ADDRESSES OF THE HEADQUARTERS OF NATIONAL SAMPLE SURVEY OFFICE (Field Operations Division)

NEW DELHI

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कृषि सांख्यिकी मैनुअल AGRICUTURAL STATISTICS MANUAL

भाग-2 PART-II

फसल सांख्यिकी सुधार योजना के अंतर्गत प्रतिदर्श जांच सम्बंधी क्षेत्र कार्य, संवीक्षा तथा संकेतीकरण (कोडिंग) करने के लिए तकनीकी अनुदेश

Technical Instructions for undertaking field work on sample checks under ICS, Scrutiny and Coding

भारत सरकार सांख्यिकी एवं कार्यक्रम कार्यान्वयन मंत्रालय

GOVERNMENT OF INDIA MINISTRY OF STATISTICS & PROGRAMME IMPLEMENTATION

> राष्ट्रीय प्रतिदर्श सर्वेक्षण कार्यालय (क्षेत्र संकार्य प्रभाग)

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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 field personnel. The Scheme for Improvement of Crop Statistics (ICS) was initiated in 1973-74 with the objective of locating deficiencies in the 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 20 States namely Andhra Pradesh, Assam, Bihar, Chhattisgarh, Gujarat, Haryana, Himachal Pradesh, Jammu & Kashmir, Jharkhand, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Odisha, Punjab, Rajasthan, Tamil Nadu, Uttar Pradesh, Uttrakhand, West Bengal and one 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 at FOD Headquarters.

Based on past experience in the implementation of ICS Programme, the manual for fieldwork required suitable updating and revision wherever necessary with regard to procedures and instructions. It gives me great pleasure to present revised and updated edition of Agricultural Statistics Manual Part II. It contains detailed instructions on the field work in respect of the three items of work envisaged under ICS programme viz. (i) Sample Check on Area Enumeration, (ii) Sample Check of Area totals in village Khasra Register and (iii) Sample Check on crop cutting experiments. The instructions cover the design, sample selection, procedures for field work and the manner of filling in the schedules prescribed in all the ICS states except Kerala for which a separate instructions manual is available.

This is intended to be a guide and reference book and the basis of training for all field staff engaged in the ICS Scheme. Keeping in view the end use to which the instructions are to be put to, the language has been kept simple and expressive. Illustrative examples are given wherever possible.

I also place on record my deep appreciation for the painstaking efforts made by the team of officers of NSSO (FOD) Agricultural Statistics Wing Faridabad in bringing out this revised edition of Agricultural Statistics Manual.

Suggestions for improvement are welcome.

Introduction

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 consists of examining (i) whether the patwaris have carried out crop inspection in the relevant seasons properly in the respective villages, (ii) whether the crop abstracts prepared by the patwaris are consistent with the entries in the Khasra register and (iii) whether the primary workers entrusted with crop estimation survey work, are conducting crop cutting experiments as per prescribed procedure. 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.
- 1.2 The programme of work under the scheme for ICS consists of carrying out checks in each agricultural season of a State on (i) enumeration of area done by the village officials (patwaris, karnams etc.) in a set of selected 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., (iii) crop cutting experiments conducted by the State primary workers in a sample of villages. 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.
- 1.3 For sample check of area enumeration and area aggregation in each season, a sample of about 10,000 villages in drawn in the form of two non-overlapping samples of about 5,000 for supervision by the supervisory staff of the National Sample Survey Office (NSSO) (Central Sample) and the State Agricultural Statistics Authorities (SASA) (State Sample). In these villages physical verification of the crop inspection work done by the primary worker and checking of the crop abstract statements prepared by him are undertaken. For the purpose of supervising crop cutting experiments a sample of about 31,000 experiments is chosen every year, in the form of two non-overlapping sample of approximately equal size for supervision by the two agencies.

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.

1.4 The Regional Head of the NSSO(FOD) located at the SASA Hqrs. will arrange, in collaboration with the State authority, to select the sample villages, both for the Central

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and State supervision, in accordance with the procedure prescribed by the FOD Hqrs. He will also arrange for the distribution of the list of Central samples to the various regions of the NSSO in the State. It is essential that the work of sample selection is completed well in advance of the commencement of State Programme for area enumeration and crop cutting experiments.

- 1.5 The Sample villages for checks on area enumeration and aggregation are generally a sub-sample of the Timely Reporting Scheme (TRS) villages in the Land Records States. Since the concerned village patwaris are required to carry out crop inspection (girdawari) in the TRS villages on priority basis within the first eight to ten days of the normal girdawari period in the respective State crop seasons, the supervisory staff of both the NSSO and the State will commence the sample check programme immediately after this period. Details regarding dates for commencement and completion of field work, submission of schedules, etc., in the various state/ season are communicated by FOD Hqrs., Faridabad every year. The Regional Head have to maintain close liaison with the SASA to keep themselves informed about any subsequent changes in the programme of crop enumeration (girdawari) in any district due to any reason.
- 1.6 The Senior Statistical Officer of NSSO (FOD) is the supervisor in respect of the Central sample and the supervisory staff of SASA in respect of the State sample. The number of villages and crop cutting experiments assigned to each Senior Statistical Officer in a sub-region is decided on the basis of the general norm of about 12 villages per season for check on area enumeration and of about 30 to 40 crop cutting experiments in a year and taking into account factors, such as accessibility of the sample villages the terrain, communication and other facilities in the region.
- 1.7 Regional Head will inspect one village for sample check on area enumeration (Sch. AS 1.0) and one for area aggregation (Sch. AS 1.1) in each season. The villages should be different for different season. For Crop Cutting Experiment, Regional Head will inspect 2 experiments (Sch. AS 2.0) in each season. More inspections may be carried out during Kharif season for AS 1.0 in order to ensure the correct selection of clusters. Regional Heads have to inspect 10 % of the samples completed by each Senior Statistical Officer in each season for sample check on area enumeration and page totalling. For Crop Cutting Experiments, at least 4 Crop Cutting Experiments in a year should be inspected by the Regional Head. A reasonable amount of inspection by Regional Head should be "surprise visit" in nature. However the allocation of field inspection will be decided by Deputy Director General (Zones). The norms for the state supervisory staff in this regard will be decided by the State Authorities.
- 1.8 The findings of the checks on enumeration of area in the village are to be recorded in Schedule AS 1.0, on the preparation of crop abstract statements in schedule AS 1.1, and on the crop cutting experiments in Schedule AS 2.0. Schedule AS 1.2 (T), AS 1.2 (D) and

Introduction 3

AS 1.2(S) relate to checks on aggregation of area figures at the tehsil, district and State levels.

The supervisor will prepare three copies of each schedule after completion of sample check in a sample village and submit all the three copies to the Officer-in charge of SRO/ State higher authority. The later will immediately scrutinise these copies of the schedules in accordance with the prescribed scrutiny programmes and send the original copy of the schedule (filled in by Senior Statistical Officer/ State supervisor) to the Deputy Director General, NSSO(FOD), NH-IV, Faridabad-121001, duplicate copy to the SASA and retain the triplicate copy for official use, within three days after the receipt of the schedule. Detailed instructions for filling them- up are contained in subsequent chapters.

