ratio of Primary worker's totals and those of Supervisor for sample village for the crop (b/a)														
		Paddy			Jowar		Bajra	Maize	Ragi	Cotton	Groundnut	Sugarcane	Wheat	Barley	Gram	Rape & Mustard
		Aut.	Wint.	Sum.	Kh.	Rabi										
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17

Annex- V (b) (Working Sheet)

State	Ratio of Patwari's entries and that of Supervisor in sample clusters for area															
	Paddy						Jowar				Bajra		Maize		Ragi	
	Autumn		Winter		Summer		Kharif		Rabi							
	Sup	Pat	Sup	Pat	Sup	Pat	Sup	Pat	Sup	Pat	Sup	Pat	Sup	Pat	Sup	Pat
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17

Annex- V (b) (Working Sheet) Contd.....

State	Cotton		Groundnut		Sugarcane		Wheat		Barley		Gram		Rape & mustard	
	Sup	Pat	Sup	Pat	Sup	Pat	Sup	Pat	Sup	Pat	Sup	Pat	Sup	Pat
18	19	20	21	22	23	24	25	26	27	28	29	30	31	32

Source Annex-XV of State Status Report (SSR)

**RESPONSE IN SAMPLE CHECK ON CROP CUTTING EXPERIMENTS
DURING ----- (At Harvest stage only)**

Sr. No.	State	A G E N C Y	Kharif				Rabi/ Summer			
			Autumn		Winter		Rabi		Summer	
			No. of Expts. Planned	% Response	No. of Expts. Planned	% Response	No. of Expts. Planned	% Response	No. of Expts. Planned	% Response
1	2	3	4	5	6	7	8	9	10	11

Annex- VI (Working Sheet)

State	Season	Kharif				Rabi		Summer	
		Autumn		Winter					
		No. of Expts Planned	Response	No.of Expts. Planned	Response	No. of Expts Planned	Response	No.of Expts. Planned	Response
1	2	3	4	5	6	7	8	9	10

Source Annex-XIX of State Status Report (SSR)

**DISTRIBUTION OF NUMBER OF EXPERIMENTS CONDUCTED
ACCORDING TO IMPORTANT INPUTS DURING -----**

Sl. No.	State	Agency	H/ T	Percentage of Experiments under various inputs for crops		
				I	HYV	F
1	2	3	4	5	6	7
Crop						
No working Sheet required and No pooling required						

H = Checked at Harvest and Post harvest stage

T = Total (Harvest+Missed+Lost)

INCIDENCE OF ERRORS ON CROP CUTTING EXPERIMENTS DURING

Sl. No.	State	Season	A G E N C Y	% of Expts. where no error noticed	Percentage of experiments where errors noticed							
					e ₁	e ₂	e ₃	e ₄	e ₅	e ₆	e ₇	e ₈
1	2	3	4	5	6	7	8	9	10	11	12	13

e₁= Error in selection of survey/sub-survey nos.

e₂= Error in selection of field within survey/sub-survey nos.

e₃= Error in measurement of field

e₄= Error in selection of Random Nos., Location and Marking of plots

e₅= Error in weighment of produce

e₆= Error in reporting ancillary information

e₇= Inadequate arrangements for storing of produce for driage and incorrect reporting of constituents in mixture.

e₈= Others

Annex-VIII (Working Sheet)

State	Season	Agency	no.of expts. analysed	no.of expts. where no error noticed	No.of experiments where errors noticed							
					e1	e2	e3	e4	e5	e6	e7	e8
1	2	3	4	5	6	7	8	9	10	11	12	13

Source Annex-XXII of State Status Report (SSR)

SUPPLY AND USE OF EQUIPMENTS FOR CROP CUTTING EXPERIMENTS**DURING -----**

S.No.	State	S S O	A G E N C Y	Percentage of experiments for which							
				Concerned Primary workers were not supplied with				Primary workers did not use the supplied items.			
				Tape	Pegs	Balance	Weight	Tape	Pegs	Balance	Weight
1	2	3	4	5	6	7	8	9	10	11	12

Annex-IX (Working Sheet)

		A G E N C Y	No. of expts. Analysed	Number of experiments for which concerned primary workers were not supplied with				Primary workers did not use the supplied items			
				Tape	Pegs	Balance	Weight	Tape	Pegs	Balance	Weight
State	Season										
1	2	3	4	5	6	7	8	9	10	11	12

Source Annex-XXIII of State Status Report (SSR)

**DELEGATION OF WORK AND CONDUCT OF CROP CUTTING EXPERIMENTS BY
UNTRAINED WORKERS DURING -----**

S.No	State	A	Kharif				Rabi			
		G	Autumn		Winter		Rabi		Summer	
		E	Percentage							
		N	of Expts.	of Expts.	of Expts.	of Expts.	of Expts.	of Expts.	of Expts.	of Expts.
		C	for which	conducted	for which	conducted	for which	conducted	for which	conducted
Y	work was	by untrained	work was	by untrained	work was	by untrained	work was	by untrained	work was	
			delegated	workers	delegated	workers	delegated	workers	delegated	workers
1	2	3	4	5	6	7	8	9	10	11

Annex-X (Working Sheet)

S T A T E	A G E C Y	No.of expts. analysed	Number of Expts. for which work was delegated	No. Expts.con ducted by untrained workers	No.of expts. analysed	No. Expts. for which work was delegated	No. Expts.con ducted by untrained workers	No.of expts. analysed	Number of Expts. for which work was delegated	No. Expts.con ducted by untrained workers	No.of expts. analysed	No. Expts. for which work was delegat ed	No. Expts. conduct ed by untrain ed workers
1	2	3	4	5	6	7	8	9	10	11	12	13	14

Source Annex-XXIV of State Status Report (SSR)

ANNEX - XI

SUBSTITUTION OF SAMPLING UNITS IN CROP ESTIMATION SURVEYS
DURING -----

S.No.	State	Season	Percentage of experiments for which substitution was done in respect of							
			Selected villages due to reason				Selected survey nos.due to reason			
1	2	3	4	5	6	7	8	9	10	11

Annex-XI (Working Sheet)

State	Season	No. of expts analysed	Number of experiments for which substitution was done in respect of							
			Selected villages due to reason				Selected survey nos.due to reason			
1	2	3	4	5	6	7	8	9	10	11
			1	2	3	9	1	2	3	9

Source Annex-XXI of State Status Report (SSR)

**COMPARISON OF ESTIMATES OF CROP AREAS BASED ON
ICS, TRS & FINAL ESTIMATES : -----**

SI No	State	A G E N C Y	Estimates of Area based on sample checks (in `000' hectares)				Estimated area as per TRS (in `000' ha)	Final Estimates of Area (in `000' ha)	Ratio of Area Estimates				
			A-I	A-II	A-III	A-IV			TRS/ Final	A-I/ Final	A-II/ Final	A-III/ Final	A-IV/ Final
1	2	3	4	5	6	7	8	9	10	11	12	13	14
CROP													

- 1) A-I = Estimates based on abstract statement of sample village.
- 2) A-II = Estimates based on crop areas in sample village as aggregated by supervisor.
- 3) A-III = Estimates based on khasra entries in sample cluster.
- 4) A-IV = Estimates based on supervisors observations of crop area in sample cluster.
- 5)

COMPARISON OF PERCENTAGE AREA UNDER DIFFERENT INPUTS AS ESTIMATED

UNDER ICS & TRS : -----

Sl. No.	State	Season	Percentage of Area under different categories													
			As per Sample check						TOTAL	As per T.R.S.						TOTAL
			Irrigated			Un-Irrigated				Irrigated			Unirrigated			
			HYV	Local	Total	HYV	Local	Total		HYV	Local	Total	HYV	Local	Total	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
CROP																
TOTAL FOR STATES COVERED UNDER ICS SCHEME																
TOTAL FOR STATES WHERE TRS ESTIMATES AVAILABLE FOR IRRIGATED AND UNIRRIGATED																
TOTAL FOR STATES WHERE TRS ESTIMATES AVAILABLE FOR HYV & LOCAL																

Annex-XIII (Working Sheet)

S T A T E	S E A S O N	Villages analysed			Area I-HYV				Area I-Local				Total Irr. Area HYV & Local					
		C	S	P	C	S	P		V(P)*A(P)	C	S		P	V(P)*A(P)	C	S	P	V(P)*A(P)
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17		
R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	AG	AH		
CROP																		

Area UI-HYV			V(P)*A(P)	Area UI-Local			V(P)*A(P)	Total Un-Irr. Area HYV & Local			V(P)*A(P)	Grand Total of all varieties			V(P)*A(P)
C	S	P		C	S	P		C	S	P		C	S	P	
18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33
AI	AJ	AK	AL	AM	AN	AO	AP	AQ	AR	AS	AT	AU	AV	AW	AX
CROP															

TRS Format

Sr. no.	State	season	Irrigated			Unirrigated			GRAND TOTAL
			HYV	Local	Total	HYV	Local	Total	
1	2	3	4	5	6	7	8	9	10
AY	AZ	BA	BB	BC	BD	BE	BF	BG	BH
CROP									

Source: (i) Tables A-17/18 received from EDP unit (AS 1.0)
(ii) TRS Area estimates received from DES, M/o Agri.

COMPARISON OF ESTIMATES OF YIELD UNDER ICS AND CES DURING -----

Sr. No.	State	A G E N C Y	Sample check (ICS)				C.E.S.				% Diff. (Col.6- Col.10/ Col.10 x 100)	Coeffi- cient of Varia- tion		
			No.of Expts.		Estimated Yield Rate Kg/Hac	%	SE	No.of Expts.		Estimated Yield Rate Kg/Hac			%	SE
			Planned	Analysed				Planned	Analysed					
1	2	3	4	5	6	7	8	9	10	11	12	13		
CROP														

Annex-XIV (Working Sheet)

State	<u>Season</u>	Sample check (ICS)				C.E.S.				Percentage Difference
				Estimated Yield Rate Kg/hec.	% SE			Estimated Yield Rate Kg/hec.	% SE	(Col.6-Col.10) ----- x 100 Col.10
		No.of Expts.				No.of Expts.				
		Planned	Analysed			Planned	Analysed			
1	2	3	4	5	6	7	8	9	10	11
CROP										

Coefficient of Variation	ICS Area	Square of ICS Area	Ar*Yld	V*SQ(Area)	CES Area	Square of CES Area	Ar*Yld	V*SQ(Area)
12	13	14	15	16	17	18	19	20
CROP								

Source: 1. Annex-XX and XXV of State Status Report (SSR)
2. Table –5 CES report

ESTIMATE OF YIELD RATE ACCORDING TO IRRIGATION AND SEEDS UNDER ICS DURING -----

Sl. No.	State	A G E N C Y	S E A S O N	High Yield Varieties						Other Varieties						Both HYV & Other varieties					
				Irrigated		Unirrigate		Total		Irrigated		Unirrigated		Total		Irrigated		Unirrigated		Total	
				No. Of Exp.	Yield Rate Kg/ha	No. Of Exp.	Yield Rate Kg/ha	No. Of Exp.	Yield Rate Kg/ha	No. Of Exp.	Yield Rate Kg/ha	No. Of Exp.	Yield Rate Kg/ha	No. Of Exp.	Yield Rate Kg/ha	No. Of Exp.	Yield Rate Kg/ha	No. Of Exp.	Yield Rate Kg/ha	No. Of Exp.	Yield Rate Kg/ha
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
CROP																					

Annex-XV (Working Sheet)

Agency	c4*c5	c6*c7	c8*c9	c10*c11	c12*c13	c14*c15	c16*c17	c18*c19	c20*c21
1	2	3	4	5	6	7	8	9	10
CROP									

Source: Tables Y-8 received from EDP unit (AS 2.0)

ANNEX - XVI

**ESTIMATE OF YIELD RATE ACCORDING TO USE OF FERTILISERS, MANURES
AND UNMANURED UNDER ICS DURING-----**

Sr.No	State	S E A S O N Y	A G E N C Y	Treated with						Not treated with Manure or Fertiliser		Pooled	
				Fertilisers only		Manures only		Both Fert. & Manures		No.of expts.	Yield Rate Kg/hac	No.of expts.	Yield Rate Kg/hac
				No.of expts.	Yield Rate Kg/hac	No.of expts.	Yield Rate Kg/hac	No.of expts.	Yield Rate Kg/hac				
1	2	3	4	5	6	7	8	9	10	11	12	13	14
CROP													

Annex-XVI (Working Sheet)

Agency	c5*c6	c7*c8	c9*c10	c11*c12	c13*c14
1	2	3	4	5	6
CROP					

Source: Tables Y-9 (i) & (ii) received from EDP unit (AS 2.0)

Table - 2 Working Sheet

WORKLOAD OF PATWARI DURING								
Sl.No	State	No. of Vill. Analysed Ann.1(col.5)	Average Work load per Patwari			Col.3xCol.4	Col.3xCol.5	Col.3xCol.6
			Villages No.	Survey/ sub survey Nos. 000' per village	Geographical Area (000,Hac) per village			
1	2	3	4	5	6	7	8	9

Source : - Annexure-3

INSTRUCTIONS AND PROCEDURE FOR

PREPARATION

OF

ANNEXES/ APPENDICES

OF

ALL INDIA REPORT ON

“ CONSOLIDATED RESULTS OF CROP

ESTIMATION

SURVEY ON PRINCIPAL CROPS ”

STATES COVERED UNDER CES

Land Record States/UTs	1. Andhra Pradesh
	2. Assam
	3. Bihar
	4. Chhattisgarh
	5. Gujarat
	6. Haryana
	7. Himachal Pradesh
	8. Jammu & Kashmir
	9. Jharkhand
	10. Karnataka
	11. Madhya Pradesh
	12. Maharashtra
	13. Punjab
	14. Rajasthan
	15. Tamil Nadu
	16. Uttar Pradesh
	17. Delhi
	18. Uttarakhand
	19. Dadra & Nagar Haveli
	20. Puducherry
EARAS States	1. Kerala
	2. Odisha
	3. West Bengal
Other States and UTs.	1. Andaman district of A & N Islands
	2. Daman & Diu
	3. Goa
	4. Manipur
	5. Meghalaya
	6. Tripura

DETAILS OF ANNEXES AND APPENDICES`

1. ANNEXES

- ANNEX 1 (a) : Total number of experiments planned (Statewise, Seasonwise & Categorywise)
- ANNEX 1 (b) : Number of experiments planned for Kharif Food Crops.
- ANNEX 1 (c) : Number of experiments planned for Rabi Food Crops.
- ANNEX 1 (d) : Number of experiments planned for Kharif Non- Food Crops.
- ANNEX 1 (e) : Number of experiments planned for Rabi Non -Food Crops.
- ANNEX II : Agency wise Training particulars of primary workers.
- ANNEX III (a) : Statewise Supervision details of field work (Agency, Season & Category wise)
- ANNEX III (b) : Cropwise Supervision details of field work (State, Season & Agencywise)
- ANNEX IV (a) : Statewise Response of Experiments Planned /Analysed (Season & Category wise)
- ANNEX IV (b) : Statewise Reasons for loss of Experiments (Category wise)
- ANNEX V : Cropwise Estimates of Area, yield rates and production (State, Season & Agencywise)
- ANNEX VI : Comparison of Survey Estimates and Official Estimates of Area Production and Yied.
- ANNEX VII : Cropwise Estimates of yield rates Irrigated and Unirrigated (State & Seasonwise)
- ANNEX VIII : Varietywise Estimates of yield rates for 5 Important Crops (High Yielding and local varieties - Irrigated and Un – Irrigated)
- ANNEX IX : Cropwise Percentage of Area under different Improved Agricultural practices
- ANNEX X(a) : Cropwise Results of Field driage – (State , Season & Variety)
- ANNEX X(b) : Statewise Results of Central driage – (Crop, Season & Variety)