- 1.9 The District Level Committee (DLC) will be constituted in each state in order to probe into the reasons for the divergence of the figures of land utilisation recorded by the State Primary Worker and those observed by the Technical Personnel assigned with the task of sample check programme. Two districts will be selected for DLC in each state (except in M.P.). However in M.P. State, 9 districts are selected one each from every division.
- **1.10** The Senior Statistical Officer of the NSSO will also prepare in duplicate the work completion report (Schedule AS 3.0) giving the particulars of completion of work in a sample village and dispatch the same to his Regional Head.
- 1.11 In addition to the work relating to ICS, the Region Head and the Senior Statistical Officers posted in the various Sub-regional offices of the NSSO (FOD) have to participate in the training of the State primary workers engaged in the General Crop Estimation Surveys. The Regional Head located at the Hqrs. of the SASA have the additional responsibility of the associating himself with the State authorities in regard to agricultural statistics matters such as TRS / EARAS, GCES, ICS & HLCC and maintain necessary liaison with the SASA.
- **1.12** In schedules AS 1.0 and 2.0, in addition to the cells provided against each item or under each column for making entries in the field, special additional cells are provided which are meant for entering codes required for tabulation. A few of these codes are to be entered at the time of field work itself by the Senior Statistical Officer/ State supervisor for which instructions are issued separately from time to time.

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CHAPTER II

DESIGN AND SAMPLE SELECTION FOR I.C.S.

- 2.1 The design adopted for the selection of villages for sample check on area is one of stratified random sampling, where a tehsil / taluka /anchal /sub-division or a group of them, is taken as a stratum in the Land Records States. For Odisha, a block or a group of blocks constitutes a stratum. For Puducherry, each Region (group of villages) constitutes a stratum. The total number of villages allotted to each State is first distributed among the districts and then among the strata in proportion to the gross cropped area, ensuring at least two villages for a stratum.
- 2.2 The list of T.R.S. villages is the frame for the selection of villages for sample check on area in the Land Records States. For Odisha, where a sub-sample of EARAS villages is selected by the State for the programmes of crop cutting experiments, the list of crop cutting villages is the frame for Area Enumeration Check (A.E.C). In West Bengal, the list of EARAS villages is the frame for the selection of villages for sample check on area enumeration. The villages for sample checks in all the States are chosen within each stratum by simple random sampling without replacement.
- **2.3** For selection of villages for sample check on crop cutting experiments, district is treated as stratum. The sample villages chosen for check on Area Enumeration in a district are scanned for locating as many crop cutting villages of the CES as possible. Whenever requisite number of villages for sample check can not be located out of the villages chosen for check on Area, additional sample villages are chosen from the list of CES / EARAS villages in the district. Two sets of sample villages are chosen in each district, one for supervision by the staff of SASA and the other for supervision by staff of NSSO.
- **2.4** The selection of villages for Check on Area Enumeration and crop cutting experiments is made jointly by the SASA and the Regional Head posted at the headquarters of the SASA in such a way that the two sets of supervision villages (one for NSSO and the other for the SASA) are non-overlapping. The procedure for selection of villages is detailed in the following paras:

<u>Procedure for selection of sample villages in the States where TRS is implemented:</u>

- **2.5** Following statements are prescribed for this exercise:
 - 1. List of TRS villages and details of selection of sample villages.
 - 2. List of villages selected for sample check on area enumeration.
 - 3. Initial frame for selection of villages for supervision of crop cutting experiments.
 - 3-ASupplementary frame for selection of villages for supervision of crop cutting experiments.
 - 4. (A&B) List of villages selected for sample check on crop cutting experiments.
 - 5. Tehsil / Taluk wise list of Revenue villages.
 - 6(a) Allocation of villages selected for sample check on Area Enumeration among the Senior Statistical Officers.
 - 6(b) Allocation of villages selected for supervision of crop cutting experiments among Senior Statistical Officers.

Regional Head posted at SASA Hqrs. will retain statements 1 and 3. These are not to be sent to FOD Hqrs., Faridabad. He would forward statements 2, 4 and 5 in duplicate to the F.O.D. Hqrs. Faridabad. He would also forward statements 2 and 4 to other Regional Heads in the State for necessary action.

Statement 6 (a) and 6 (b) is to be forwarded in duplicate to FOD Faridabad by all the Regional Heads for their respective regions.

(A) Check on Area Enumeration:

(a) Sample Size & Stratification

2.6 The total number of villages to be covered for sample check on area enumeration is distributed among the districts and within a district among the strata formed in proportion to the gross cropped area in the district / stratum. The strata, so formed at FOD, Faridabad are however, tentative and Regional Heads should examine whether any regrouping is necessary and if so, he should intimate the proposed revised grouping to FOD for necessary action. A tehsil / taluka / anchal / sub Division etc. or a group of them will constitute the stratum.

Table showing State-wise Stratum for Area Enumeration and Crop Cutting experiments

	1 0 1						
State	Stratum						
	Area Enumeration (1.0)	Crop cutting Expts. (2.0)					
Assam	Sub Division	District					
Bihar	A group of two or more anchals.	District					
Odisha	C.D.Block or group of C.D.Blocks	District					
West Bengal	District	District					
Kerala	District	District					
Puducherry	Region (group of villages)	District					
Others- Andhra Pradesh, Chhattisgarh, Gujarat, Haryana, Himachal Pradesh, Jammu & Kashmir, Jharkhand, Karnataka Madhya Pradesh, Maharashtra, Punjab, Rajasthan, Tamil Nadu, U.P. and Uttarakhand	Tehsil / Taluka or a group of Tehsils / Talukas	District					

In Bihar, where the number of Anchals is large, the number of strata to be formed in each district will be indicated. The Regional Head, Patna should suitably form the strata for each district keeping in view the geographical contiguity, cropped area etc. and intimate the same to FOD Hqrs., Faridabad for necessary action.

(b) Selection of Villages:

- 2.7 The list of TRS villages in a stratum for that year will constitute the frame for selection of the villages for the sample check on area enumeration. Following two statements will be prepared by Regional Head at SASA Hqrs. for this purpose:
 - > Statement No. 1: List of TRS villages and details of selection of sample villages.
 - > Statement No. 2: List of villages selected for sample check.

Statement No.1

List of TRS villages and details of selection of sample villages for check on area enumeration

State			Year & Season					
			Stratum number					
Dstrict			Random no. Col. Assigned					
Name of Tehsil / Taluk/	Revenue circle/ KG circle/ Pargana	Village name	Corresponding sl.no. in the TRS sample list	Sample sl. no	Order of selection			
1	2	3	4	5	6			

Note: This statement is to be prepared separately for each stratum.

<u>Col.1 to 3</u>: The names of tehsil / taluka / anchal & revenue circle / KG circle and villages would be listed in Cols. 1,2,3, respectively in the same order in which, they appear in the SASA list of TRS villages.

<u>Col.4</u>: The Sl. No. given in the TRS sample list for a particular village will be recorded against that village in Col.4.

<u>Col.5</u>: All the villages listed in col.3 will be given a continuous serial number starting from 1. Separate serial numbers would be assigned to villages in each stratum.

<u>Col.6</u>: Selection of sample villages from each stratum is to be done for the Central and State together from the villages listed in col.3 by simple random sampling without replacement. The number of villages to be selected will, therefore, be equal to the sum of sample villages to be covered by the NSSO and SASA supervisory agencies.

For selecting the villages, the table of random numbers circulated by the NSSO will be used. The random numbers in these tables are four digited. In case the total number of villages in col.3 is three digited the right hand digit in the four digited random number will be omitted and the remaining three digits would be referred. Similarly, if the total number of villages is only two digited. The two digits from the right hand side will be omitted.

Separate cols. from the random number table will be used for selecting villages in respect of each stratum. These col. numbers will be assigned by the Regional Head and the same will be recorded in Statement 1 in the place provided for it. If all the cols.(104) from the random number table are exhausted due to large number of strata (as in case of Madhya Pradesh or Uttar Pradesh), the next selection may be done from col. 1 (of the Random table) and onwards.

The villages thus selected for sample check on area enumeration will be indicated by encircling their serial numbers in col. 5. Serial numbers will be given to the selected villages in col.6 in the order in which they are selected. Supposing village at serial number 29 in col. 5 is selected first, its order of selection will be 1 in col.6. If village at serial number 3 get selected next, its order of selection will be 2 in col.6. After selecting the number of villages required for Central and State sample check, the first 50 percent of the villages, in the order of selection indicated in col. 6 will constitute the Central Sample and the remaining 50 percent would constitute the State sample. Thus, if the total sample size of villages to be selected from the first stratum is 8 villages, the four villages having order of selection 1,2, 3 & 4 will be assigned for the Central sample, and the remaining four to State sample having order of selection 5,6,7& 8. Statement No.1 will be retained by the Regional Head (Region) and should not be sent to FOD Hqrs.

Statement No. 2 List of villages selected for sample check on area enumeration.

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der of ection
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The details of villages selected will be recorded in Statement No.2. This statement will be prepared districtwise, separately for Central and State samples. Within a district, the strata (as adopted under ICS), will be listed in serial order. The details are available in statement.1.

- <u>Col.1-2</u>: Stratum number and random number col. used will be copied from the information given from the heading of statement no.1.
- <u>Col. 3 to5</u>: Names of the tehsil, revenue circle, village would be copied from cols. 1,2 and 3 respectively from statement no. 1.
- <u>Col. 6</u>: The sampling sl. number as recorded in col.5 of statement 1 will be copied here.
 - Col. 7: The order of selection will be as per col. 6 of statement 1.

Two copies of statement No.2 for each of the district will be sent to FOD Hqrs. Faridabad.

(B) SAMPLE CHECK ON CROP CUTTING EXPERIMENTS

Selection of villages

2.8. The selection of sample villages for supervision of crop cutting experiments will be done in two stages. In the first stage, villages will be selected from the list of villages already selected for sample check on area enumeration and in which crop cutting experiments are planned. If the number of villages required for supervision of crop cutting experiments get selected from the villages-selected for sample check on area enumeration then no further selection is necessary. If however, there is any shortfall in the number of villages required for supervision of crop cutting experiments, additional number of

villages will have to be selected in the second stage. This will be done from the remaining villages selected for Crop Estimation Surveys. In other words, the list of total villages selected for conduct of crop cutting experiments to be used as the frame will be split into two sub lists- (a) list of villages which are already selected for sample check on crop enumeration and in which crop cutting experiments are planned under the CES. This will form the initial frame and (b) the remaining villages selected for conduct of crop cutting experiments. This will be supplementary frame. In case the required no. of experiments planned in a district for supervision are not available, the shortfall in the required number may be made up by shifting the balance to the neighboring district. Further there may be a situation where for a crop in a district, equal number of expts. for both Central and State supervision could not be selected (in the event of matching samples) because of non-availability of sufficient no. of set of villages under CES. In such cases, care may be taken to ensure that equal number of villages in a district for Central sample and State sample are selected.

- **2.9.** Accordingly, for the purpose of selection of villages for supervision of crop cutting experiments two statements viz. statement no.3 and 3A will be prepared.
 - > Statement No. 3: Initial frame for selection of villages for supervision of crop cutting experiments.
 - > Statement No. 3A: Supplementary frame for selection of villages for supervision of crop cutting experiments.

Statement No. 3

Initial frame for selection of villages for supervision of crop cutting experiments Central Sample

State Sample

Year & Season-----

								2000	o sump			
Stratum no. for sample check on area enumeration	Tehsil / Taluk / Anchal	Revenue Circle/ Pargana	Name of Selection for area check Cropwise sampling sl.no. Order of s Cropwise sampling sl.no. Order of s C.C.Expts. planned on crop			for Village in which C.C.Expts. planned on		selecti	on			
					C1	C2	C3	C4	C1	C2	C3	C4
1	2	3	4	5	6	7	8	9	10	11	12	13
	•	•	•			<u> </u>			•			

Note: C1, C2,....indicate different crops.

District ·----

This statement is to be prepared districtwise separately for Central and State samples. Only those villages listed in Statement No. 2 in which crop-cutting experiments are planned under CES for specified crops will be listed in statement No. 3 separately for Central and State samples.

<u>Col. 1</u>: The strata within a district will be copied in this column as per column 1 of statement 2 in the same order as these appear in statement No.2.

Design & Selection

- <u>Col. 2, 3 and 4</u>: These cols. will be copied from cols. 3, 4, 5 of statement No. 2 respectively.
- <u>Col. 5</u>: This will be as per col. 7 (order of selection from statement No. 2).
- <u>Cols. 6 to 9</u>: Against these columns the names of the specified crops, on which experiments are planned for supervision, will be indicated in the order in which they appear in the work programme. In case the number of specified crops in a district exceeds 4, additional cols. will have to be provided for recording the names of such crops in this statement.

Separate sampling serial nos. will be given for each specified crop in the respective cols. Selection of villages will be done crop by crop in the order in which these are listed in the cols. 6 to 9. The requisite number of villages for a specified crop will be selected by simple random sampling without replacement. For this purpose, the table of random numbers supplied by the NSSO will be used. A fresh random number col. will be assigned by the Regional Head for Kharif and Rabi seasons separately where the selection of villages is done season-wise. After selecting the required number of villages for the specified crop in col.6, the random col. will be used for selection of villages for the crop in col.7 followed by 8 and 9 in that order till the selection of villages for all the crops is completed. The selection of villages for all the crops will be completed first for the Central sample and will be followed by selection of additional villages for Central sample from statement 3A before selecting State sample from statement No.3. Where separate planning is done according to the irrigation and variety of seed, the order of selection will be irrigated, Unirrigated and high yielding, traditional variety.

The order in which the villages are selected will be recorded in corresponding cols. 10 to 13. In case the available number of villages for a crop in statement No. 3 is just equal to or less than the number of villages required for supervision of crop cutting experiments ,all the villages will be selected and the order of selection will be the same as the sampling serial number. In such a case consultation of random cols. will not be necessary. Statement No.3 should be retained by the Regional Head and is not to be sent to FOD Hqrs. Faridabad.

2.10 Statement No. 3A: If the required number of villages for supervision of crop cutting experiments is not available for any one or more specified crops from Statement No.3, it would be necessary to prepare a supplementary frame consisting of complete list of villages in which experiments are planned under Crop Estimation Surveys for the specified crops.

Statement No. 3A

Supplementary frame for selection of villages for supervision of crop cutting experiments

Vear & Season-:----

State		rear & Beason.												
District			Rai	ndum n	o. cols	s. Used	1:							
Name of CES	Revenue Circle / Pargana	Name of village	Nos which	for vil	ampling lages i xpts.ar crop	n	C	Central	sample	Order (of sele		sample	
Stratum			C1	C2	C3	C4	C1	C2	C3	C4	C1	C2	СЗ	C4
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15

This statement is to be prepared districtwise. Cols. 1 to 7 would be common for both the Central and State sample. All the villages in which crop-cutting experiments are planned under CES for specified crop will be listed in this statement. Those villages already selected for check on area enumeration and listed in statement No. 3 for Central or State sample will then be struck off from the list. For the remaining villages, sampling serial numbers will be given separately for each crop in cols. 4 to 7. Selection of villages for meeting the shortfall has to be made separately for each crop in the order in which these are listed in cols. 4 to 7. The selection will be done by simple random sampling without replacement separately for Central and State samples. While selecting the additional number of villages, it is necessary to ensure that there is no overlapping of villages between the two agencies even for different crops, in the whole process.