2. APPENDICES

- APPENDIX I : Statewise Crop coverage and details of design –(Season & Variety)
- APPENDIX II : Crop Coverage by States under Crop Estimation Surveys - Categorywise
- APPENDIX III : Statewise Primary field agency - Designation & Crop Covered Percentage
- APPENDIX IV : Statewise Workload - Agency, Strength, Season & Experiments Assigned
- APPENDIX V : Methodology of Estimation Procedure.
- APPENDIX VI : Statewise Procedure of driage experiments – Crop & Season.
- APPENDIX VII : Statewise Sample Size under ICS - Season wise

ANNEX-I (a) : SAMPLE SIZE- TOTAL NUMBER OF EXPERIMENTS PLANNED UNDER CES

Col. No.	Source / Instructions
3	Table 1.1 - State & Scheme wise sum total of number of Expts. planned for Kharif Food Crops.
4	Table 1.2 - State & Scheme wise sum total of number of Expts. planned for Kharif Non- Food Crops.
5	State & Scheme wise sum total of Expts. Planned for Kharif - Food & Non- Food Crops. (Col 3 + Col. 4)
6	Table 1.3 - State & Scheme wise sum total of number of Expts. planned for Rabi Food Crops
7	Table 1.4 - State & Scheme wise sum total of number of Expts. planned for Rabi Non- Food Crops
8	State & Scheme wise sum total of Expts. Planned for Rabi -Food & Non- Food Crops. (Col 6 + Col. 7)
9	State & Scheme wise sum total of Expts. Planned for Kharif & Rabi Food Crops. (Col 3 + Col. 6)
10	State & Scheme wise sum total of Expts. Planned for Kharif & Rabi Non -Food Crops. (Col 4 + Col. 7)
11	State & Scheme wise sum total of Expts. Planned for all the crops. (Col 9 + Col. 10)
All India Pooling:	
3	Scheme wise sum total of Expt. Planned for Kharif Food Crops for all the states.
4	Scheme wise sum total of Expt. Planned for Kharif Non- Food Crops for all the states.
5	Scheme wise sum total of Expt. Planned for total Kharif Crops for all the states.
6	Scheme wise sum total of Expt. Planned for Rabi Food Crops for all the states.
7	Scheme wise sum total of Expt. Planned for Rabi Non- Food Crops for all the states.
8	Scheme wise sum total of Expt. Planned for total Rabi Crops for all the states.
9	Scheme wise sum total of Expt. Planned for all Food Crops for all the states.
10	Scheme wise sum total of Expt. Planned for all Non - Food Crops for all the states.
11	Scheme wise sum total of Expt. Planned for all the Crops for all the states under CES.

ANNEX -I (b): SAMPLE SIZE - KHARIF FOOD CROPS UNDER CES

Col. No.	Source / Instructions
	Table 1.1 - Cropwise number of Expts. Planned under Kharif Food Crops
3	Table 1.1 - Number of Expts. planned for Kharif Paddy crop (State, Scheme & Variety)
4	Table 1.1 - Number of Expts. planned for Kharif Jowar crop (State, Scheme & Variety)
5	Table 1.1 - Number of Expts. planned for Kharif Bajra crop (State, Scheme & Variety)
6	Table 1.1 - Number of Expts. planned for Kharif Maize crop (State, Scheme & Variety)
7	Table 1.1 - Number of Expts. planned for Kharif Ragi crop (State, Scheme & Variety)
8	Table 1.1 - Number of Expts. planned for Kharif Redgram crop (State, Scheme & Variety)
9	Table 1.1 - Number of Expts. planned for Kharif Greengram crop (State, Scheme & Variety)
10	Table 1.1 - Number of Expts. planned for Kharif Blackgram crop (State, Scheme & Variety)
11	Table 1.1 - Number of Expts. planned for Kharif Sugarcane crop (State, Scheme & Variety)
12	Table 1.1- Sum total of number of Expts. planned for “other” Kharif food crops not covered under Col.3 to col.11 (State & Scheme)
13	Table 1.1- Sum total of number of Expts. Planned for all Kharif food crop. (State & Scheme)
Crop wise % area under CES to total area for Kharif Food crops for all states.	
3 to 11	Col. 4 of Annex -V for Kharif food crops.
All India Pooling:	
3	Scheme wise sum total of number of Expts. planned for Kharif Paddy crop for all the states.
4	Scheme wise sum total of number of Expts. planned for Kharif Jowar crop for all the states.
5	Scheme wise sum total of number of Expts. planned for Kharif Bajra crop for all the states.
6	Scheme wise sum total of number of Expts. planned for Kharif Maize crop for all the states.
7	Scheme wise sum total of number of Expts. planned for Kharif Ragi crop for all the states.
8	Scheme wise sum total of number of Expts. planned for Kharif Redgram crop for all the states.
9	Scheme wise sum total of number of Expts. planned for Kharif Greengram crop for all the states.
10	Scheme wise sum total of number of Expts. planned for Kharif Blackgram crop for all the states.
11	Scheme wise sum total of number of Expts. planned for Kharif Sugarcane crop for all the states.
12	Scheme wise sum total of number of Expts. planned for “other” Kharif food crops not covered under col. 3 to col.11 for all the states.
13	Scheme wise sum total of number of Expts. Planned for all Kharif food crops for all the states.

ANNEX -I (b) : (Contd.....)

Scrutiny Checks :-	
12	i) Details of Experiments planned under “others” is to be given crop wise for each state at the end of Annex –I(b).
	ii) Ensure sum total of Experiments planned under “others” is equal to the figures given under Col.12 for each state.
13	Scheme wise total number of Experiments planned for Kharif Food crops for all the states should be same as that given under Col.3 of Annex –1(a).

ANNEX- I (c) : SAMPLE SIZE - RABI FOOD CROPS UNDER CES

Col. No.	Source / Instructions
	Table 1.3 - Cropwise number of Expts. Planned under Rabi Food Crops
3	Table 1.3 - Number of Expts. planned for Rabi Paddy crop (State, Scheme & Variety)
4	Table 1.3 - Number of Expts. planned for Rabi Jowar crop (State, Scheme & Variety)
5	Table 1.3 - Number of Expts. planned for Rabi Wheat crop (State, Scheme & Variety)
6	Table 1.3 - Number of Expts. planned for Rabi Barley crop (State, Scheme & Variety)
7	Table 1.3 - Number of Expts. planned for Rabi Gram crop (State, Scheme & Variety)
8	Table 1.3 - Number of Expts. planned for Rabi Greengram crop (State, Scheme & Variety)
9	Table 1.3 - Number of Expts. planned for Rabi Blackgram crop (State, Scheme & Variety)
10	Table 1.3- Sum total of number of Expts. planned for “other” Rabi food crops not covered under col.3 to col.9 (State & Scheme)
11	Table 1.3- Sum total of number of Expts. Planned for all Kharif food crop. (State & Scheme)
Crop wise % area under CES to total area for Rabi Food crops for all states.	
3 to 9	Col. 4 of Annex -V for Rabi food crops.
All India Pooling:	
3	Scheme wise sum total of number of Expts. planned for Rabi Paddy crop for all the states.
4	Scheme wise sum total of number of Expts. planned for Rabi Jowar crop for all the states.
5	Scheme wise sum total of number of Expts. planned for Rabi Wheat crop for all the states.
6	Scheme wise sum total of number of Expts. planned for Rabi Barley crop for all the states.
7	Scheme wise sum total of number of Expts. planned for Rabi Gram crop for all the states.
8	Scheme wise sum total of number of Expts. planned for Rabi Greengram crop for all the states.
9	Scheme wise sum total of number of Expts. planned for Rabi Blackgram crop for all the states.
10	Scheme wise sum total of number of Expts. planned for “other” Rabi food crops not covered under col. 3 to col. 9 for all the states.
11	Scheme wise sum total of number of Expts. Planned for all Rabi food crops for all the states.
Scrutiny Checks :-	
10	i) Details of Experiments planned under “others” is to be given crop wise for each state at the end of Annex –I(c).
	ii) Ensure sum total of Experiments planned under “others” is equal to the figures given under Col.10 for each state.
13	Scheme wise total number of Experiments planned for Rabi Food crops for all the states should be same as that given under Col.6 of Annex –I(a).

ANNEX -I (d): SAMPLE SIZE – KHARIF NON- FOOD CROPS UNDER CES

Col. No.	Source / Instructions
	Table 1.2 - Cropwise number of Expts. Planned under Kharif Non-Food Crops
3	Table 1.2 - Number of Expts. planned for Kharif Groundnut crop (State, Scheme & Variety)
4	Table 1.2- Number of Expts. planned for Kharif Sesamum crop (State, Scheme & Variety)
5	Table 1.2- Number of Expts. planned for Kharif Castor crop (State, Scheme & Variety)
6	Table 1.2- Number of Expts. planned for Kharif Coconut crop (State, Scheme & Variety)
7	Table 1.2 - Number of Expts. planned for Kharif Niger crop (State, Scheme & Variety)
8	Table 1.2- Number of Expts. planned for Kharif Cotton crop (State, Scheme & Variety)
9	Table 1.2- Number of Expts. planned for Kharif Jute crop (State, Scheme & Variety)
10	Table 1.2 - Number of Expts. planned for Kharif Mesta crop (State, Scheme & Variety)
11	Table 1.2- Number of Expts. planned for Kharif Sunflower crop (State, Scheme & Variety)
12	Table 1.2- Number of Expts. planned for Kharif Soyabean crop (State, Scheme & Variety)
13	Table 1.2- Sum total of number of Expts. Planned for all Kharif Non- food crop. (State & Scheme)
Crop wise % area under CES to total area for Kharif Non- Food crops for all states.	
3 to 12	Col. 4 of Annex -V for Kharif Non- food crops.
All India Pooling:	
3	Scheme wise sum total of number of Expts. planned for Kharif Groundnut crop for all the states.
4	Scheme wise sum total of number of Expts. planned for Kharif Sesamum crop for all the states.
5	Scheme wise sum total of number of Expts. planned for Kharif Castor crop for all the states.
6	Scheme wise sum total of number of Expts. planned for Kharif Coconut crop for all the states.
7	Scheme wise sum total of number of Expts. planned for Kharif Niger crop for all the states.
8	Scheme wise sum total of number of Expts. planned for Kharif Cotton crop for all the states.
9	Scheme wise sum total of number of Expts. planned for Kharif Jute crop for all the states.
10	Scheme wise sum total of number of Expts. planned for Kharif Mesta crop for all the states.
11	Scheme wise sum total of number of Expts. planned for Kharif Sunflower crop for all the states.
12	Scheme wise sum total of number of Expts. planned for Kharif Soyabean crop for all the states.
13	Scheme wise sum total of number of Expts. Planned for all Kharif Non- food crops for all the states.
Scrutiny Check :-	
13	Scheme wise total number of Experiments planned for Kharif Non- Food crops for all the states should be same as that given under Col.4 of Annex –1(a).

ANNEX- I (e) : SAMPLE SIZE - RABI NON -FOOD CROPS UNDER CES

Col. No.	Source / Instructions
	Table 1.4 - Cropwise number of Expts. Planned under Rabi Non-Food Crops
3	Table 1.4 - Number of Expts. planned for Rabi Groundnut crop (State, Scheme & Variety)
4	Table 1.4- Number of Expts. planned for Rabi Sesamum crop (State, Scheme & Variety)
5	Table 1.4- Number of Expts. planned for Rabi Rape & Mustard crop (State, Scheme & Variety)
6	Table 1.4- Number of Expts. planned for Rabi Linseed crop (State, Scheme & Variety)
7	Table 1.4 - Number of Expts. planned for Rabi Safflower crop (State, Scheme & Variety)
8	Table 1.4- Number of Expts. planned for Rabi Sunflower crop (State, Scheme & Variety)
9	Table 1.4- Number of Expts. planned for Rabi Tara Meera crop (State, Scheme & Variety)
10	Table 1.4 - Number of Expts. planned for Rabi Tobacco crop (State, Scheme & Variety)
11	Table 1.4- Number of Expts. planned for Rabi Isabgol crop (State, Scheme & Variety)
12	Table 1.4- Sum total of number of Expts. Planned for all Rabi Non- food crop. (State & Scheme)
Crop wise % area under CES to total area for Rabi Non- Food crops for all states.	
3 to 11	Col. 4 of Annex -V for Rabi Non- food crops.
All India Pooling:	
3	Scheme wise sum total of number of Expts. planned for Rabi Groundnut crop for all the states.
4	Scheme wise sum total of number of Expts. planned for Rabi Sesamum crop for all the states.
5	Scheme wise sum total of number of Expts. planned for Rabi Rape & Mustard crop for all the states.
6	Scheme wise sum total of number of Expts. planned for Rabi Linseed crop for all the states.
7	Scheme wise sum total of number of Expts. planned for Rabi Safflower crop for all the states.
8	Scheme wise sum total of number of Expts. planned for Rabi Sunflower crop for all the states.
9	Scheme wise sum total of number of Expts. planned for Rabi Tara Meera crop for all the states.
10	Scheme wise sum total of number of Expts. planned for Rabi Tobacco crop for all the states.
11	Scheme wise sum total of number of Expts. planned for Rabi Isabgol crop for all the states.
12	Scheme wise sum total of number of Expts. Planned for all Rabi Non- food crops for all the states.
Scrutiny Check :-	
12	Scheme wise total number of Experiments planned for Rabi Non- Food crops for all the states should be same as that given under Col.7 of Annex –1(a).

ANNEX - II. TRAINING OF PRIMARY WORKERS UNDER CES

Col. No.	Source / Instructions
	Table 2 - Training and work Load particulars of Primary Staff.
3	Table 2 Col.2 - Statewise name of the Agency for Imparting Training to filed staff.
4	Table 2 Col.3 - Statewise & Agencywise total number of Training Centers.
5	Table 2 Col.4 - Statewise number of Training Centers covered by NSSO Officers for imparting training
6	Table 2 Col.5 - Statewise number of Training Centers covered by NSSO as observers.
7	Table 2 Col.6 - Statewise & Agencywise total strength of Primary workers.
8	Table 2 Col.7 - Statewise & Agencywise total number of Primary workers called for training.
9	Table 2 Col.8 - Statewise & Agencywise total number of Primary workers attended the training.
10	Percentage: Percentage of Primary workers attended the training to primary workers called for training. (col.9/col. 8) x100
11	Table 2 Col.9 - Statewise total number of Primary workers trained by NSSO Officers.
All India Pooling:	
4	Sum total of number of training centers for all the states.
5	Sum total of number of training centers covered by NSSO officers for imparting training for all the states.
6	Sum total of number of training centers covered by NSSO officers as observers for all the states.
7	Sum total of number of primary workers for all the states.
8	Sum total of number of primary workers called for training for all the states.
9	Sum total of number of primary workers attended the training for all the states.
10	Percentage of number of Primary workers attended the training to primary workers called for training for all the states. (col.9/col. 8) x100
11	Sum total of number of Primary workers trained by NSSO Officers for all the states.
Scrutiny Check :-	
10	For calculating the All India percentage, ensure the figures are under both col. 8 & 9. If there is only one figures in either of the two cols. Ignore the figures for calculating the all India percentage.