<u>Col. 1</u>: The CES strata should be listed in the same order in which they appear in the State list.

<u>Cols. 2-3</u>: Names of the Revenue Circles & villages will be listed in the order in which they appear in State list.

Cols.4 to 7: The crops will be listed in the order in which they appear in work programme.

<u>Cols. 8 to15:</u> After completing the selection of additional villages, the order of selection will be recorded for each crop in cols. 8 to 11 for Central sample and 12 to 15 for State sample. This order of selection will be in continuation of the order recorded in respective col. for the specified crops in statement No.3. In other words, the order of selection for

each crop and each agency will start with 1 in statement no. 3 and will continue in case of shortfall in statement No. 3-A upto the number of villages required.

Following will be the order of selection of villages:-

- (1) Initial Central sample from Statement no.3A.
- (2) Additional Central sample from Statement no. 3A.
- (3) Initial State sample from statement no. 3.
- (4) Additional State sample from statement No.3A.

The selection of additional villages for Central sample will start from the last random no. used in statement No. 3 for Central sample. After completing the selection of requisite number of villages for all the crops for the Central sample, the random no. Cols. will be continued for the selection of villages from statement no. 3 and statement no. 3A for the State sample. If in the process the random nos. in a col. assigned get exhausted, the next col. of random nos. will be consulted. In case the required number of digits is less than 4 available in the Random No. table, required no. of digits would be used from the left, omitting the digits from right hand side.

2.11 After completing the selection of villages for supervision of crop cutting experiments as detailed above the Regional Head posted at SASA Hqrs. will prepare a list of villages finally selected in statement No. 4 and forward it to FOD, Hqrs. in duplicate.

Statement No. 4
List of villages selected for sample check on crop cutting experiment.

State			Year & Season					Centra	Central Sample		
District								State S	State Sample		
Tehsil /			(Crop 1	Crop 2		Crop 3		Crop 4		
Taluk	circle	of village	No. of expt	Order of selection	No. of expt.	Order of selection	No. of expt.	Order of selection	No. of expt.	Order of selection	
1	2	3	4	5	6	7	8	9	10	11	
Part A											
Part B											

This statement will be prepared separately for Central and State sample. All the villages selected from statement 3 will be listed under Part A and those selected from Statement 3 A, under part B.

(c) Special Situations

- (i) States where planning is done separately for each season:
- **2.12** In some States (e.g. Rajasthan) two sets of common villages under CES are selected, one for Kharif and the other for Rabi. In such States, selection of villages for supervision of crop cutting experiments will have to be done separately for the two seasons. The villages selected for sample check on area enumeration will be examined once during Kharif and shortfall, if any, for any of the specified crops of Kharif will be made good from CES list of villages for that season. A similar exercise will be done for Rabi season separately. This procedure would be followed in all those states which adopt separate planning for each season.

(ii)States where villages under CES are planned, separately for individual crops or group of crops:

2.13 In some States (e.g. Punjab, Uttar Pradesh) planning under CES is done separately for individual crops or group of crops (e.g. sugarcane etc.) In such cases, the lists of villages selected from sample check on area enumeration will be examined with reference to CES list for these crops and additional villages will be selected, if necessary, from the CES list of such crops or group of crops.

Details of Revenue villages

2.14 The Regional Head posted at SASA Hqrs. will prepare the details of revenue villages in each tehsil / taluk with reference to the frame used for selection of villages for sample check on area enumeration. He will furnish the details of these Revenue villages to FOD Hqrs, Faridabad in duplicate in statement No. 5.

Statement No.5

Detail of revenue villages with reference to the frame used for selection of villages for sample check on area (list of TRS villages).

Sl. No	District	Name of Taluk / Tehsil / Anchal	Geographical Area as per village papers	Total no. of revenue villages	Total no. of revenue villages in the frame from which TRS sample was selected for the current year	Total no. of TRS Villages selected during the Year		
1	2	3 4		5	6	7		

(C) ALLOCATION OF WORK:

- **2.15** After completing the selection of villages for sample check on area enumeration and supervision of crop cutting experiments, the Regional Head at SASA Hqrs. will communicate the names of the selected villages to the other Regional Heads in his state. On receipt of these lists, each Regional Head will allocate the sample villages among the Senior Statistical Officers posted in his region.
- **2.16** All the Regional Heads thereafter, will furnish the details of the allocation of work among the Senior Statistical Officers to FOD Hqrs. Faridabad in duplicate in Statement 6(a) and 6(b) as per format given below:-

Statement No.6 (a)

Allocation of villages selected for Sample Check on Area Enumeration/Area aggregation among the Senior Statistical Officers / Supervisors

State: Region:

Sub Region office:

S1.	Name of	District	Stratum no. as	Tehsil /Taluk/		Village	
No.	Senior Statistical Officer		adopted under ICS	Anchal	Name	Identification particulars	Order of selection
1	2	3	4	5	6	7	8

Col.7 - Indicate the identification particulars of the village such as Thana No./Hadbast No./ J.L. No. etc

Statement No.6 (b)

Allocation of villages selected for Sample Check on Crop Cutting Experiments among the Senior Statistical Officers/ Supervisors

State Region:

Sub Regional office:

Sl. No	Name of Senior Statistical	District	such as	of	Particular	Crop in		xpts. are			23
•	Officer		Pargana / C.D.block etc.	village	r arrediai	No. of Expts.	Order of select- ion	No. of Expts	Order of select -ion	of	Order of selection
1	2	3	4	5	6	7	8	9	10	11	12

Note: Separate statement will be prepared for each group of crops as adopted by the SASA for planning of Crop Estimation Surveys (either different plans for season/crop/group of crops etc.)

Col.6: Indicate, the identification particular of the village such as Thana No./Revenue No./Hadbast No./ J.L.No.etc.

Procedure for selection of sample Mouzas (villages) for check on enumeration of area and crop cutting experiments in West Bengal

2.17 The scheme for Establishment of an Agency for Reporting Agricultural Statistics (EARAS) was started in West Bengal from the year 1981-82 as per the decision of the Standing Technical Committee (STC) for the Improvement of Crop Surveys in West Bengal in its meeting held on 25.4.81. Under the scheme, 20% of the total Mouzas are to be covered each year, so that in a span of 5 years the entire state is covered. Complete area enumeration in the mouzas selected under EARAS is done by the Amin of Directorate of Land Records and Surveys (DLR & S). From 1995-96, the Bureau of Applied Economics and Statistics (BAE & S) has been entrusted with conducting crop cutting experiments on all 19 (insured and non-insured) major crops in West Bengal excluding potato. The crop cutting experiments are being carried out by Asstt. Investigators of BAE & S. The responsibility of conducting crop cutting experiments on potato and preparation of estimates of yield-rates and production of the crop has been given to the Agriculture Department. The name of crops and shape & size of the experimental plot of crop cutting experiments excluding potato are given below:

Shape and size of cut.

	Name of crop	Shape and size of Cut.							
1.	Jute	Circular cut of 100 Sq.ft.							
2.	Mesta	-do-							
3.	Paddy(Aus.) *	-do-							
4.	Maize	-do-							
5.	Paddy(Aman) *	-do-							
6.	Wheat *	-do-							
7.	Barley	-do-							
8.	Linseed *	-do-							
9.	Masur*	-do-							
10.	Khesari	-do-							
11.	Maskalai *	-do-							
12.	Matar	-do-							
13.	Gram *	-do-							
14.	Paddy Boro *(Summer).	-do-							
15.	Sesamum *	-do-							
16.	Mustard *	-do-							
17.	Sugarcane	Sq. cut of 15' x 15'							
18.	Mung*	-do-							
19.	Arhar	-do-							

^{*} Crops covered by Insurance.

Name of crop

Sample check on enumeration of area

- 2.18 The stratum for selection of mouzas for sample check on enumeration of area will be the district. Within the district, mouzas selected by DLR & S for area survey under EARAS will constitute to the frame for selection of mouzas for sample check on area enumeration under ICS. List of mouzas selected by DLR &S in each district will be prepared as per statement No.1 given below. Within a district the mouzas selected for each block will be arranged in the order in which they appeared in the state list.
- **2.19** The requisite number of sample mouzas for each stratum will then be selected from the frame by adopting the procedure of simple random sampling without replacement. For the purpose of selection, the table of random numbers circulated by NSSO should be consulted. If the total number of mouzas in the frame is 3 digited number, use 3 digited random numbers omitting the right hand digit of the 4 digited random number table. Separate columns of the random number in the table will be used for selection of villages in respect of each stratum. Column of the random number table will be assigned by the Regional Head and will also be recorded in the statement No.1 & 2.
- **2.20** The Performa for statement No. 1 showing list of EARAS mouzas and the details of selection are given below:-

STATEMENT NO. 1

List of EARAS mouzas and details of selection of sample mouzas for sample check on area enumeration.

State	Year and Season
District with stratum No	Random No. col. assigned

Name of Block	J.L. No.	Name of mouza	Corresponding sl. no. in the EARAS sample list	Sampling sl. no.	Order of selection
1	2	3	4	5	6

J.L NO = Jurisdiction List No.

In the above statement, the corresponding serial number in the EARAS sample list for the mouzas listed in col. (3) will be given in col.(4). Separate sampling serial numbers will be given in col. (5) to the mouzas in each stratum and this will be used for selection of mouzas for the sample check on enumeration of area. The mouzas selected for sample check will be indicated by encircling the sampling serial number in col.(5). The order of selection will be given in col. (6) of the statement No.1.

2.21 The details of mouzas selected in the State will be given in statement No.2 as per the performa below:

STATEMENT No. 2

List of mouzas selected for sample check on area enumeration.

State: Year & Season:

District with stratum No.	Random number column used for selection	Block	J.L.No.	Name of mouza	Sampling sl.no.as per col.(5) of statement no.1	Order of selection
1	2	3	4	5	6	7

- **2.22** Statement No.1 will be retained by the Regional Head, Kolkata, who is responsible for selection of mouzas (villages) and a copy need not be sent to FOD. Two copies of Statement No. 2 will be sent to FOD Hqrs., Faridabad.
- **2.23** Within a mouza, 4 clusters of 5 survey numbers each will be covered for AEC by the Senior Statistical Officers, NSSO (FOD) / State Supervisors. Details of selection of survey numbers and procedure for conducting sample check on area enumeration in the selected numbers will be as given in the succeeding chapters.
- 2.24 According to the State plan, the BAE & S conducts certain number of crop cutting experiments on each of the specified crops by a process of examination of the availability of the crop in the selected crop cutting mouzas in ascending order. To facilitate this, ten mouzas out of the EARAS mouzas in a block are randomly selected for conduct of crop cutting experiments. The BAE & S staff will take 10% systematic sample (subject to minimum of 100 plots) of all the plots in a selected mouza and identify the type of land use for each plot in the sample. In this way a sub-frame of plots cultivating each crop is

prepared for each mouza. The plots for conducting crop cutting experiments are sampled out of this sub-frame. In all 20 plots are taken in the form of two interpenetrating sub-sample of 10 each from each block for a crop. The Senior Statistical Officers will be in constant touch with the State Officers to find out as to which of the Mouzas are selected for crop cutting experiments. A cropwise list of such mouzas will be collected by Senior Statistical Officers for each district in his jurisdiction.

- 2.25 The sampling design for supervision of crop cutting experiments is that of stratified multistage sampling where districts are taken as strata. Blocks within a district are FSUs and selected through Probability Proportional to Size (PPS), size being area under an experimental crop in the blocks. Mouzas within a selected block are SSUs and selected using SRSWOR. The total number of mouzas to be selected in a district for sample check of crop cutting experiments will be equal to the half of the number of crop cutting experiments (2 expts. on a crop in each mouza) indicated against a district in the plan of work. For instance, if 8 crop cutting experiments are to be checked on Wheat in the district Malda then the number of mouzas to be selected in that district will be 4 (since the State worker conducts two experiments on a specified crop in a mouza). The selection will be done for each crop separately consulting the corresponding list of State crop cutting mouzas.
- **2.26** After obtaining the list of mouzas for crop cutting experiments from D.S.O. the Senior Statistical Officers will put tally marks to the mouzas which fall under the selected mouzas for sample check on area enumeration and examine the number of mouzas thus obtained. By doing this three types of situation may arise:
 - (i) the crop cutting mouzas thus tick marked may be equal to the half of the number of crop cutting experiments planned on a certain crop.
 - (ii) the crop cutting mouzas may be more than the half of the required no. of experiments.
 - (iii) the crop cutting mouzas may be less than the half of the required no. of experiments.

In first case, where mouzas are equal to half of the number of experiments planned on a certain crop, all the mouzas will be retained for sample check on crop cutting experiments and there is no need for further selection.

In second case, where crop cutting mouzas are more in number than the required, the Senior Statistical Officers will select out of these the required no. of mouzas with simple random sampling without replacement.

In the third case where crop cutting mouzas are less than the number of mouzas required, the Senior Statistical Officers will retain all the mouzas obtained by tally marks and the short fall will be made good by selecting from the mouzas falling outside the mouzas selected by NSSO for sample check on area enumeration. In case no crop cutting mouza falls under the mouzas selected for area enumeration under ICS, the state cropcutting plan should only be used as a frame.

The detailed procedure for selection of mouzas for supervision of crop cutting experiments is given in Annexure-IV (page-135).

The usual random number table will be used for the purpose of selection. The Regional Head, Kolkata will assign in advance the column of random number to be used for a district. After the selection, the Regional Head will allocate the mouzas amongst Senior Statistical Officers and will prepare a list of mouzas for sample check on crop cutting experiments in each district as per Statement 3 given below:-

STATEMENT 3

Statement of allocation of mouza for sample check on crop cutting experiments among the Senior Statistical Officers, NSSO - West Bengal

Year Seaso			Season				Region		
Sl.No.	Name of Senior Statistical Officer	District	Random column No used	Block	Order of selection of mouzas as allocated for sample check on area*	Identification Sl. No. of the mouza.	J.L.Number		
1	2	3	4	5	6	7	8		

^{*} Mention outside planned mouzas and give sl. no. in order of selection in case crop cutting mouzas are selected from outside the N.S.S.O.area enumeration mouzas.

The Senior Statistical Officers of the Sub-Region will forward immediately 4 copies of the Statement to his Regional Head, who after necessary scrutiny will forward two copies of the statement to FOD, Head quarters, Faridabad and one copy to respective District Statistical Officer. In addition, each Senior Statistical Officer will also be supplied with a list of mouzas allotted to him. The Regional Head will equip each Sub-Regional Office with adequate number of blank statements to expedite the submission of such statements by the Senior Statistical Officer.