ANNEX III(a): SUPERVISION OF FIELD WORK-ALL CROPS (SEASON-WISE) UNDER CES

Col. No.	Source / Instructions
	Table 3 - Supervision of Field Work.
5	Table 3.1 Col.2 : Statewise sum total of Expts. planned for Kharif Food Crops.
5	Table 3.2 Col.2 : Statewise sum total of Expts. planned for Kharif Non- Food Crops.
5	Comb.- Table 3.1 & 3.2 Col.2 : Statewise sum total of Expts. planned for all Kharif Crops.
5	Table 3.3 Col.2 : Statewise sum total of Expts .planned for Rabi Food Crops.
5	Table 3.4 Col.2 : Statewise sum total of Expts. planned for Rabi Non -Food Crops.
5	Comb.- Table 3.3 & 3.4 Col.2 : Statewise sum total of Expts. planned for all Rabi Crops.
5	Total : Statewise sum total of all the Expts planned for all Crops.
6	Table 3.1 Col. 3 : Statewise total number of Expts. inspected by State Statistical Staff for Kharif Food crops. (At all stages)
6	Table 3.2 Col. 3 : Statewise total number of Expts. inspected by State Statistical Staff for Kharif Non -Food crops. (At all stages)
6	Comb.- Table 3.1 & 3.2 Col.3 : Statewise sum total of Expts. inspected by State Statistical Staff for all Kharif crops. (At all stages)
6	Table 3.3 Col. 3 : Statewise total number of Expts. inspected by State Statistical Staff for Rabi Food crops. (At all stages)
6	Table 3.4 Col. 3 : Statewise total number of Expts. inspected by State Statistical Staff for Rabi Non -Food crops. (At all stages)
6	Comb.- Table 3.3 & 3.4 Col.3 : Statewise sum total of Expts. inspected by State Statistical Staff for all Rabi crops. (At all stages)
6	Total : Statewise sum total of all the Expts. inspected by State Statistical Staff for all crops.
7	Table 3.1 Col. 4 : Statewise percentage of total number of Expts. inspected by State Statistical Staff to total number of Experiments planned for Kharif Food crops. (col.3/col.2)x100
7	Table 3.2 Col. 4 : Statewise percentage of total number of Expts. inspected by State Statistical Staff to total number of Expts. planned for Kharif Non- Food crops. (col.3/col.2)x100
7	Comb.- Table 3.1 & 3.2 Col.4 : Statewise percentage of total number of Expts. inspected by State Statistical Staff to total number of Expts. planned for all Kharif crops. (col.3/col.2)x100
7	Table 3.3 Col. 4 : Statewise percentage of total number of Expts. inspected by State Statistical Staff to total number of Expts. planned for Rabi Food crops. (col.3/col.2)x100
7	Table 3.4 Col. 4 : Statewise percentage of total number of Expts. inspected by State Statistical Staff to total number of Expts. planned for Rabi Non- Food crops. (col.3/col.2)x100
7	Comb.- Table 3.3 & 3.4 Col.4 : Statewise percentage of total number of Expts. inspected by State Statistical Staff to total number of Expts. planned for all Rabi crops. (col.3/col.2)x100
7	Total : Statewise percentage of total number of Expts. inspected by State Statistical Staff to total number of Expts. planned for all crops. (col.3/col.2)x100

ANNEX III(a): (Contd.....)

8	Table 3.1 Col. 5 : Statewise total number of Expts. inspected by State Statistical Staff at Harvest stage for Kharif Food crops.
8	Table 3.2 Col. 5 : Statewise total number of Expts. inspected by State Statistical Staff at Harvest stage for Kharif Non -Food crops.
8	Comb.- Table 3.1 & 3.2 Col.5 : Statewise sum total of Expts. inspected by State Statistical Staff at Harvest stage for all Kharif crops.
8	Table 3.3 Col. 5 : Statewise total number of Expts. inspected by State Statistical Staff at Harvest stage for Rabi Food crops.
8	Table 3.4 Col. 5 : Statewise total number of Expts. inspected by State Statistical Staff for at Harvest stage for Rabi Non -Food crops.
8	Comb.- Table 3.3 & 3.4 Col.5 : Statewise sum total of Expts. inspected by State Statistical Staff at Harvest stage for all Rabi crop.
8	Total : Statewise sum total of all the Expts. inspected by State Statistical Staff at Harvest stage for all crops.
9	Table 3.1 Col. 6 : Statewise percentage of total number of Expts. inspected by State Statistical Staff at Harvest stage to total number of Experiments planned for Kharif Food crops. (col.5/col. 2)x100
9	Table 3.2 Col. 6 : Statewise percentage of total number of Expts. inspected by State Statistical Staff at Harvest stage to total number of Expts. planned for Kharif Non- Food crops. (col.5/col. 2)x100
9	Comb.- Table 3.1 & 3.2 Col.6 : Statewise percentage of total number of Expts. inspected by State Statistical Staff at Harvest stage to total number of Expts. planned for all Kharif crops. (col.5/col. 2)x100
9	Table 3.3 Col. 6 : Statewise percentage of total number of Expts. inspected by State Statistical Staff at Harvest stage to total number of Expts. planned for Rabi Food crops. (col.5/col. 2)x100
9	Table 3.4 Col. 6 : Statewise percentage of total number of Expts. inspected by State Statistical Staff at Harvest stage to total number of Expts. planned for Rabi Non- Food crops. (col.5/col. 2)x100
9	Comb.- Table 3.3 & 3.4 Col.6 : Statewise percentage of total number of Expts. inspected by State Statistical Staff at Harvest stage to total number of Expts. planned for all Rabi crops. (col.5/col. 2)x100
9	Total : Statewise percentage of total number of Expts. inspected by State Statistical Staff at Harvest stage to total number of Expts. planned for all crops. (col.5/col. 2)x100
10	Table 3.1 Col. 7 : Statewise total number of Expts. inspected by State Departmental Staff for Kharif Food crops. (At all stages)
10	Table 3.2 Col. 7 : Statewise total number of Expts. inspected by State Departmental Staff for Kharif Non -Food crops. (At all stages)
10	Comb.- Table 3.1 & 3.2 Col.7 : Statewise sum total of Expts. inspected by State Departmental Staff for all Kharif crops. (At all stages)
10	Table 3.3 Col. 7 : Statewise total number of Expts. inspected by State Departmental Staff for Rabi Food crops. (At all stages)
10	Table 3.4 Col. 7 : Statewise total number of Expts. inspected by State Departmental Staff for Rabi Non -Food crops. (At all stages)
10	Comb.- Table 3.3 & 3.4 Col.7 : Statewise sum total of Expts. inspected by State Departmental Staff for all Rabi crops. (At all stages)
10	Total : Statewise sum total of all the Expts. inspected by State Departmental Staff for all crops.

ANNEX III(a): (Contd.....)

11	Table 3.1 Col. 8 : Statewise percentage of total number of Expts. inspected by State Departmental Staff to total number of Experiments planned for Kharif Food crops. (col.7/col.2)x100
11	Table 3.2 Col. 8 : Statewise percentage of total number of Expts. inspected by State Departmental Staff to total number of Expts. planned for Kharif Non- Food crops.(col.7/col.2)x100
11	Comb.- Table 3.1 & 3.2 Col.8 : Statewise percentage of total number of Expts. inspected by State Departmental Staff to total number of Expts. planned for all Kharif crops. (col.7/col.2)x100
11	Table 3.3 Col. 8 : Statewise percentage of total number of Expts. inspected by State Departmental Staff to total number of Expts. planned for Rabi Food crops. (col.7/col.2)x100
11	Table 3.4 Col. 8 : Statewise percentage of total number of Expts. inspected by State Departmental Staff to total number of Expts. planned for Rabi Non- Food crops. (col.7/col.2)x100
11	Comb.- Table 3.3 & 3.4 Col.8 : Statewise percentage of total number of Expts. inspected by State Departmental Staff to total number of Expts. planned for all Rabi crops. (col.7/col.2)x100
11	Total : Statewise percentage of total number of Expts. inspected by State Departmental Staff to total number of Expts. planned for all crops. (col.7/col.2)x100
12	Table 3.1 Col. 9 : Statewise total number of Expts. inspected by State Departmental Staff at Harvest stage for Kharif Food crops.
12	Table 3.2 Col. 9 : Statewise total number of Expts. inspected by State Departmental Staff at Harvest stage for Kharif Non -Food crops.
12	Comb.- Table 3.1 & 3.2 Col.9 : Statewise sum total of Expts. inspected by State Departmental Staff at Harvest stage for all Kharif crops.
12	Table 3.3 Col. 9 : Statewise total number of Expts. inspected by State Departmental Staff Harvest stage for Rabi Food crops.
12	Table 3.4 Col. 9 : Statewise total number of Expts. inspected by State Departmental Staff for at Harvest stage for Rabi Non -Food crops.
12	Comb.- Table 3.3 & 3.4 Col.9 : Statewise sum total of Expts. inspected by State Departmental Staff at Harvest stage for all Rabi crop.
12	Total : Statewise sum total of all the Expts. inspected by State Departmental Staff at Harvest stage for all crops.
13	Table 3.1 Col. 10 : Statewise percentage of total number of Expts. inspected by State Departmental Staff at Harvest stage to total number of Experiments planned for Kharif Food crops. (col.9/col. 2)x100
13	Table 3.2 Col. 10 : Statewise percentage of total number of Expts. inspected by State Departmental Staff at Harvest stage to total number of Expts. planned for Kharif Non- Food crops. (col.9/col. 2)x100
13	Comb.- Table 3.1 & 3.2 Col.10 : Statewise percentage of total number of Expts. inspected by State Departmental Staff at Harvest stage to total number of Expts. planned for all Kharif crops. (col.9/col. 2)x100
13	Table 3.3 Col. 10 : Statewise percentage of total number of Expts. inspected by State Departmental Staff at Harvest stage to total number of Expts. planned for Rabi Food crops. (col.9/col. 2)x100
13	Table 3.4 Col. 10 : Statewise percentage of total number of Expts. inspected by State Departmental Staff at Harvest stage to total number of Expts. planned for Rabi Non- Food crops. (col.9/col. 2)x100
13	Comb.- Table 3.3 & 3.4 Col.10 : Statewise percentage of total number of Expts. inspected by State Departmental Staff at Harvest stage to total number of Expts. planned for all Rabi crops. (col.9/col. 2)x100
13	Total : Statewise percentage of total number of Expts. inspected by State Departmental Staff at Harvest stage to total number of Expts. planned for all crops. (col.9/col. 2)x100

ANNEX III(a): (Contd.....)

14	Table 3.1 Col. 11 : Statewise total number of Expts. inspected by NSSO Staff for Kharif Food crops. (At all stages)
14	Table 3.2 Col. 11 : Statewise total number of Expts. inspected by NSSO Staff for Kharif Non -Food crops. (At all stages)
14	Comb.- Table 3.1 & 3.2 Col.11 : Statewise sum total of Expts. inspected by NSSO Staff for all Kharif crops. (At all stages)
14	Table 3.3 Col. 11 : Statewise total number of Expts. inspected by NSSO Staff for Rabi Food crops. (At all stages)
14	Table 3.4 Col. 11 : Statewise total number of Expts. inspected by NSSO Staff for Rabi Non –Food crops. (At all stages)
14	Comb.- Table 3.3 & 3.4 Col.11 : Statewise sum total of Expts. inspected by NSSO Staff for all Rabi crops. (At all stages)
14	Total : Statewise sum total of all the Expts. inspected by State Departmental Staff for all crops.
15	Table 3.1 Col. 12 : Statewise percentage of total number of Expts. inspected by NSSO Staff to total number of Experiments planned for Kharif Food crops. (col.11/col.2)x100
15	Table 3.2 Col. 12 : Statewise percentage of total number of Expts. inspected by NSSO Staff to total number of Expts. planned for Kharif Non- Food crops. (col.11/col.2)x100
15	Comb.- Table 3.1 & 3.2 Col.12 : Statewise percentage of total number of Expts. inspected by NSSO Staff to total number of Expts. planned for all Kharif crops. (col.11/col.2)x100
15	Table 3.3 Col. 12 : Statewise percentage of total number of Expts. inspected by NSSO Staff to total number of Expts. planned for Rabi Food crops. (col.11/col.2)x100
15	Table 3.4 Col. 12 : Statewise percentage of total number of Expts. inspected by NSSO Staff to total number of Expts. planned for Rabi Non- Food crops. (col.11/col.2)x100
15	Comb.- Table 3.3 & 3.4 Col.12 : Statewise percentage of total number of Expts. inspected by NSSO to total number of Expts. planned for all Rabi crops.(col.11/col.2)x100
15	Total : Statewise percentage of total number of Expts. inspected by State Statistical Staff to total number of Expts. planned for all crops. (col.11/col.2)x100
16	Table 3.1 Col. 13 : Statewise total number of Expts. inspected by NSSO Staff at Harvest stage for Kharif Food crops.
16	Table 3.2 Col. 13 : Statewise total number of Expts. inspected by NSSO Staff at Harvest stage for Kharif Non -Food crops.
16	Comb.- Table 3.1 & 3.2 Col. 13 : Statewise sum total of Expts. inspected by NSSO Staff at Harvest stage for all Kharif crops.
16	Table 3.3 Col. 13 : Statewise total number of Expts. inspected by NSSO Staff at Harvest stage for Rabi Food crops.
16	Table 3.4 Col. 13 : Statewise total number of Expts. inspected by NSSO Staff for at Harvest stage for Rabi Non -Food crops.
16	Comb.- Table 3.3 & 3.4 Col. 13 : Statewise sum total of Expts. inspected by NSSO Staff at Harvest stage for all Rabi crop.
16	Total : Statewise sum total of all the Expts. inspected by NSSO Staff at Harvest stage for all crops.

ANNEX III(a): (Contd.....)