Procedure of selection of villages for sample checks on enumeration of Area, Crop Cutting Experiments and Area Aggregation under the Scheme of ICS in Odisha,

EARAS Villages: The scheme for Establishment of an Agency for Reporting Agricultural Statistics (EARAS) is functioning in the state of Odisha. Under the scheme it is envisaged to undertake complete enumeration in a set of 20% of the total number of villages in the State in a year, with a view to complete all the villages in course of 5 years. This scheme was initiated in the State of Odisha from 1976-77 onwards and complete enumeration was introduced in a small sample of less than 6% of villages. The State Government increased the sample size in phases since then and now 20% of the total villages are covered every year.

According to sampling procedure adopted under the Scheme of EARAS, all the villages selected for area enumeration are completely enumerated by the primary worker known as Statistical Field Surveyor (SFS) belonging to the Directorate of Economics and Statistics (DES), Odisha, in each of the agricultural seasons in a year. The programme of Crop Cutting Experiments has also been integrated with that of the complete area enumeration. A set of crops has been taken as programmed crops on which Crop Cutting Experiments are conducted under CES. A sub-sample of the complete area enumeration villages is selected for crop cutting experiments on minor crops. A further sub-sample of the villages selected for minor crops are taken for crop cutting on Principal crops.

Sample check on enumeration of area:

- 2.29 <u>Stratum</u>: For this purpose, a CD block or a group of CD blocks will be considered as a stratum depending on the gross cropped area and also the geographical contiguity of the blocks. Grouping of blocks will be made at Regional Office, NSSO (FOD) located at SASA Hqrs., Odisha and intimated to NSSO (FOD) Hqrs., Faridabad. The number of strata to which a district is to be divided will remain the same as given in the plan of work prepared at Hqrs. Faidabad.
- **2.30** Frame: The list of villages in each stratum selected for crop cutting experiments on minor crops under CES will be the frame for the selection of sample villages for sample check on enumeration of area under the scheme of ICS. The villages within a block will be arranged in the order they appear in the State EARAS list. In case, a stratum consists of more than one block, the blocks will be listed as per the order appearing in the grouping. The list of villages will be prepared as per statement No.1 separately for each stratum:

STATEMENT NO. 1

List of villages selected for crop cutting experiments on minor crops under EARAS in Odisha

Year----- Stratum------

C.D. Block	Villages selected for cc expts. on minor crops. (EARAS Year)		minor crops. for selection of ICS samples		Order of selection		
	Serial order as per EARAS		Villages for area check	Additional villages			
1	2	3	4	5	6		

Continuous sl. nos. will be given in col. 4 to all the villages appearing in cols.2/3. From the total no. of villages in a stratum, 4 non- overlapping villages will first be selected by simple random sampling without replacement with the help of a random number table. The order of selection 1, 2, 3 and 4 will be noted under col. 5. Out of the 4 villages, 2 villages with orders of selection 1 and 2 will be assigned to the central sample and the other two with orders of selection 3 and 4 to the state sample. All these villages will be covered for sample check on area enumeration. Similarly, all the residual villages in column 4 will also be selected from each stratum and their order of selection beyond 4 will be given in column 6.

2.31 After the selection of villages is completed as per the procedure above, two lists of the selected villages for each district will be prepared as per statement no. 2 and 2A. Statement No.2 (villages selected for check on area) will be prepared separately for Central and State samples for each district. Statement No.2A (Additional villages) will be prepared first as a total list without dividing it among the Central and State samples. Subsequently these additional villages will also be divided equally into 2 samples (central and state) as per procedure given in para 2.35.

STATEMENT NO. 2

List of villages selected for check on area enumeration and also frame for selection of villages for check on c.c. experiments and area aggregation.

Central/State Sample District: Random col. No. Allotted:

No.1) @ Crop Cutting Experiments Area a			Selection	Name of village	Order of selection	No.@ (col.5 of statement	
Sampling Sl. Order of as pe	Area aggregation	Experiments	Crop Cutting		,		
	as per season				2.3.2, 2		
1 2 3 4 5	6	5	4	3	2	1	

[@] The strata in a district and order of selection within a stratum are to be arranged in ascending order of serials.

Sample check on enumeration of area will be conducted in all the villages appearing in col.3 of statement No.2, (Central sample by the Senior Statistical Officers, NSSO (FOD) and State sample by State Supervisory staff). These villages will remain the same in all crop/seasons and will not be replaced.

STATEMENT NO. 2A

List of additional villages: Frame for selection of additional villages for check on crop cutting on Paddy (A), Paddy (S), Jute and Potato.

*Total list/Central/State Sample

District:

Random col. no. allotted:

Stratum No. @	Order of Name of the selection village		Selection of vil	of villages for check on crop cutting (additional)			
	(col.6 of statement No. 1) @	(col.6 of	ol.6 of	Sampling Sl. No.	Order o	of selection	
			Combined	Agency wise			
1	2	3	4	5	6		

^{*} Delete inapplicable words

Column of random nos.

The col. of random nos. to be used for the selection of villages for statements 2 and 2 A will be the same as stratum no. up to stratum 104. For the strata nos. 105, 106, 107 and so on the col. of random nos. will be 1, 2, 3 and so onrespectively.

The Regional Head, Bhubaneswar will prepare 6 copies of statements no. 2 and 2A and send 2 copies each to FOD, Faridabad and Directorate of Economics & Statistics (DES), Odisha. Besides, a list of villages meant for Regional Head, Sambalpur, will also be sent for his use for the districts under his jurisdiction.

Selection of villages for sample check on crop cutting experiments

2.32. Stratum: For this purpose, each district will be a stratum.

2.33. Frame: Statement no. 2 will serve as the frame for villages to be selected for Paddy (W). For Paddy (Autumn), Paddy (Summer), Jute and Potato besides statement no.2, the statement no. 2A will be used as the additional frame of villages for check on crop cutting.

After listing the selected villages for area enumeration for all the strata in a district in statement 2, continuous sampling sl. nos. are to be given in col. 4 to all the villages in the district. All these villages will have to be arranged in a random order in col. 5. For example, if the total no. of villages is 8, all the 8 villages are to be randomly arranged by selecting all the 8 numbers (1 to 8) in a random order. Col. of random nos. to be used in

[@] Same as in Statement No. 2

Design & Selection 23

this case will be assigned to each district by the Regional Head, Bhubaneswar (say col. nos. 41 to 53). A specimen statement 2, say for the State sample is given below:-

(Specimen Statement No. 2)

Stratum	Order of selection	Name of village	Selection of villages for sample check on			
No. @	(col.5 of statement No.1) @		Crop Cutting Experiments		Aggregation of	
	110.1)		Sampling Sl. No.	Order of selection	area as per season*	
1	2	3	5	6	7	
1	3	V	1	6	S	
	4	R	2	3	S	
2	3	P	3	7	A	
	4	A	4	5	W	
3	3	S	5	1	A	
	4	L	6	8	A	
4	3	T	7	4	A	
	4	G	8	2	W	

[@] same as in statement no. 2

Sample check on crop cutting Experiments:

2.34 Paddy (**W**): In each village, 2 experiments are to be checked at harvest stage. These 2 experiments in a village will be the first two experiments selected by the P.W. under CES (bearing order of selection 1 & 2) irrespective of any consideration of irrigation and seed variety. A special experiment on high yielding variety (HYV), which the state primary worker may conduct in a village will not be checked under the ICS programme under any circumstances. The no. of villages to be covered to complete the quota of supervision on Paddy (W) will thus be half of the no. of experiments given in the plan of work. Tick (\checkmark) may be marked on as many orders of selections as are required in a district beginning from the order of selection 1 under col. 5 of statement no. 2. In the example above, suppose it is expected to check 12 experiments on paddy (W) in a district, tick (\checkmark) may be marked on orders of selection 1 to 6.