17	Table 3.1 Col. 14 : Statewise percentage of total number of Expts. inspected by NSSO Staff to total number of Experiments planned for Kharif Food crops. (col.13/col.2)x100
17	Table 3.2 Col. 14 : Statewise percentage of total number of Expts. inspected by NSSO Staff to total number of Expts. planned for Kharif Non- Food crops. (col.13/col.2)x100
17	Comb.- Table 3.1 & 3.2 Col.14 : Statewise percentage of total number of Expts. inspected by NSSO Staff to total number of Expts. planned for all Kharif crops. (col.13/col.2)x100
17	Table 3.3 Col. 14 : Statewise percentage of total number of Expts. inspected by NSSO Staff to total number of Expts. planned for Rabi Food crops. (col.13/col.2)x100
17	Table 3.4 Col. 14 : Statewise percentage of total number of Expts. inspected by NSSO Staff to total number of Expts. planned for Rabi Non- Food crops. (col.13/col.2)x100
17	Comb.- Table 3.3 & 3.4 Col.14 : Statewise percentage of total number of Expts. inspected by NSSO to total number of Expts. planned for all Rabi crops.(col.13/col.2)x100
17	Total : Statewise percentage of total number of Expts. inspected by State Statistical Staff to total number of Expts. planned for all crops. (col.13/col.2)x100
All India Pooling:	
5	Sum total of Seasonwise & Categorywise number of Experiments planned for all the states.
6	Sum total of Seasonwise & Categorywise number of Expts. inspected by State Statistical Staff for all the states (At all stages).
7	Seasonwise & Categorywise percentage of total number of Expts. inspected by State Statistical Staff to total number of Experiments planned for all the states (col.6/col.5)x100
8	Sum total of Seasonwise & Categorywise number of Expts. inspected by State Statistical Staff at Harvest stage for all the states.
9	Seasonwise & Categorywise percentage of total number of Expts. inspected by State Statistical Staff at Harvest stage to total number of Experiments planned for all the states (col.8/col.5)x100
10	Sum total of Seasonwise & Categorywise number of Expts. inspected by State Departmental Staff for all the states (At all stages).
11	Seasonwise & Categorywise percentage of total number of Expts. inspected by State Departmental Staff to total number of Experiments planned for all the states (col.10/col.5)x100
12	Sum total of Seasonwise & Categorywise number of Expts. inspected by State Departmental Staff at Harvest stage for all the states.
13	Seasonwise & Categorywise percentage of total number of Expts. inspected by State Departmental Staff at Harvest stage to total number of Experiments planned for all the states (col.12/col.5)x100
14	Sum total of Seasonwise & Categorywise number of Expts. inspected by NSSO Staff for all the states (At all stages).
15	Seasonwise & Categorywise percentage of total number of Expts. inspected by NSSO Staff to total number of Experiments planned for all the states (col.14/col.5)x100
16	Sum total of Seasonwise & Categorywise number of Expts. inspected by NSSO Staff at Harvest stage for all the states.
17	Seasonwise & Categorywise percentage of total number of Expts. inspected by NSSO Staff at Harvest stage to total number of Experiments planned for all the states (col.16/col.5)x100
Scrutiny Check :-	
5	Ensure Figures for Grand Total under Col.5 are equal to total figures given col. 11 of Annex 1(a).
5 -17	State wise total figures given at the end of table 3 under Cols.2 to 14 should be same as given under col.5 to 17 of Annex –III(a) for respective states.

ANNEX III (b) SUPERVISION OF FIELD WORK - CROP-WISE UNDER CES

Col. No.	Source / Instructions
	Table 3 - Supervision of Field Work.- Cropwise
4	Table 3.1,3.2, 3.3 & 3.4 Col.2 : Cropwise number of Expts. Planned for each State (Seasonwise).
5	Table 3.1,3.2, 3.3 & 3.4 Col.3 : Cropwise total number of Expts. inspected by State Statistical Staff for each State (Seasonwise).
6	Table 3.1,3.2, 3.3 & 3.4 Col.4 : Cropwise percentage of total number of Expts. inspected by State Statistical Staff to total number of Experiments planned for each State (Seasonwise). (col.3/col.2)x100
7	Table 3.1,3.2, 3.3 & 3.4 Col.5 : Cropwise total number of Expts. inspected by State Statistical Staff at Harvest stage for each State (Seasonwise).
8	Table 3.1,3.2, 3.3 & 3.4 Col.6 : Cropwise percentage of total number of Expts. inspected by State Statistical Staff at Harvest stage to total number of Experiments planned for each State. (Seasonwise). (col.5/col.2)x100
9	Table 3.1,3.2, 3.3 & 3.4 Col.7 : Cropwise total number of Expts. inspected by State Department Staff for each State (Seasonwise).
10	Table 3.1,3.2, 3.3 & 3.4 Col.8 : Cropwise percentage of total number of Expts. inspected by State Department Staff to total number of Experiments planned for each State (Seasonwise). (col.7/col.2)x100
11	Table 3.1,3.2, 3.3 & 3.4 Col.9 : Cropwise total number of Expts. inspected by State Department Staff at Harvest stage for each State (Seasonwise).
12	Table 3.1,3.2, 3.3 & 3.4 Col.10 : Cropwise percentage of total number of Expts. inspected by State Department Staff at Harvest stage to total number of Experiments planned for each State (Seasonwise). (col.9/col.2)x100
13	Table 3.1,3.2, 3.3 & 3.4 Col.11 : Cropwise total number of Expts. inspected by NSSO Staff for each State (Seasonwise).
14	Table 3.1,3.2, 3.3 & 3.4 Col.12 : Cropwise percentage of total number of Expts. inspected by NSSO Staff to total number of Experiments planned for each State (Seasonwise). (col.11/col.2)x100
15	Table 3.1,3.2, 3.3 & 3.4 Col.13 : Cropwise total number of Expts. inspected by NSSO Staff at Harvest stage for each State (Seasonwise).
16	Table 3.1,3.2, 3.3 & 3.4 Col. 14 : Cropwise percentage of total number of Expts. inspected by NSSO Staff at Harvest stage to total number of Experiments planned for each State (Seasonwise). (col.13/col.2)x100.
All India Pooling:	
4	Cropwise sum total of Expts. Planned for all the states.
5	Cropwise sum total of all Expts. inspected by State Statistical Staff for all the states.
6	Cropwise percentage of total number of Expts. inspected by State Statistical Staff to total number of Experiments planned for all the states. (col.5/col.4)x100
7	Cropwise sum total of all Expts. inspected by State Statistical Staff at Harvest stage for all the states.
8	Cropwise percentage of total number of Expts. inspected by State Statistical Staff at Harvest stage to total number of Experiments planned for all the states. (col.7/col.4)x100

ANNEX III(b): (Contd.....)

9	Cropwise sum total of all Expts. inspected by State Departmental Staff for all the states.
10	Cropwise percentage of total number of Expts. inspected by State Departmental Staff at Harvest stage to total number of Experiments planned for all the states. $(\text{col.9}/\text{col.4}) \times 100$
11	Cropwise sum total of all Expts. inspected by State Departmental Staff at Harvest stage for all the states.
12	Cropwise percentage of total number of Expts. inspected by State Departmental Staff at Harvest stage to total number of Experiments planned for all the states. $(\text{col.11}/\text{col.4}) \times 100$
13	Cropwise sum total of all Expts. inspected by NSSO Staff for all the states.
14	Cropwise percentage of total number of Expts. inspected by NSSO Staff to total number of Experiments planned for all the states. $(\text{col.13}/\text{col.4}) \times 100$
15	Cropwise sum total of all Expts. inspected by NSSO Staff at Harvest stage for all the states.
16	Cropwise percentage of total number of Expts. inspected by NSSO Staff at Harvest stage to total number of Experiments planned for all the states. $(\text{col.15}/\text{col.4}) \times 100$

ANNEX - IV(a):- RESPONSE UNDER CROP ESTIMATION SURVEY

Col. No.	Source / Instructions
	Table 4 (a) - Percentage Response of Expts. Analysed to Expt. Planned.
3	Table 4 (a) Col.2 : Statewise number of Expts. Planned for Kharif Food Crops.
4	Table 4 (a) Col.3 : Statewise number of Expts. Analysed for Kharif Food Crops.
5	Table 4 (a) Col.4 : Statewise percentage of number of Expts. Analysed to Expts. Planned for Kharif Food Crops.
6	Table 4 (a) Col.2 : Statewise number of Expts. Planned for Kharif Non- Food Crops.
7	Table 4 (a) Col.3 : Statewise number of Expts. Analysed for Kharif Non-Food Crops.
8	Table 4 (a) Col.4 : Statewise percentage of number of Expts. Analysed to Expts. Planned for Kharif Non-Food Crops.
9	Table 4 (a) Col.5 : Statewise number of Expts. Planned for Rabi Food Crops.
10	Table 4 (a) Col.6 : Statewise number of Expts. Analysed for Rabi Food Crops.
11	Table 4 (a) Col.7 : Statewise percentage of number of Expts. Analysed to Expts. Planned for Rabi Food Crops.
12	Table 4 (a) Col.5 : Statewise number of Expts. Planned for Rabi Non- Food Crops.
13	Table 4 (a) Col.6 : Statewise number of Expts. Analysed for Rabi Non-Food Crops.
14	Table 4 (a) Col.7 : Statewise percentage of number of Expts. Analysed to Expts. Planned for Rabi Non-Food Crops.
15	Table 4 (a) Col.8 : Statewise number of Expts. Planned for all Crops.
16	Table 4 (a) Col.9 : Statewise number of Expts. Analysed for all Crops.
17	Table 4 (a) Col.10 : Statewise percentage of number of Expts. Analysed to Expts. Planned for all Crops.
All India Pooling:	
3	Sum total of number of Experiments planned for Kharif Food Crops for all the states.
4	Sum total of number of Experiments Analysed for Kharif Food Crops for all the states.
5	Percentage of number of Expts. Analysed to Expts. Planned for Kharif Food Crops for all the states.
6	Sum total of number of Experiments planned for Kharif Non -Food Crops for all the states.
7	Sum total of number of Experiments Analysed for Kharif Non -Food Crops for all the states.
8	Percentage of number of Expts. Analysed to Expts. Planned for Kharif Non -Food Crops for all the states.
9	Sum total of number of Experiments planned for Rabi Food Crops for all the states.
10	Sum total of number of Experiments Analysed for Rabi Food Crops for all the states.
11	Percentage of number of Expts. Analysed to Expts. Planned for Rabi Food Crops for all the states.

ANNEX IV(a): (Contd.....)

12	Sum total of number of Experiments planned for Rabi Non -Food Crops for all the states.
13	Sum total of number of Experiments Analysed for Rabi Non -Food Crops for all the states.
14	Percentage of number of Expts. Analysed to Expts. Planned for Rabi Non -Food Crops for all the states.
15	Sum total of number of Experiments planned for all Crops for all the states.
16	Sum total of number of Experiments Analysed for all Crops for all the states.
17	Percentage of number of Expts. Analysed to Expts. Planned for all Crops for all the states.
Scrutiny Check :-	
3,6,9 &12	Ensure Figures for Grand Total under Col.3,6,9,12 & 15 are equal to total figures given cols. 3,4,6,7,&9 of Annex 1(a).
Scrutiny Check :-	
5	Ensure Figures for Grand Total under Col.5 are equal to total figures given col. 11 of Annex 1(a).
5 - 17	State wise total figures given at the end of table 3 under Cols.2 to 14 should be same as given under col.5 to 17 of Annex –III(a) for respective states.

ANNEX-IV (b) :REASONS FOR LOSS OF EXPERIMENTS UNDER CES

Col. No.	Source / Instructions
	Table 4 (b) - Reasons for Non- Response.
4	i) Table 4 (B)1 Col.2 : Statewise number of Expts. Planned for Food Crops.
	ii) Table 4 (B)2 Col.2 : Statewise number of Expts. Planned for Non- Food Crops.
	iii) Table 4 (B)1& 2, Col.2 : Statewise total number of Expts. Planned for all Crops.

5

ANNEX IV(b): (Contd.....)

10	i) Table 4 (B)1 Col.8 : Statewise number of Food Crop Expts. not conducted due to non availability of crop.
	ii) Table 4 (B)2 Col.8 : Statewise number of Non- Food Crop Expts. not conducted due to non availability of crop.
	iii) Table 4 (B)1& 2, Col.8 : Statewise total number of Expts. not conducted due to non availability of crop.
11	i) Table 4 (B)1 Col.9 : Statewise number of Food Crop Expts. not conducted due to other reasons.
	ii) Table 4 (B)2 Col.9 : Statewise number of Non- Food Crop Expts. not conducted due to other reasons.
	iii) Table 4 (B)1& 2, Col.9 : Statewise total number of Expts. not conducted due to other reasons.
12	i) Table 4 (B)1 Col.10 : Statewise sum total of Expts. not conducted due to various reasons for Food Crops.
	ii) % age : Statewise percentage of total number of Expts. not conducted due to various reasons for Food crops .
	iii) Table 4 (B)2 Col.10 : Statewise sum total of Expts. not conducted due to various reasons for Non- Food Crops.
	iv) % age : Statewise percentage of total number of Expts. not conducted due to various reasons for Non- Food crops .
	v) Table 4 (B)1& 2, Col.10 : Statewise sum total of Expts. not conducted due to various reasons for all Crops.
	vi) % age : Statewise percentage of total number of Expts. not conducted due to various reasons for all Crops.
13	i) Table 4 (B)1 Col. 11 : Statewise number of Food Crop Expts. rejected due to incomplete data.
	ii) Table 4 (B)2 Col.11 : Statewise number of Non- Food Crop Expts. rejected due to incomplete data.
	iii) Table 4 (B)1& 2, Col.11 : Statewise total number of Expts. rejected due to incomplete data.
14	i) Table 4 (B)1 Col. 12 : Statewise number of Food Crop Expts. rejected due to discrepant data.
	ii) Table 4 (B)2 Col.12 : Statewise number of Non- Food Crop Expts. rejected due to discrepant data.
	iii) Table 4 (B)1& 2, Col.12 : Statewise total number of Expts. rejected due to discrepant data.
15	i) Table 4 (B)1 Col. 13 : Statewise number of Food Crop Expts. rejected due to unreliable data.
	ii) Table 4 (B)2 Col.13 : Statewise number of Non- Food Crop Expts. rejected due to unreliable data.
	iii) Table 4 (B)1& 2, Col.13 : Statewise total number of Expts. rejected due to unreliable data.
16	i) Table 4 (B)1 Col. 14 : Statewise number of Food Crop Expts. rejected due to late receipt of returns.
	ii) Table 4 (B)2 Col.14 : Statewise number of Non- Food Crop Expts. rejected due to late receipt of returns.
	iii) Table 4 (B)1& 2, Col.14 : Statewise total number of Expts. rejected due to late receipt of returns.

ANNEX IV(b): (Contd.....)

17	i) Table 4 (B)1 Col. 15 : Statewise number of Food Crop Expts. rejected due to other reasons.
	ii) Table 4 (B)2 Col.15 : Statewise number of Non- Food Crop Expts. rejected due to reasons.
	iii) Table 4 (B)1& 2, Col.15 : Statewise total number of Expts. rejected due to reasons.
18	i) Table 4 (B)1 Col.16 : Statewise sum total of Expts. rejected by Statistician due to various reasons for Food Crops.
	ii) % age : Statewise percentage of total number of Expts. rejected by Statistician due to various reasons for Food crops .
	iii) Table 4 (B)2 Col.16 : Statewise sum total of Expts. rejected by Statistician due to various reasons for Non- Food Crops.
	iv) % age : Statewise percentage of total number of Expts. rejected by Statistician due to various reasons for Non- Food crops .
	v) Table 4 (B)1& 2, Col.16 : Statewise sum total of Expts. rejected by Statistician due to various reasons for all Crops.
	vi) % age : Statewise percentage of total number of Expts. rejected by Statistician due to various reasons for all Crops.
19	i) Table 4 (B)1 Col.17 : Statewise number of Expts. for which reasons for non inclusion in analysis are not known for Food Crops.
	ii) % age : Statewise percentage of number of Expts. for which reasons for non inclusion in analysis are not known for Food Crops.
	iii) Table 4 (B)2 Col.17 : Statewise number of Expts. for which reasons for non inclusion in analysis are not known for Non- Food Crops.
	iv) % age : Statewise percentage of number of Expts. for which reasons for non inclusion in analysis are not known for Non- Food crops .
	v) Table 4 (B)1& 2, Col.17 : Statewise sum total of Expts. for which reasons for non inclusion in analysis are not known for all Crops.
	vi) % age : Statewise percentage of total number of Expts. for which reasons for non inclusion in analysis are not known for all Crops.
20	i) Table 4 (B)1 Col.18 : Statewise total number of Expts. not analysed for Food Crops.
	ii) % age : Statewise percentage of total number of Expts. not analysed for Food Crops.
	iii) Table 4 (B)2 Col.18 : Statewise total number of Expts. not analysed for Non- Food Crops.
	iv) % age : Statewise percentage of total number of Expts. not analysed for Non- Food crops.
	v) Table 4 (B)1& 2, Col.18 : Statewise sum total of Expts. not analysed for all Crops.
	vi) % age : Statewise percentage of total number of Expts. not analysed for all Crops.
All India Pooling:	
4	i) Sum total of number of all Experiments planned for Food crops for all the states.
	ii) Sum total of number of all Experiments planned for Non- Food crops for all the states.
	iii)Sum total of number of all Experiments planned for all crops for all the states.

ANNEX IV(b): (Contd.....)

5	i) Sum total of number of all Expts. analysed for Food crops for all the states.
	ii) % age : Percentage of total number of all Expts. analysed for Food Crops for all the states.
	iii) Sum total of number of all Experiments analysed for Non- Food crops for all the states.
	iv) % age : Percentage of total number of all Expts. analysed for Non- Food Crops for all the states.
	v) Sum total of number of all Expts. analysed for all crops for all the states.
	vi) % age : Percentage of total number of all Expts. analysed for all Crops for all the states.
6	i)) Sum total of number of Food Crop Expts. not conducted due to primary worker being on leave, absent, transfer etc. for all the states.
	ii) Sum total of number of Non- Food Crop Expts. not conducted due to primary worker being on leave, absent, transfer etc. for all the states.
	iii) Sum total of number of Expts. for all crops not conducted due to primary worker being on leave, absent, transfer etc. for all the states.
	iv) % age : Percentage of total number of all Expts. not conducted due to primary worker being on leave, absent, transfer etc. for all the states.
7	i) Sum total of number of Food Crop Expts. not conducted due to primary worker not attending the work due to other assignments for all the states.
	ii) Sum total of number of Non- Food Crop Expts. not conducted due to primary worker not attending the work due to other assignments for all the states.
	iii) Sum total of number of all Expts. not conducted due to primary worker not attending the work due to other assignments for all the states.
	iv) % age : Percentage of total number of all Expts. not conducted due to primary worker not attending the work due to other assignments for all the states.
8	i) Sum total of number of Food Crop Expts. not conducted due to primary worker not attending the work due to other reasons for all the states.
	ii) Sum total of number of Non- Food Crop Expts. not conducted due to primary worker not attending the work due to other reasons for all the states.
	iii) Sum total of number of all Expts. not conducted due to primary worker not attending the work due to other reasons for all the states.
	iv) % age : Percentage of total number of all Expts. not conducted due to primary worker not attending the work due to other reasons for all the states.
9	i) Sum total of number of Food Crop Expts. not conducted due to prior harvest by cultivator for all the states.
	ii) Sum total of number of Non- Food Crop Expts. not conducted due to prior harvest by cultivator for all the states.
	iii) Sum total of number of all Expts. not conducted due to prior harvest by cultivator for all the states.
	iv) % age : Percentage of total number of all Expts. not conducted due to prior harvest by cultivator for all the states.

ANNEX IV(b): (Contd.....)

10	i) Sum total of number of Food Crop Expts. not conducted due non availability of crop for all the states.
	ii) Sum total of number of Non- Food Crop Expts. not conducted due to non availability of crop for all the states.
	iii) Sum total of number of all Expts. not conducted due to non availability of crop for all the states.
	iv) % age : Percentage of total number of all Expts. not conducted due to non availability of crop for all the states.
11	i) Sum total of number of Food Crop Expts. not conducted due to other reasons. for all the states.
	ii) Sum total of number of Non- Food Crop Expts. not conducted due to other reasons for all the states.
	iii) Sum total of number of all Expts. not conducted due to other reasons for all the states.
	iv) % age : Percentage of total number of all Expts. not conducted due to other reasons for all the states.
12	i) Sum total of number of all Expts. not conducted due to various reasons for Food Crops. for all the states.
	ii) % age : Percentage of total number of all Expts. not conducted due to various reasons for Food Crops for all the states.
	iii) Sum total of number of all Expts not conducted due to various reasons for Non- Food crops for all the states.
	iv) % age : Percentage of total number of all Expts. not conducted due to various reasons for Non- Food Crops for all the states.
	v) Sum total of number of all Expts. not conducted due to various reasons for all crops for all the states.
	vi) % age : Percentage of total number of all Expts. not conducted due to various reasons for all the states.
13	i) Sum total of Food Crop Expts. rejected due to incomplete data for all the states.
	ii) Sum total of number of Non- Food Crop Expts. rejected due to incomplete data for all the states.
	iii)) Sum total of number of all Expts. rejected due to incomplete data for all crops for all the states.
	iv) Percentage of total number of all Expts. rejected due to incomplete data for all the states.
14	i) Sum total of Food Crop Expts. rejected due to discrepant data for all the states.
	ii) Sum total of number of Non- Food Crop Expts. rejected due to discrepant data for all the states.
	iii) Sum total of number of all Expts. rejected due to discrepant data for all crops for all the states.
	vi) Percentage of total number of all Expts. rejected due to discrepant data for all the states.
15	i) Sum total of Food Crop Expts. rejected due to unreliable data. for all the states.
	ii) Sum total of number of Non- Food Crop Expts. rejected due to unreliable data. for all the states.
	iii) Sum total of number of all Expts. rejected due to unreliable data for all crops for all the states.
	iv) Percentage of total number of all Expts. rejected due to unreliable data. for all the states.

ANNEX IV(b): (Contd.....)

16	i) Sum total of Food Crop Expts. rejected due to late receipt of returns for all the states.
	ii) Sum total of number of Non- Food Crop Expts. rejected due to late receipt of returns for all the states.
	iii) Sum total of number of all Expts. rejected due to late receipt of returns for all crops for all the states.
	iv) Percentage of total number of all Expts. rejected due to late receipt of returns for all crops for all the states.
17	i) Sum total of Food Crop Expts. rejected due to other reasons for all the states.
	ii) Sum total of Non- Food Crop Expts. rejected due to other reasons for all the states.
	iii) Sum total of all Expts. rejected due to other reasons for all crops for all the states.
	iv) Percentage of total number of all Expts. rejected due to other reasons for all the crops for all the states.
18	i) Sum total of all Food Crop Expts. rejected due to various reasons for all the states.
	ii) % age : Percentage of total number of all Food Crops Expts. rejected due to various reasons for all the states.
	iii)) Sum total of all Non -Food Crop Expts. rejected due to various reasons for all the states.
	iv) % age : Percentage of total number of all Non - Food Crops Expts. rejected due to various reasons for all the states..
	v) Sum total of number of all Expts. rejected due to various reasons for all crops for all the states.
	vi) % age : Percentage of total number of all Expts. rejected due to various reasons for all the states.
19	i) Sum total of Food Crop Expts. for which reasons for non inclusion in analysis are not known for all the states.
	ii) % age : Percentage of total number of all Food Crop Expts. for which reasons for non inclusion in analysis are not known for all the states.
	iii) Sum total of Non- Food Crop Expts. for which reasons for non inclusion in analysis are not known for all the states.
	iv) % age : Percentage of total number of all Non-Food Crop Expts. for which reasons for non inclusion in analysis are not known for all the states.
	v) Sum total of all Expts. For which reasons for non inclusion in analysis are not known for all the crops for all the states.
	vi) % age : Percentage of total number of all Expts. for which reasons for non inclusion in analysis are not known for all the crops for all the states.
20	i) Sum total of all Food crop Expts. not analysed due to various reasons for all the states.
	ii) % age : Percentage of all Food Crop Expts. not analysed due to various reasons for all the states
	iii) Sum total of all Non- Food crop Expts. not analysed due to various reasons for all the states.
	iv) % age : Percentage of all Non- Food Crop Expts. not analysed due to various reasons for all the states
	v) Sum total of all Expts. not analysed due to various reasons for all the crops for all the states.
	vi) % age : : Percentage of all Expts. not analysed due to various reasons for all the crops for all the states

ANNEX – V: ESTIMATES OF YIELD RATES AND PRODUCTION UNDER CES

Col. No.	Source / Instructions
	Table 5 - Estimation of Yield Rates and Production.
3	Table 5.1, 5.2, 5.3 & 5.4 Col .2 - Cropwise, Seasonwise and varietywise total Area under crop for each state.
4	Table 5.1, 5.2, 5.3 & 5.4 Col. 3 - Cropwise, Seasonwise and varietywise coverage percentage Area for each state.
5	Table 5.1, 5.2, 5.3 & 5.4 Col 4 - Cropwise, Seasonwise and varietywise number of Experiments planned for each state.
6	Table 5.1, 5.2, 5.3 & 5.4 Col .5- Cropwise, Seasonwise and varietywise number of Experiments Analysed for each state.
7	Table 5.1, 5.2, 5.3 & 5.4 Col. 6 - Cropwise, Seasonwise and varietywise response percentage of Expts. Analysed to Expts. Planned for each state. $(\text{col.6}/\text{col.5}) \times 100$
8	Table 5.1, 5.2, 5.3 & 5.4 Col. 7 - Cropwise, Seasonwise and varietywise Estimated yield rate (kg/ha.) for each state.
9	Table 5.1, 5.2, 5.3 & 5.4 Col. 8 - Cropwise, Seasonwise and varietywise standard Error percentage for each state.
10	Table 5.1, 5.2, 5.3 & 5.4 Col. 9 - Cropwise, Seasonwise and varietywise total production for each state.
All India Pooling:	
3	Cropwise & Seasonwise (Kh./ Rabi/Comb.) Sum total of Area figures for all the states.
4	Cropwise & Seasonwise (Kh./ Rabi/Comb.) All India Area percentage coverage for all the states. $\sum(\text{col.3} \times \text{col} 4) / \sum \text{col. 3.}$
5	Cropwise & Seasonwise (Kh./ Rabi/Comb.) Sum total of number of Expts. planned for all the states.
6	Cropwise & Seasonwise (Kh./ Rabi/Comb.) Sum total of number of Expts. analysed for all the states.
7	Cropwise & Seasonwise (Kh./ Rabi/Comb.) response percentage of Expts. Analysed to Expts. planned for all the states. $\sum \text{col.6} / \sum \text{col.5} \times 100$
8	Cropwise & Seasonwise (Kh./ Rabi/Comb.) All India Estimated Yield Rate for all the states. $\sum(\text{col.3} \times \text{col} 8) / \sum \text{col.3.}$
9	Cropwise & Seasonwise (Kh./ Rabi/Comb.) All India Standard Error percentage for all the states. $V = \sum(\text{col.3} \times \text{col} 8 \times \text{col.9})^2 / (\sum \text{col.3.})^2$ S.E % = $\sqrt{V} \times 100 / \sum \text{col.8}$
10	Cropwise & Seasonwise (Kh./ Rabi/Comb.) Sum total of Production figures for all the states.
Scrutiny Check :-	
4	For calculating the All India Area percentage coverage, ensure the entries are under both col. 3 & 4. If there is only one figures in either of the two cols. Ignore the figures for calculating the all India percentage.
5	Crop wise all India total (No. of Expts. Planned) should be equal to the figures given under col. 4 of Annex III(b).
8	Ensure that Av. Yield is in terms of Rice for Paddy and in terms of lint for cotton crops.

ANNEX – VI: COMPARISION OF SURVEY ESTIMATES AND OFFICIAL ESTIMATES UDER CES

Comparison of Survey Estimates and Official Estimates in Respect of those crops where difference in Area, Production or Yield is \pm More than five percent .	
Col. No.	Source / Instructions
	CES Table 5 & All India Estimates of Area, Yield Rates and Production figures prepared by Ministry of Agriculture.
3	Table 5.1, 5.2, 5.3 & 5.4 Col .2 - Cropwise, Seasonwise total Area under the crop for the state where difference is \pm more than five percent either in Area, Production or Yield rate figures compiled by Ministry of Agriculture , New Delhi (Official Estimates)
4	Table 5.1, 5.2, 5.3 & 5.4 Col. 9 - Cropwise, Seasonwise total Production under the crop for the state where difference is \pm more than five percent either in Area, Production or Yield rate figures compiled by Ministry of Agriculture , New Delhi (Official Estimates)
5	Table 5.1, 5.2, 5.3 & 5.4 Col 7 - Cropwise, Seasonwise total production under the crop for the state where difference is \pm more than five percent either in Area, Production or Yield rate figures compiled by Ministry of Agriculture , New Delhi (Official Estimates)
6	Official Estimates :- Ministry of Agriculture Area figures under the crop for the state where difference is \pm more than five percent either in Area, Production or Yield rate figures compiled under CES. (Survey Estimates).
7	Official Estimates :- Ministry of Agriculture Production figures under the crop for the state where difference is \pm more than five percent either in Area, Production or Yield rate figures compiled under CES. (Survey Estimates).
8	Official Estimates :- Ministry of Agriculture Yield rate under the crop for the state where difference is \pm more than five percent either in Area, Production or Yield rate figures compiled under CES. (Survey Estimates).
Scrutiny Check :-	
3 to 8	Difference between survey estimates and official estimates for more than ± 5 % is to be calculated for all the crops for all the states. Only crops in a state where difference is more than ± 5 % between survey estimates and officials estimates either in area, yield or production are to be recorded for this annexure.

ANNEX – VII: ESTIMATES OF YIELD RATES FROM IRRIGATED AND UN-IRRIGATED PLOTS UNDER CES.