In case, subsequently the state primary worker does not plan crop cutting experiment in a village due to the non-availability of 2 survey nos. growing paddy (W) or he plans only one crop cutting due to the availability of one survey no. growing the crop, replace such village by the village with next higher order of selection (7 in the example above) in the district in ascending order. If in this process all the villages in the list are exhausted, which rarely happens, no further trial is to be made to replace the villages in the district.

^{*} Instruction for selection of sample villages for aggregation of area is in para 2.37

Caution: On the other hand, if it is found that there were at least 2 survey nos. growing paddy (W) in a village and it was possible for the SFS to conduct 2 experiments, but he has replaced such a village or conducted only one experiment without reason, the Senior Statistical Officers will discuss the situation with the District Statistical Officer and restore the experiments as far as possible.

Experiments which could not be conducted due to late visit of the SFS will be treated as lost, where as in case when the primary worker planned & conducted the experiment but the supervisor could not attend, it will be treated as missed. A Schedule AS 2.0 will be filled in for missed and lost experiments also and the details of the circumstances in which the experiments were lost/ missed will be reported in the remarks block.

2.35 Paddy (Aut.) and Paddy (S): In each village, 2 experiments are to be checked. Since these crops are grown in less intensity than Paddy (W), replacement of villages will be carried further from statement no. 2A. All the villages listed in statement no. 2A will form an additional frame. The villages will be given as sampling sl. no. in col. 4 for the entire district. In case the total no. of villages in a district is even, such as 6, 8, etc. retain all the villages. In case the no. is odd, ring out (exclude) the last number. Arrange the village in a random order (as in case of statement no. 2) and give the orders of selection in col. 5. The first half of the order of selection will be additional villages for the central sample and the second half for the state sample. Agency wise order of selection will be given in col. 6 in continuation of that in statement no. 2. Selection of random no. the same random columns allotted to the districts may be used consulting the numbers beyond the number exhausted. A specimen of statement no. 2A is given below:

(Specimen Statement No. 2A)

Total list/Central/State Sam	ole District:	Random col. Allotted:

	tran state sam	<u> </u>	Sibiliet.		m con i moncu.	
Stratum No. @	Order of selection	Name of the village	Selection of villages for check on crop cutting (additional)			
	(col.6 of statement No.		Sampling Sl. No.	Order o	of selection	
	1) @			Combined	Agency wise*	
1	2	3	4	5	6 @	
1	5	X	1	6	14-C	
	6	Z	2	12	!3-S	
	7	Н	3	3	11-C	
	8	В	4	14	15-S	
2	5	A	5	7	15-C	
	6	M	6	13	14-S	
	7	E	7	1	9-C	
3	5	Q	8	8	9-S	
	6	C	9	4	12-C	
	7	Y	10	11	12-S	
	8	M	11	9	10-S	
4	5	D	12	2	10-C	
	6	F	13	5	13-C	
	7	U	14	10	11-S	
	8	K	15			

^{*}C- Central,

After drawing the additional samples in this manner, the central & state samples would be listed separately in similar statement no. 2A, agency wise. The name of the agency would be written on the top.

Further each supervisor will, after completing examination in consultation with the SFS / DSO, of the villages in statement 2, do further scanning of villages in statement 2A in serial order of selection. As many additional orders of selection as are needed to complete the quota of crop cutting experiment in the district will be included under the sample check. In case it is not possible to achieve the quota, even after scanning the entire additional list as per statement 2A, no further attempt will be made for replacement.

Caution: The caution given under paddy (W) will also apply in this case. Experiments will be treated as lost or missed depending on the situation enunciated therein. A schedule AS 2.0 will also be filled in for missed and lost experiments.

S- State

[@] Since equal no. of villages for each agency (central & state) would have been selected as per statement no. 2, last orders of selection for both the agencies will remain the same in statement no. 2A col. 6.

2.36 Potato and Jute: In case of these crops, only one experiment per village may be conducted and therefore the no. of villages required would be same as the no. of experiments. The requisite number of villages will be taken from statements 2 & 2A after consulting SFS/DSOs about the availability of crops in the villages in the manner prescribed for Paddy (Autumn) and Paddy (Summer) above and complete the quota of inspection in the district. In case, the quota is not completed even after scanning the villages in list 2A, no further attempt will be made.

A similar caution under Paddy crops will also apply here. In case one plot growing the crop was available in the village, but the primary worker did not conduct crop cutting or without reason replaced the village, this may be discussed with the DSO to restore the experiment otherwise it would be treated as lost alongwith other lost cases. In case, the primary worker conducted but the supervisor did not attend it will be treated as missed. A schedule AS 2.0 will also be filled in for lost and missed experiments.

2.37 Selection of villages for check on area aggregation

Out of total villages selected for area enumeration 40%, 30% and 30% of the villages are selected for check on aggregation of area for Autumn, Winter and Summer season respectively. For this, village as per order of selection of selected villages in col. '5' of statement '2' will be marked as A (for Autumn), W (for Winter) and S (for Summer) starting from order of selection '1' to make as many triplets of (A,W,S) as can be made. The remaining untripleted villages(s) will be marked as. 'A' This process is to be repeated a fresh for each district. In case of districts having only 2 villages for AES, both the villages may be marked as either A, A or W & S, as the case may be, as to maintain the number of villages at 40%, 30% and 30% for Autumn, Winter and Summer respectively. The marking of A, W & S will be made in col. '6' in statement '2'.

2.38 Allocation of samples among the Senior Statistical Officers/State Supervisors:

From the district wise list as per statements 2 and 2A, the Regional Heads, NSSO(FOD) and (the state officers at the district levels) will draw the allocation of samples among the supervisory staff as per statement no.3.

STATEMENT NO.3 (Part A/B)

Allocation of samples among the supervisory staff

Sub-Region:

Central/State sample.

Name of Senior	District Stratum	Name of	Order of selection			
Statistical Officer / Supervisor		No. (ICS)	village	Area enumeration	Season in case of area aggregation	Crop cutting Expt.
1	2	3	4	5	6	7

Note: Part A; as per statement no.2,.

Part; B as per statement no. 2A.

Part A- cols. 5, 6 & 7 will correspond to cols. 2, 6 & 5 of statement 2 respectively. Part B - col. 5, 6 will be left blank, col. 7 will correspond col. 6 of statement 2A.

Design & Selection

Order of selection for area enumeration & area aggregation will remain the same.

The Regional Head, Bhubaneswar and Regional Head, Sambalpur,both will prepare 6 copies of statement no. 3 and send two copies to FOD, Faridabad, one each to DES, Odisha, District Statistical Officer concerned and SRO.

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2.39 **General:** While replacing the villages for check on crop cutting expts. as per procedure given above, the Officer in-charge in Sub-Regional Office, will keep close watch over the villages so that the replacement is done strictly in ascending order within a district and not left to the choice of Senior Statistical Officers. This would need a vigilance on the part of Senior Statistical Officers in districts where more than one Senior Statistical Officer is posted. Since during harvesting period information may come in quick succession, control room type of information is to be maintained. The rule will be, to have more checking if need be, rather than skip over the lower orders of selection, while replacing the villages. For example, if crop cutting has been checked in the 12th order of selection in the additional list every attempt will be made to cover the earlier orders also say 11th, even if the quota of supervision is exceeded. Necessary shifting of the samples will be done at the time of tabulation in the FOD, Faridabad. Considering the non-availability of some crops in many of the villages and with a view to achieve a reasonable number of crop cutting experiments on a crop the SASA had issued instructions to the SFS in the past to attempt crop cutting experiments on such crops in the village having the next even order of selection. Since in the work programme under ICS, a slightly different method of replacement has been prescribed, the above type of replacement prescribed by the SASA need not be attempted under the programme of sample check.