Col. No.	Source / Instructions
	Table 6 - Average yield in Kg/ha. for irrigated and un-irrigated areas.
4	Table 6 Col .8 - Cropwise, Seasonwise total number of Irrigated Experiments analysed for each state.
5	Table 6 Col .9 - Cropwise, Seasonwise average yield (kg/ha.) of Irrigated Experiments for each state.
6	Table 6 Col .10 - Cropwise, Seasonwise Area of Irrigated Experiments for each state.
7	Table 6 Col .17 - Cropwise, Seasonwise total number of Un- Irrigated Experiments analysed for each state.
8	Table 6 Col .18 - Cropwise, Seasonwise average yield (kg/ha.) of Un-Irrigated Experiments for each state.
9	Table 6 Col .19 - Cropwise, Seasonwise Area of Un-Irrigated Experiments for each state.
All India Pooling:	
4	Cropwise sum total of Irrigated Experiments analysed for all the states.
5	Cropwise average yield of Irrigated Experiments for all the states. ($\sum(\text{col.5} \times \text{col 6}) / \sum \text{col. 6}$. when area figures are available for all the crops. Otherwise $\sum(\text{col.4} \times \text{col 5}) / \sum \text{col. 4}$)
6	Cropwise sum total of area figures for Irrigated Experiments for all the states.
7	Cropwise sum total of un-Irrigated Experiments analysed for all the states.
8	Cropwise average yield of un-Irrigated Experiments for all the states. ($\sum(\text{col.8} \times \text{col 9}) / \sum \text{col. 9}$. when area figures are available for all the crops. Otherwise $\sum(\text{col.7} \times \text{col 8}) / \sum \text{col. 7}$) (weightage of Experiments analysed.)
9	Cropwise sum total of area figures for un-Irrigated Experiments for all the states.
Scrutiny Check :-	
6 & 9	Cropwise sum total of area figures for all India level in respect of Irrigated & Un-irrigated analysed experiments should be given only when area figures for respective category are available for all the states. Other wise “- ” mark should be given.
	Check details are given in this annexure for all the crops as given in Annex V. Total no. of crops for both the annexures should be same.

ANNEX – VIII: ESTIMATES OF YIELD RATES FROM IRRIGATED AND UN-IRRIGATED PLOTS ACCORDING TO HIGH YIELDING AND LOCAL VARIETIES UNDER CES.

Col. No.	Source / Instructions
	Table 7 - Average yield in Kg/ha. for irrigated and un-irrigated areas according to high yielding and local varieties.
3	Table 6 Col .2 - Cropwise, Seasonwise total number of Irrigated High yielding variety Experiments analysed for each state.
4	Table 6 Col .3 - Cropwise, Seasonwise average yield (kg/ha.) of Irrigated High yielding variety Experiments for each state.
5	Table 6 Col . 4 - Cropwise, Seasonwise Area of Irrigated High yielding variety Experiments for each state.
6	Table 6 Col .5 - Cropwise, Seasonwise total number of Irrigated local variety Experiments analysed for each state.
7	Table 6 Col .6 - Cropwise, Seasonwise average yield (kg/ha.) of Irrigated local variety Experiments for each state.
8	Table 6 Col . 7 - Cropwise, Seasonwise Area of Irrigated local variety Experiments for each state.
9	Table 6 Col .11 - Cropwise, Seasonwise total number of Un- Irrigated High yielding variety Experiments analysed for each state.
10	Table 6 Col .12 - Cropwise, Seasonwise average yield (kg/ha.) of Un-Irrigated High yielding variety Experiments for each state.
11	Table 6 Col . 13 - Cropwise, Seasonwise Area of Un- Irrigated High yielding variety Experiments for each state.
12	Table 6 Col .14 - Cropwise, Seasonwise total number of Un- Irrigated local variety Experiments analysed for each state.
13	Table 6 Col .15 - Cropwise, Seasonwise average yield (kg/ha.) of Un- Irrigated local variety Experiments for each state.
14	Table 6 Col . 16 - Cropwise, Seasonwise Area of Un- Irrigated local variety Experiments for each state.
Note :-	
	Four fold classification is to be given for five major Crops only i.e Rice , Jowar , Bajra, Maize and Wheat.

ANNEX – IX : PERCENTAGE AREA UNDER IMPROVED AGRICULTURAL PRACTICES UNDER CES.

Col. No.	Source / Instructions
	Table 7 - Percentage area under different Improved Agricultural Practices
3	Table 7 Col .2 - Cropwise, Seasonwise & variety wise percentage area under High yielding seeds for each state.
4	Table 7 Col .3 - Cropwise, Seasonwise & variety wise percentage area under Improved seeds for each state.
5	Table 7 Col .4 - Cropwise, Seasonwise & variety wise percentage area under local seeds for each state.
6	Table 7 Col .5 - Cropwise, Seasonwise & variety wise percentage area where Chemical Fertilizer were used for each state.
7	Table 7 Col .6 - Cropwise, Seasonwise & variety wise percentage area where other Manures were used for each state.
8	Table 7 Col .7 - Cropwise, Seasonwise & variety wise percentage area where no manure was used (Un-manured) for each state.
9	Table 7 Col .8 - Cropwise, Seasonwise & variety wise percentage area treated with Pesticides for each state.
10	Table 7 Col .9 - Cropwise, Seasonwise & variety wise percentage area not treated with Pesticides for each state.
Scrutiny Check :-	
3,4,5	Sum total of percentage area under different seed variety should come to 100 %. i.e Sum total of cols. 3+ 4 +5 should be 100.
6,7,8	Sum total of percentage area under chemical fertilizer, other Manures and un -manure should come to 100 %. i.e Sum total of cols 6+ 7 +8 should be 100.
9 & 10	Sum total of percentage area treated with pesticides and not treated with pesticides should come to 100 %. i.e Sum total of cols. 9 +10 should be 100.

ANNEX – X(a) : RESULTS OF FIELD DRIAGE UNDER CES.

Col. No.	Source / Instructions
	Table 8 - Results of Field driage and Produce
3	Table 8 Col .2 - Cropwise, Seasonwise & variety wise number of driage Experiments planned for each state.
4	Table 8 Col .3 - Cropwise, Seasonwise & variety wise number of driage Experiments analysed for each state.
5	Table 8 Col .4 - Cropwise, Seasonwise & variety wise driage percentage recovery ratio for each state.
Scrutiny Check :-	
5	Ascertain driage % recovery ratio is the percentage of dry weight (Final weight) to Green weight (First weight) of the crop. In some cases it is given as percentage of driage experiments analysed to experiments planned of the crop, which is wrong.
3,4,5	Details of field driage is to be given for all the states except Assam , Karnataka and Orissa where results of Central driage are adopted. For Rajasthan state in addition to Field driage Central driage is adopted for Jowar, Bajra, Maize,Wheat and Gram crops.

**ANNEX – X(b) : RESULTS OF CENTRAL DRIAGE EXPERIMENTS
ORGANISED BY STATES UNDER CES.**

Col. No.	Source / Instructions
	Table 8 - Results of Central driage and Produce
4	Table 8 Col .2 - Cropwise, Seasonwise & variety wise number of Central driage Experiments planned for states of Assam, Karnataka, Orissa and Rajasthan.
5	Table 8 Col .3 - Cropwise, Seasonwise & variety wise number of Central driage Experiments analysed for states of Assam, Karnataka ,Orissa and Rajasthan.
6	Table 8 Col .4 - Cropwise, Seasonwise & variety wise Central driage percentage recovery ratio states of Assam, Karnataka,Orissa and Rajasthan.
7	Table 8 Col .4 - Cropwise, Seasonwise & variety wise field driage percentage recovery ratio for Rajasthan state only.
Scrutiny Check :-	
6	Ascertain driage % recovery ratio is the percentage of dry weight (Final weight) to Green weight (First weight) of the crop. In some cases it is given as percentage of driage experiments analysed to experiments planned of the crop, which is wrong.
4,5,6& 7	Results of Central driage are adopted for the states of Assam , Karnataka, Orissa and Rajasthan state. In addition to Field driage, Central driage is also adopted for Jowar, Bajra, Maize, Wheat and Gram crops in Rajasthan state.

CHAPTER-X

Preparation of report on “Consolidated Results of Crop Estimation Surveys on Principal food and non-food crops.”

10.1 Crop Estimation Surveys (CES) are conducted by States and Union Territories for obtaining sufficiently precise estimates of average yield of principal food and non food crops by employing the objective technique of crop cutting experiments by scientific sampling method. Planning, organization of field work, processing of data and bringing out the results of these surveys in the States is the responsibility of the State Agricultural Statistics Authority (SASA). The NSSO (FOD) has been entrusted with the work of providing technical guidance to the States, ensuring uniformity in concepts and definitions in the conduct of the surveys. In discharging this role, NSSO (FOD) scrutinizes plan of work for GCES drawn up by States and conveys comments on the sample size, their distribution to districts and coverage of crops.

10.2 The NSSO (FOD) brings out an annual publication entitled “Consolidated Results of Crop Estimation Surveys on Principal Crops” incorporating results of CES in States/UTs. For the purpose of this publication, full details on various aspects of CES in each state are collected every year. The NSSO (FOD) has prescribed formats (Appendix) as detailed on the following pages for obtaining various items of information from the States according to a mutually agreed time schedule. As soon as the information in the prescribed formats is received from States, the information is scrutinized for consistency and completeness as per guidelines for scrutiny of various Appendix (CES).

10.3 Based on the information received from various States, intermediate tables namely Table-1 to 9 (specimen formats enclosed) are prepared. These are forwarded to the SASAs concerned with a request to confirm the correctness of the figures and to fill in gaps in the information, if any. On obtaining full information and clarification for the discrepancies, the preparation of the consolidated results of Crop Estimation Surveys on Principal Crops is taken up. The publication consists of the following aspects and results on various aspects of CES in detail:-

- (i) Introduction
- (ii) Objective
- (iii) Coverage
- (iv) Design
- (v) Organisation
- (vi) Coordination
- (vii) Sample size
- (viii) Training
- (ix) Supervision
- (x) Response
- (xi) Results
- (xii) Ancillary data
- (xiii) Driage Experiments.

The List of Annexures of the publication is given at Appendix-----

Guidelines for preparing various Annexures based on the data collected from States are given below Annexure wise

1. **Appendix-A :-** Statement showing allocation of experiments.
2. **Appendix-B :-** Training of primary field staff: workload and details of equipments supplied.
3. **Appendix-C:-** Preliminary estimates of average yield based on crop estimation surveys.
4. **Appendix-D-1:-** Communication of final estimates of yield and production.
5. **Appendix-D-2 :-** Frequency distribution of plot yield.
6. **Appendix-D-3:-** Analysis of variance of plot yield.
7. **Appendix-D-4:-** Number of villages required for estimating the mean yield within a given degree of precision.
8. **Appendix-D-5:-** Results of driage experiments.
9. **Appendix-D-6:-** Details of non-response.
10. **Appendix-E-1:-** Statement showing average yield Kg/ha for HYV/Local varieties according to irrigated and unirrigated areas.
11. **Appendix-E-2:-** Statement showing the percentages of area under different improved agricultural practices.
12. **Appendix-F:-** Details of inspection by State Staff.

Seasons coming under:

Kharif: Autumn, Winter, Early Kharif, Late Kharif, Bhadai, Aghani, Phase-I Phase-II for Tamil Nadu

Rabi & Summer: Zaid Rabi, Phase-III for Tamil Nadu, Rabi-I & Rabi-II

Crop Estimation Surveys

Statement showing allocation of experiments

State:-----

Year :-----

Primary field agency :----- Season : -----

Sl. No.	District	Total no. of primary workers	Crop				
			No. of strata covered	Total area in the covered strata “000” (hect.)	Crop in distt. in “000” (hect.)	% age area covered	No. of expts. allotted
1	2	3	4	5	6	7	8
Total for districts Covered							

- Note :-
1. Furnish information separately for each agency, e.g. Revenue, Agricultural, Statistical etc. with designation such as Rev. Inspector, Kanungo etc.
 2. In Col.7 give % area under crop in strata covered to total area under crop in the district.
 3. Year to which area figures relate may be mentioned. To the extent possible latest area figures available may be furnished.
 4. Provision for all crops planned in a season be made horizontally.

Crop Estimation Surveys

Training of primary field staff - workload and details of equipment supplied

State : ----- Year : -----Season /Annual :-----

D I S T R I C T	No. of Tra in ing Ce n tres	Details of Primary workers					Details of equipments supplied (no.)								Total no. of expts.assigned			No. of primary workers with more than		
		Des ign ait ion	Dep tt.	To tal	No. cal le d	No. att en ded	Tap es/ Chai ns/ ISI Equ ipm ent.	Pe gs	Ba l an nce	Stan dard wei gh ts	Co rd or Str ing of re qui red len gth	Ba gs for dra ge	He ss ian clo th	Spe cial bal ance for Sug ar Ca ne/ Jute etc.	Kha rif	Ra bi	To tal	12 Ex pts	20 Ex- pts.	
																		Kh	Ra bi	An nu al
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
State Total																				

- Note :-1. In col. 5, the total number of primary workers in position in all the strata covered at each centre of training is to be given.
2. Entries for different categories of staff to be made in separate lines before the next district is taken up.
3. In States where Kharif /Rabi classification is not in vogue, details for the whole year may be presented.
4. While counting no. of expts. to be reported under cols. 19, 20 and 21, each cotton expt. will be treated as 3 and each experiment on castor and tobacco will be treated as 2.
5. In col. 2, include all the centres where training was imparted either by State or NSSO Officers.
6. In case training is conducted season wise, details may be given separately for each season.

Crop Estimation Surveys

Preliminary estimates of average yield based on crop estimation surveys

State :-----

Year :-----

Season :-----

Crop	Harvesting period	No. of Experiments		Description of produce	Estimation of yield in Kg./ hect.
		Planned	Analysed		
1	2	3	4	5	6

- Note :-
1. The estimates of yield should relate to the standard form of produce (vide footnote of Appendix - D -1)
 2. As the relevant data for current year may not be available for many of the experiments at this stage, it is suggested that the driage factor and other similar factors used for reducing the yield estimate to the standard produce may be based on the previous year's data. The factor used may be indicated in a footnote.
 3. In Col. 5, mention cob, grain, plant, cane, fibre etc. as the case may be.

State : ----- Year : ----- Season: -----Crop: ----- Final Produce @

District	No. of Experiments		Estimated yield Kg./ hect.	Area under crop “000” (hect.)	Average yield estimates actually used for estimating production in Kg./ hect	Estimated production in “000” tones or bales of ----- Kgs. each	Bund correction factor applied if any	Percentage S.E
	Planned	Analysed						
1	2	3	4	5	6	7	8	9
Total for all districts covered in the State								

- Note:**
1. Quote the source of area figures.
 2. State whether the estimates have been adopted and reported for the all India final estimate.
 3. Ensure that the yield figures relate to the standard form of produce.
 4. The figures in Col. 4 may be given correct to the nearest integer only.
 5. If figures in Col. 2 differ from the original plan intimated to NSSO, state reasons for the difference.
 6. Specify reasons for sharp difference with the results of previous year at state level
 7. Indicate factors of conversion used such as driage ratio, bund correction in a footnote.
 8. In States where revised final estimates are to be prepared, this final estimate may be submitted timely and revised as and when prepared.
 9. If percentage standard error is calculated at a later stage information up to Col. 8 may be sent immediately and that for Col. 9 later on
- @ 10. The yield estimate should be given in terms of :-
- (a) Rice and not Paddy.
 - (b) Jowar, Bajra, Maize, Ragi – dried grains and not cobs.
 - (c) Wheat, Gram, Barley and Pulses – dried grains.
 - (d) Sesamum, linseed, Rape and mustard – dried grain.
 - (e) Groundnut - dried nuts with shell not kernel only.
 - (f) Castor - dried beans and capsules.
 - (g) Cotton - lint and not kapas.
 - (h) Jute, Mesta - dried fibre.
 - (i) Sugarcane – stripped cane and not gur
 - (j) Tobacco - cured tobacco
11. In case of minor districts (or such other districts) where only a small number of experiments are planned or ultimately analysed, the usual procedure is to estimate production on the basis of the corresponding divisional average yield which should be quoted in col. 6 whereas the estimate based on the experiments analysed for the district should be indicated in Col.4. In some cases, the production estimates for minor districts are obtained by apportioning the total production for such districts in proportion to the official (traditional) estimates. If so, the average yield corresponding to the production estimate given in col. 7 and area in col. 5 should be quoted in Col. 6.
 12. If a uniform allowance is made for all the districts for the area under bunds while estimating it may be so stated and the percentage allowance indicated in Col. 8.
 13. In case of rice, the paddy to rice ratio adopted may also be indicated.
 14. If the survey results are not adopted /used for framing official forecast estimates of production, the later may also be shown in an additional column side by side with the figures in col. (4).
-

Crop Estimation Surveys

Frequency distribution of plot yields

State : ----- Year : ----- Season : ----- Crop: -----

Limits (class interval) in Kg / hect. (in terms of dry & cleaned produce)*	Number of plots	Percentage frequency
1	2	3
Total		

Mean in Kg/ hect. :- _____

Standard Deviation :- _____

Coefficient of variation :- _____

- Note :- 1. The class interval should be reduced to 25 kgs / hect. in the case of low yielding crops such as cotton, sesamum, linseed etc.
2. * The limits are to be expressed in terms of the same produce for which estimates are given in Appendix -D – 1.

Crop Estimation Surveys

Analysis of variance of plot yields

Year : ----- **Crop:** -----

District	Between Strata		Between Village		Within Village	
	d.f.	mean square in 00 (Kg. / hect.) ²	d.f.	mean square in 00 (Kg. / hect.) ²	d.f.	mean square in 00 (Kg. / hect.) ²
1	2	3	4	5	6	7
Total						

- Note: -
1. The values of mean squares should correspond to the same produce in terms of which average yield and production estimates are reported in Appendix -D – 1.
 2. Appendix D-3 may not be forwarded when analysis of variance is not complete.
 3. Degree of Freedom (D. F).

Crop Estimation Surveys

Number of villages required for estimating the mean yield with a given degree of precision

State : ----- Year : ----- Crop: -----

No. of expts. / villages	% S.E									
	1%	2%	3%	4%	5%	6%	7%	8%	9%	10%
1.										
2.										
3.										
4.										
5.										
6.										

- Note: - 1. Appendix - D – 4 may be calculated once in 5 years and not forwarded if analysis of variance is not complete.
2. Data for each crop may be provided horizontally.

Crop Estimation Surveys

Results of driage experiments

State : ----- Year : ----- Season : ----- Crop : -----

District	No. of driage Experiments			Driage ratio applied for estimating yield	Total of plot yield before driage	Total of plot yield after driage operation *	
	Planned	Reported	Analysed			Before threshing	After threshing & further driage
1	2	3	4	5	6	7	8

Note:- 1. Even if the main analysis of yields is in terms of dried produce and as such driage ratios are not worked out, it is requested that the particulars of the above Appendix – D-5 may be compiled to enable a study of the driage factor, it may also be stated in footnote whether the main analysis is based on the harvested data or dry yields.

2. Where only a uniform driage factor applied for all districts, entry in col. (5) may be made against the state only. It may, also be specifically stated that only a uniform factor is used.
3. In the case of crops for which the plants are cut and stored and produce is collected only at the final stage of the experiments, this Table is not required to be furnished.
4. * Mention nature of produce: where driage is followed by threshing of produce and further drying of grain, the weights taken before threshing and after final driage, to be given in cols. 7 & 8. Where there is not threshing after driage, the dry weight to be entered in col. (8) only leaving col. (7) blank.
5. Where district wise ratios are applied, col. (5) should tally with col. (6) and col. (8). If however, due to any reason, this is not the case, the reasons may be furnished in a footnote, indicating also the basis of the ratio actually used in col. (5).
- 6.

Crop Estimation Surveys

Details of Non- response

State: ----- **Year:** -----

Crop	No. of Expts. Planned	No. of Expts. finally accepted for analysis	Number of Experiments Lost									
			Experiments not Conducted due to			Experiments rejected due to						
			Prior harvest by cultivators	Other reasons	Sub total (4+5)	Incomplete data	Un reliable / doubtful data	Disc-rep-ant data	Late receipt of returns	Other reasons	Sub Total (7 to 11)	Total (6 + 12)
1	2	3	4	5	6	7	8	9	10	11	12	13

- Note:-
1. It may be ensured that entries in col.3 and 13 are consistent with col. 2
 2. In col. 10 if no cut off dates are prescribed beyond which returns are not accepted, indicate this fact by an asterisk (*)

Crop Estimation Surveys

Statement showing the average yield in Kg / hect. (dry and clean produce) for High Yielding and local varieties according to irrigated and un-irrigated areas

State : -----Crop : ----- Year : ----- Season: -----

District	High Yielding Varieties						Local Varieties					
	Irrigated			Un- irrigated			Irrigated			Un- irrigated		
	No.of expts. analysed	Average yield in Kg./ hect.	Area in “000” hect.	No.of expts. analysed	Average yield in Kg./ hect.	Area in “000” hect.	No.of expts. analysed	Average yield in Kg./ hect.	Area in “000” hect.	No.of expts. analysed	Average yield in Kg./ hect.	Area in “000” hect.
1	2	3	4	5	6	7	8	9	10	11	12	13
State Total												

- Note :-
1. The programme of tabulation under the above four-fold categories should relate to surveys on paddy, jowar, bajra, maize and wheat. For other crops the figures may be reported under Col. 8 to 13.
 2. The tabulation will have to be undertaken in respect of each variety under the high yielding variety programme. The high yielding variety will be as defined by the state Deptt. of Agriculture.
 3. Under col. 2, 5, 8 and 11 the number of experiments under a particular variety as reported in crop cutting schedule should be entered.
 4. If the number of experiments reported under different variety happens to be small, then a combined average yield of high yielding variety should be worked out at the state level.

Crop Estimation Surveys

Statement showing the percentages of area under different improved agricultural practices. *

State: ----- Crop: ----- Year: ----- Season: -----

District	Percentage area under							Remarks
	Improved Seeds	Local Seeds	Chemical fertilisers	Other man-ure	Unma-nure	Treatment of insecti-cides/ pesticides	Untreated by pesticides /insecticides	
1	2	3	4	5	6	7	8	9
State Total								

Note: The percentage given in columns (2) + (3), columns (4)+ (5) + (6) and those in columns (7) + (8) should add up to 100.

* Based on no. of expts. analysed.

Crop Estimation Surveys

Details of inspection by state staff.

Sl.No.	Agency of Supervisory staff	Part time or whole time	Strength available for Supervision	Crop	Details of inspection			
					No. of Expts. Inspected			
					At harvest or picking	Other stages	Total (Exclusives)	Remarks
1	2	3	4	5	6	7	8	9

- Note:-
1. To arrive at exclusive number of experiments, the same expts. inspected at more than one stage is counted as one.
 2. Agency will refer to Revenue, Agriculture and Statistical etc.
 3. Inspection will include sample checks under Improvement of Crop Statistics (I.C.S.)

Crop Estimation Survey – Training Report- Form ‘T’

Block 1 : Identification Particulars													
1. State				2. Year				3. Season					
4. District				5. Name of Training center				6. Date(s) of training					
Participation of officers - NSSO													
7.(a) as training officer				7. (b) as observer				8. others who attended training					
Name		Designation		Name		Designation		Name		Designation			
Participation of officers - State													
9. State Officers imparting training Name Designation 9.1 Whether the officer who imparted the training was designated training officer (Yes/No) 9.2 If no, then, designated officer's Name Designation				10. State supervisory officers called and attended training (agency-wise) Designation (i) (ii) (iii) (iv) (v) (vi)				No. called		No. attended			
Block –2: Particulars of primary workers													
Sl. No.	Name of primary Worker called with designation	Whether attended Yes/No	Whether previously trained	Supply of equipment								work – load (no. of villages)	
				tape	balance	weights	string	bags	pegs	hessian cloth	container	Upto 12 Per season/ 20 per year	More than 12 Per season/ 20 per year
	2	3	4									13	14

Note: (1) Information for cols. 13 & 14 may be given by ✓ (tick) or x (cross).
 (2) Cols. 5 to 12: enter G if supplied and in good condition, enter NG if supplied, but not in good condition, enter NS if not supplied.

Signature & Date
Designation

Table 1: -Crop coverage and sample size (No. of Experiments Planned)

YEAR: -

STATE: -----

1.1 Food Crops (Kharif)

Crop	Crop1	Crop2	Crop3	Crop-----n
No. of Expts.				
				Total

1.2 Non- Food Crops (Kharif)

Crop	Crop1	Crop2	Crop3	Crop-----n
No. of Expts.				
				Total

YEAR:

STATE: -----

Table 1: -Crop coverage and sample size (No. of Experiments Planned)

1.3 Food Crops (Rabi & Summer)

Crop	Crop1	Crop2	Crop3	Crop-----n
No. of Expts.				
				Total

1.4 Non- Food Crops (Rabi & Summer)

Crop	Crop1	Crop2	Crop3	Crop-----n
No. of Expts.				
				Total

Table: -2: - Training and work Load of Primary Staff.

YEAR: -

STATE: -----

[illegible]

Note: - For States where training is held for each season separately, season - wise information will be given otherwise 'YEARLY' may be recorded in Col. (1).

Table –3: - Supervision of fieldwork

YEAR:

STATE: -----

[illegible]

Table –3: - Supervision of field work.

YEAR:

STATE: -----

[illegible]

Table: - 4(A): - Response

YEAR: -

STATE: -----

Crop	Kharif			Rabi & Summer			Total		
	No. of Experiments			No. of Experiments			No. of Experiments		
	Planned	Analysed	Response %	Planned	Analysed	Response %	Planned	Analysed	Response %
1	2	3	4	5	6	7	8	9	10
Food Crops									
Non –Food Crops									
All Crops									

Note 1:

Note 2:

Table: - 4 (B) 1: - Reasons for loss of crop cutting Experiments on Food Crops

YEAR:

STATE: - -----

[illegible]

Table: - 4 (B) 2: - Reasons for loss of crop cutting Experiments on Non - Food Crops

YEAR: -

STATE: - -----

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
Total Non-Food Crops																	
Grand Total																	

Note: -

- A: -Primary workers absent, on leave, transfer etc.
- B: -Primary workers not attending the work due to other assignments.
- C: -Primary workers not attending the work due to other reasons.
- D: -Prior harvest by cultivator.
- E: -Crop not available.
- F: -Other Reasons.
- P: -Incomplete data.
- Q: -Discrepant data.
- R: -Un-reliable data.
- S: -Late receipt of returns.
- U: -Experiments for which reasons are not known.
- T: -Other reasons.

Table 5: - Estimation of Yield rate and production

YEAR: -

STATE: -----

[illegible]

Table: -6: - Average yield in Kg. / Ha. (Dry & clean produce) for irrigated and Un – irrigated area according to high yielding and Local varieties.

YEAR: - 20 – 20

STATE: - -----

[illegible]

Note: - For crops where break up of high yielding and local varieties according to Irrigated and Un-irrigated areas are not available, break up of Ir / UI only may be given in Col. 8,9,10,17,18 & 19.

STATE: - -----

[illegible]

Table 7: - Percentage area under different improved Agricultural practices

YEAR:

STATE: -----

[illegible]

Table 8: - Results of Field driage and Procedure

YEAR: -

STATE: -

[illegible]

Table: 9: - Primary Field Agency wise crops covered.

YEA R: -

STATE: - -----

[illegible]

Guidelines for Scrutiny of various CES Appendices/Tables received from SASAs.

Crop Estimation Surveys:

General :

1. Sample checks such as totals, multiplication, percentages etc. are to be made for each table. Check all the state level figures.
2. Inter consistency between table's columns, figures reported in different tables may please be checked. Some items of information occurring again and again in different tables have to be checked. Viz. Area figures, No. of experiments planned, analysed etc. appearing in different tables.
3. State level figures of the previous years are to be noted in pencil to check the comparability, authenticity /abnormality etc. of current year figures. All abnormal cases should be pointed out to SASA to know the reasons thereof.

Plan of work Appendix 'A'

For each crop minimum number of experiments required at the state level has to be checked with the help of precision table (previous year), if the sample size needs some modification, SASA may be addressed for the same. Check whether this number (at State level) has been distributed over districts in proportion to the area under the crop keeping in view also the major and minor districts (for the crop), primary worker staff strength and also the no. of strata and percentage of area covered. SASA attention may be drawn on the findings on above lines and suggestion made.

Report on Training – Appendix – B

Work-load , no. of experiments allotted to primary worker districtwise has to be checked in regard to manageability in each season- especially when more than 20 experiments are allotted to a primary worker. State unit should take special care to see that attendance, training for the absentees, supply of equipment etc. are properly commented.

Preliminary Estimates – Appendix -C.

Check districtwise area and no of experiments planned with those of plan of work details, percentage response and simple average yield as reported should be compared with previous year and comparability / abnormality commented.

Final tables – Appendix D-1.

Check the state level figures- totals, percentage response etc. as well compare with the previous year. Also check the percentage increase/ decrease of area, average yield . The pooling at state level for average yield, production and % SE has to be checked specifically using standard formula.

Production = Yield rate x area

$$\text{Average Yield} = \frac{\sum (\text{yield rate at dist.} \times \text{area at dist. Level})}{\sum (\text{area})}$$

$$V = \frac{\sum_{d=1}^n \left(\frac{\% \text{ S.E}_d \times \text{yield}}{100} \right)^2 \times a_d^2}{\left(\sum_{d=1}^n a_d \right)^2} \quad \text{where } n \text{ is the total no. of district in the state}$$

$$\% \text{ S.E} = \frac{\sqrt{V}}{\text{average yield}} \times 100$$

Frequency distribution table – Appendix D-2

Check the mean, SD and CV any mistake noticed has to be communicated to SASAs

$$\bar{X} = \text{Mean} = A + \frac{\sum f_i d_i}{n} \times I \quad d_i = \frac{x_i - A}{I}, \quad n = \sum f_i \quad I = \text{Interval}$$

where f_i = frequency of the i th class

$$\text{S.D.} = \sqrt{\sum f_i d_i^2 - \frac{\left(\sum f_i d_i \right)^2}{n}}$$

where \bar{X} = average yield , Co-efficient of variation CV = $\frac{S.D. \times 100}{\bar{X}}$

Analysis of variance table : D –3

Check the degree of freedom, for all, between villages, strata etc. with number of experiments analysed, also check pooling at state level for each (between, within etc.)

Precision table – D- 4

This table has to be checked for the no. of experiments required for a desired degree of precision. Number of experiments required actually to get a desired level of SE % , is calculated by the formula.

$$\left(\frac{V + \frac{F}{n}}{\bar{x}^2 \times p^2} \right) \frac{100^2}{\lambda} \quad \text{where } V = \frac{E - F}{\lambda}$$

E= (mean square between villages), F = (mean square within villages)

λ = average no. of fields in a village,

n = no. of fields in a village, P = S.E. %, if $\lambda = 2$ and n= 2

The formula reduces to its simplified form

$$\left(\frac{E \times 100^2}{2 \times \bar{x}^2 \times p^2} \right)$$

and this can be used to check the number of villages required when number of experiments per village are 2. Note that is is a specific row in table D-4.

Driage –D –5

Check the totals for wet and dry weight and also the diriage ratio calculated.

Non- response : D -6

Check total number of experiments planned are accounted for by number conducted, lost and missed. Similarly number conducted with analysed and rejected etc. (rejected with different reasons and for which information not available.)

Post Stratification: E –I

Check the total number of experiments analysed (irrigated and unirrigated etc.) with that of number analysed of the final table (these should tally). Average yield for irrigated and unirrigated be checked for consistency (average yield of irrigated should be always more than unirrigated). Average yield of final tables should tally with the pooled figures of irrigated and unirrigated- if the weight are same area – check the state level figures and also the state level category wise pooling with that of final table (state level). Similar checks for other HYV – local etc.

Improved Agricultural Practices – E –2 :

Percentage under different inputs – seeds, fertilizer, pesticides etc. should total to 100 for each category at district / State.

Details of Inspection :

Cropwise agencywise percentage of supervision is to be checked and compared with percentage of inspection allotted.

For each state a time schedule has been fixed for receipt of these (above mentioned) tables/ appendices. Reminders to receive them are to be issued after every fortnight. Reminder and subsequent reminders are to be addressed by senior officers through D.Os and finally by the Addl. Director General.

CHAPTER –XI

Forums for improving the quality and timeliness of crop estimates

11.1 Improving the quality and timeliness of crop estimates is a continuous process and requires frequent consultations between the Centre and the States and joint action by them. For this purpose, the following forums have been set up:

- (i) National Statistical Commission;
- (ii) High Level Coordination Committee on Agricultural Statistics in the States; and
- (iii) Zonal meetings of the State Agricultural Statistics Authorities.
- (iv) District Level Committee (DLC)

(i) **National Statistical Commission:**

In the year 2000, Government of India setup the National Statistical Commission (NSC) to examine the Statistical system in the country and recommend measures to affect improvement in the system. The NSC has given its recommendations for improving the system of crop statistics in the country. The National Statistical Commission headed by an eminent economist/statistician and is composed of members, both official and non-official, and includes representatives from States by rotation. It directs large-scale sample surveys conducted jointly by the Central and State Governments and is an apex body for laying down the guidelines for improvement of socio-economic, industrial and agricultural statistics.

(ii) **High Level Coordination Committee on Agricultural Statistics:**

At the State level High Level Coordination Committees (HLCC) on Agricultural Statistics have been constituted which include representatives at the highest possible executive level of the various State departments connected with area and yield estimation as also the Economic and Statistical Adviser, Ministry of Agriculture and the Additional Director General, NSSO, Field Operations Division. The Committee is headed by a Senior Officer of the State Government like the Financial Commissioner, the Agricultural Production Commissioner or Member, Board of Revenue etc. In the meetings of the Committee, various issues relating to area forecasts, estimates of yield rates and crop production, the working of TRS, EARAS and ICS schemes and other aspects of agricultural statistics are discussed. The meetings of the Committee have proved useful in sorting out problems of coordination of the efforts of the associated departments of the State and other operational problems and also in taking steps for improving the working of the system. Such Committees have been formed in all States except in few States. In West Bengal, a State Technical Coordination Committee consisting of the departments concerned discharges similar function. As pointed out in the earlier report, such committee has not yet been formed in Odisha.

(iii) **Zonal Meetings of the State Agricultural Statistics Authorities:**

The meetings of HLCC have been found useful in discussing and finding solutions to many operational and administrative problems from the agricultural statistical system in the States. Some of the recommendations of NSC are required to be implemented by the States. Therefore, the Forum of Zonal meetings of SASA can also be utilized to review the progress of implementation of NSC recommendations to discuss common technical issues. Accordingly, the States have been grouped into four zones as under:

- (a) Southern Zone : A.P., Karnataka, Kerala, Tamil Nadu & Puducherry
- (b) Western Zone : Gujarat, Madhya Pradesh, Chhattisgarh, Maharashtra, Goa, Daman & Diu, Dadra and Nagar Haveli
- (c) Northern Zone : Haryana, Himachal Pradesh, J & K, Punjab, Rajasthan, Uttar Pradesh, Delhi and Uttrakhand
- (d) Eastern Zone : Assam, Bihar, Jharkhand, Odisha and West Bengal

11.2 The issues discussed in the meetings include problems in area and yield estimation, review of the working of the TRS/EARAS and ICS/GCES scheme, methodological aspects of crop surveys, collection and analysis of ancillary data, progress of implementation of the recommendations of the National Commission on Agriculture and recording of area under high yielding varieties of crops etc. The meetings have proved useful for studying the technical aspects of the surveys in the different states of the Zone.

IV District Level Committee (DLC):

District Level Committee (DLC) consists of officials of NSSO (FOD) and the State Govt. at District level is set up in two Districts in a State every year. The committee is meant for probing into the reasons for wide/no differences between the crop-wise and non crop area figures recorded by the State Primary workers during the crop inspection and those observed by the Central/ State Supervisor during sample check on area enumeration under the scheme for Improvement of Crop Statistics (ICS).

Detailed guidelines for functioning of DLC and formats of reports to be submitted by DLC and format of summary to be prepared are given in Appendix.

District-wise, Season-wise findings of DLC are summarized in DLC-IV and discussed in the HLCC meeting of the concerned State.

GUIDELINES FOR THE FUNCTIONING OF DISTRICT LEVEL COMMITTEES

1. **SELECTION OF DISTRICTS:-**District Level Committee would be formed in two districts in each State (except M.P. and Chhattisgarh). In **Madhya Pradesh and Chhattisgarh**, District Level Committee would be formed in jurisdiction of the State. For this purpose, those districts where the differences between the two sets of figures are quite large or negligible would be selected. The districts selected in the previous year may not be considered for the selection for the current year.

2. **COMPOSITION:-**The DLC would comprise the Superintending Officer of the NSSO(FOD) and the concerned District Statistical Officer or the Officer in charge of ICS scheme at the district level. District level Gazetted officer from the Agriculture / Land Records or of other concerned Department may also be associated, if desired. In case the concerned Superintending Officer in SRO / NSRO is not available, the services of the Superintending Officer posted in adjoining SRO/ NSRO may be utilised for joint inspection.

3. **SCOPE:-**Under the ICS Scheme, sample checks are carried out in respect of (i) area enumeration (ii) area aggregation and (iii) crop cutting experiments. The DLC would, however confine itself to the spot verification of entries as recorded in Block 3.3 of schedule AS 1.0 (Sample Check on Area Enumeration).

4. **SELECTION OF VILLAGES:-**During each season, 4 sample villages (2 from Central and 2 from State samples) from each district will be selected for spot verification of area figures by the members of DLC. Villages selected in the earlier seasons will also be considered for selection during the current season, if they conform to the prescribed criteria. For this purpose, the Superintending Officer of

- (i) **in these villages the extent of variations between the two sets of figures is quite large or nil**
- (ii) **they are well spread over the entire district**
- (iii) **they represent maximum number of supervision.**

four villages. While drawing the programme, it needs to be ensured that the field visits take the crops of the concerned season are standing in the fields.

5. **SPOT VERIFICATION:-**The physical verification of crop enumeration needs to be completed well in time before the seasonal crops are harvested. For the physical verification the members would visit all the survey numbers selected for sample check and record their own findings by joint assessment of the area under the crop / non-crop utilisation in each of the survey / serial number. If Patwari's are not available in all the sample villages in the selected district, joint inspection need not be done in that district and only form DLC I may be sent.

It would be desirable that the concerned Supervisor(ICS) and the Primary Worker accompany the members of the DLC during the physical verification so that their help can be taken to find out the basis for the entries made by them.

6. **REPORTS:-**The committee would prepare following reports:-

i) **Preliminary Report:-**After the DLC meets for the first time and selects the four villages, it would prepare a preliminary report(DLC-I) giving the date of the meeting, names and designation of the members and other officers who participated in the meeting, number of sample villages of which filled - in schedules were examined for selection of village, name of the four villages selected for spot verification and the dates proposed for visiting these villages.

ii) **Village-wise Reports:-**This Report DLC-II) would be prepared after the committee has completed the physical verification of the area figures for all the survey numbers selected for sample check in the selected village. This report would indicate the actual survey numbers visited and the type of mistakes noticed between the two sets of figures. General comments on the reasons for the mistakes noticed and the quality of the field work would also be given in this report.

iii) **General Report:-**After visiting all the four villages, the committee would meet again to review the overall performance. A brief critical note (DLC-III) would be prepared on the basis of the findings of spot verification indicating the names of the villages visited along with the dates of visits, types of errors noticed, reasons for wide variation of entries between the Central and State sample villages, if any and suggestions for improving the quality of area enumeration by the primary worker, sample check by the Supervisor (ICS) and the functioning of the committee.

Specimen of the formats (DLC-I, II & III) proposed for recording the details of findings are enclosed. Four copies of each report would be prepared so that the members (Superintending Officer and District Statistical Officer) can retain one copy each and forward one copy each to concerned SASA and the Deputy Director General, NSSO (FOD), Faridabad.

The committee would also arrange a meeting of all the concerned Central and State Supervisors to discuss the type of errors noticed along with the reasons for committing such errors and to clarify doubts, if any, so as to avoid repetition of such errors in future.

DLC-I

National Sample Survey Office (Field Operations Division) District Level Committee Preliminary Report

State _____ District _____ Year _____ Season _____

1. Date of meeting. _____
2. Name(s) and designation of i) _____
the members attending the ii) _____
meeting. iii) _____
3. Name and designation of i) _____
other Officers attending ii) _____
the meeting. iii) _____
4. No. of sample villages Central State Total
(a) for which schedule AS 1.0
examined.
(b) No. of sample villages out of
(a) above for which both 'a' and

5. Details of villages selected for spot verification.

Name of the villages	Central/State	Name of the Supervisor	Proposed date for spot verification
-------------------------	---------------	---------------------------	----------------------------------------

1) _____

2) _____

3) _____

4) _____

Signature of the Members (with name and date)

(_____)
Superintending Officer

(_____)
D.S.O.

(_____)
Others

Forwarded to :-

- i) State Agricultural Statistics Authority, _____.
- ii) DDG, NSSO (FOD), N.H-IV, Faridabad

DLC-II

**National Sample Survey Office
(Field Operations Division)
District Level Committee
Report on spot verification**

State_____ District _____ year_____ Season_____

Date of visit by the DLC team _____

I. Identification particulars of the village visited

- | | | |
|----|-----------------------------|--------------------------------------------------------------------------------------------|
| 1. | Tehsil/Taluka/Anchal_____ | 5(a) Name of Central/ State |
| 2. | Name of the village_____ | Supervisor with designation
whose work was verified _____ |
| 3. | Order of selection _____ | 5(b) Name of Primary Worker
with designation _____ |
| 4. | Sample (Central/State)_____ | 6. Other Official(s)
present at the time
of visit.
(a)NSSO _____
(b)State_____ |

II. Observations by the committee Members Yes/No

- | | | |
|-----|-------------------------------------------------------------|--------------------------------------|
| 1. | Whether girdawari was done in time | _____ |
| 1.1 | If 'No' record reasons thereof | _____ |
| 2. | Whether sample check was done in
time by the Supervisor. | _____ |
| 2.2 | If 'No' record reasons thereof | _____ |
| 3. | at the time of visit of the members | _____ |
| 4. | Survey / Serial Nos.
visited for verification* | cluster nos. survey/serial nos. |
| | | I _____ |
| | | II _____ |
| | | III _____ |
| | | IV _____ |

*All the selected Survey / Sr. Nos. are to be visited for verification

5. Details of the mistake(s) observed (Code)

Agency responsible for mistakes	No. of Survey / Serial nos. where								Total
	No mistake was observed	Mistakes were observed according to error type							
	e ₀	e ₁	e ₂	e ₃	e ₄	e ₅	e ₆	e ₇	e ₁ to e ₇
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Supervisor									
Primary Worker									

e₀ = No mistakes.

e₁ = Wrong identification of crop.

e₂ = Measurement of field not done as per State procedure.

e₃ = Irrigation particulars wrongly recorded or not recorded.

e₄ = Seed variety wrongly recorded or not recorded.

e₅ = Conceptual mistakes observed.

e₆ = Enumeration done without following state procedure.

e₇ = Others(specify).

i) Reason for mistakes_____

ii) Quality of work of the:-

Primary Worker _____

Supervisor _____

Signature of the Members (with name and date)

() () ()
Superintending Officer **D.S.O.** **Others**

Forwarded to:-

- 1 State Agricultural Statistics Authority, _____.
- 2 DDG, NSSO (FOD), N.H-IV, Faridabad.

DLC-III

**National Sample Survey Office
(Field Operations Division)
District Level Committee
General Report**

State _____ District _____ Year _____ Season _____

1. Name of villages visited with order of selection

- i) _____
- ii) _____
- iii) _____
- iv) _____

2. Type of errors noticed

- i) _____
- ii) _____
- iii) _____
- iv) _____

3. Reason(s) for wide variation i)
if any, in the Central and ii)
State sample villages between ii)
iv)

Worker's entries.

4. Suggestions for improvement on

a) Area enumeration by Primary
Workers.

b) Sample Check by Supervisors

c) Functioning of the Committee

5. General remarks:-

Signature of the Members (with name and date)

() () ()
Superintending Officer **D.S.O.** **Others**

Forwarded to:-

- 1. State Agricultural Statistics Authority, _____.
- 2. DDG, NSSO (FOD), N.H-IV, Faridabad.

DLC-IV

REPORT ON DISTRICT LEVEL COMMITTEE

STATE: _____

SEASON: _____

YEAR: _____

Item of information

Name of the Districts

(1) _____ (2) _____

1. Date of constitution _____

2. If not constituted, date(s) of issue of reminders
from Hqrs. _____

3. Date(s) of meetings for drawing programme for
physical verification _____

4. Name of villages visited for physical verification (a) _____ (a) _____
(b) _____ (b) _____
(c) _____ (c) _____
(d) _____ (d) _____

5. Date(s) of receipt for report at Hqrs. _____

6. In case of non receipt of report , action taken by
State unit _____

7. Date(s) of issue of comments on report received
from the field, if any _____

8. Consolidated details of the mistake observed (code) as per DLC-I

Samples	Agency responsible for mistakes	No. of Survey / Serial nos. where								Total
		No mistake was observed	Mistakes were observed according to error type							
		e ₀	e ₁	e ₂	e ₃	e ₄	e ₅	e ₆	e ₇	e ₁ to e ₇
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Central	Supervisors									
	Primary Workers									
State	Supervisors									
	Primary Workers									