Sufficient copies of Harvesting Dates Intimation cards will have to be distributed among the primary workers so as to get the information regarding the planning and harvesting in time. Close liaison is to be maintained with District Statistical Officers and other State Officers at different levels.

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CHAPTER III

SAMPLE CHECK ON ENUMERATION OF AREA SCHEDULE A.S.-1.0

- **3.1.1** Schedule AS 1.0 is designed to record the findings of sample checks. The check on area enumeration actually consists of selecting and locating a sample of 20 serial/survey numbers in each selected village with the help of the village map and records and noting down the actual utilisation to which they are put in each season. The entries of the primary worker in the Khasra register are also to be collected and noted down. Further, data are collected in the schedule on various ancillary factors which have relevance to the scheme for ICS. It is essential that the supervisory staff invariably visit the selected serial/survey numbers, within each sample village during each season as per the prescribed time schedule and record the crop / utilisation to which they are put without any bias and thereafter copy out those given by the patwari in the village records.
- **3.2.1** Schedule AS 1.0: At the top of the schedule the Senior Statistical Officer of the NSSO will put a tick mark () against 'Central' and the State Supervisor against 'State' and delete the others. Similarly a tick mark is to be put against 'original', 'duplicate' or 'triplicate', as the case may be. Note the season and the year in the place provided in the heading of the schedule. It may be noted that the season is to be recorded in the nomenclature as followed in the State. For instance, Bhadai, Aghani, Rabi, Garma, etc., in Bihar and Kharif, Rabi, Zaid in Uttar Pradesh. For Tamil Nadu, where definite seasons have not been prescribed as the Girdawari is carried out monthly by the primary worker, the entry against season will be 'phase I' for July to October, 'Phase II' for November to January and 'Phase III' for February to March.
- **3.2.2** In Andhra region of Andhra Pradesh, where for the primary worker monthly inspections are prescribed and in Telegana region of Andhra Pradesh where two visits each are prescribed for the primary worker during Kharif and Rabi seasons, the Senior Statistical Officer/State Supervisor may have to pay an additional visit to some of the sample villages, in order to cover early maturing and the late sowing of crops. In such cases, the supervisory staff will submit the schedule only after completing the last visit in the respective season.

3.3 Block 1: Identification and other particulars of village

- **3.3.1** This block is intended for recording identification particulars of the sample village to ascertain characteristics like cadastral survey particulars, particulars regarding patwari, completion of Girdawari in the village etc.
- **3.3.2** <u>Items 1 to 4</u>: Write the name of the State, district (along with their respective code) and tehsil (with stratum number) to which the sample village belongs against items

- 1, 2 and 3 respectively. The name of the village and its order of selection will be entered against items 4(a) and 4 (b).
- **3.3.3** <u>Items 5.1 and 5.2</u>: Write the name of the patwari and his headquarters against these items. In case of EARAS States, the particulars of the primary worker (Amin in West Bengal, & Statistical Field Surveyor in Orissa) will be entered.
- **3.3.4** <u>Item 6</u>: Record the total number of villages in the patwari circle against item 6(a) and number of TRS villages for that year allotted to him against item 6(b). In case of EARAS States, total number of villages will be entered against item 6(a) and a cross mark (x) against item 6(b). While reporting information against this item additional work load of another patwari circle will be considered, if the additional charge is assigned to the primary worker of the selected sample village for the full period of Girdawari for the season under survey. In all such cases, a remark will be provided invariably in Block (1.c) of the schedule.
- **3.3.5** <u>Item 7.1 and 7.2</u>: If the entire area included in the jurisdiction of village is cadastrally surveyed, write code 1, against item 7.1. If a part of the village is cadastrally surveyed and a part is unserveyed (which does not bear any survey number), write code 2. If the village is not cadastrally surveyed, enter code 3. If information regarding cadastral survey is not available, enter code 4. If the village is fully or partially surveyed, a village map is normally prepared initially at the time of survey and settlement. Subsequent changes in survey numbers when needed are first noted in pencil or red ink by the patwari and thereafter at certain interval the changes are rectified by the tehsildars. A new map is brought out in this process incorporating such changes. The year in which such new map is brought out is to be recorded against item 7.2. If the map has not been updated since initial preparation, remark 'not up-dated' may be given. In the situation where "map updated but year is not known", "map never updated since prepared last" and "map never updated since prepared for the first time", a foot- note may be given, with an asterisk (*) in item 7.2.
- **3.3.6** <u>Item 8</u>: This item is intended to obtain information as to whether the village map is available with the patwari in his headquarters. If it is available, code 1 will be entered and if not, code 0 will be entered.
- **3.3.7** <u>Item 9</u>: This item is intended to obtain information relating to the condition of the map, if the map is available with the patwari as per entry in item 8. It is likely that the map is torn, soiled or otherwise not usable due to numerous mutilations of entries. The entry will be 1 or 0 according to the map is found to be usable or unusable. It may be noted that the term usable refers to the physical condition of the map. In case of 0 code against item 8, put a (x) mark against item 9.
- **3.3.8** Item 10(a): Note the date by which crop inspection (Girdawari) is required to be completed by the patwari under the TRS/EARAS programmes for the village against item

10(a). In case of Orissa state the date by which the Girdawari is scheduled to be completed in CES (50% of EARAS) villages will be reported as the CES villages constitute frame for the selection of area enumeration village under ICS. However, any change in Girdawari period ordered locally, will be supported by remarks. Girdawari in a village may be taken to be completed, if the patwari has done field to field crop inspection for all survey numbers and recorded the areas either in Kacha form (rough record) or regular Khasra form. Girdawari may be taken as partially completed if field to field enumeration is undertaken but not completed in respect of all survey nos. For filling up this item, it is necessary to verify it from the records of the primary worker.

- **3.3.9** Items 10 (b) to10 (d): The fact that the Girdawari was done fully, partially or had not yet been started, is to be indicated by code 1,2 or 3 respectively against item 10(b). In a village where the work of Girdawari was not started before the commencement of sample check on area enumeration under ICS, but the primary worker had noted down the particulars of the selected survey numbers along with the visit of supervisor, then in such situation the stage of completion of Girdawari may be reported as 'not yet started'. If Girdawari was completed by the time of the visit of the supervisor, the actual date on which it was completed may be given against item 10 (c). In case it was not completed the reasons for the same are to be given against item 10 (d) in terms of codes:- occupied with other work- code 1, TRS programme was not intimated in time-code 2, other (specify)-code 9. If code 9 is noted reasons should be specified.
- **3.3.10** Items 10(e) to10 (f): In case the patwari has used the latest form as prescribed by the State authorities for Girdawari, write code 1 against item 10 (e), otherwise '0'. The manner in which record of Girdawari is kept is to be recorded in item 10(f) in codes: regular form-code 1, katcha form- code 0. If code 3 is recorded against item 10(b) then items 10 (e) and (f) will become inapplicable. Thus a cross (x) mark may be put against these items.
- **3.3.11** Item 11: Under the TRS, the patwari is required to complete the Girdawari in villages selected under TRS within 8-10 days of the commencement of Girdawari period and submit the TRS statement (crop abstract under TRS) immediately on completion of Girdawari. The TRS statement can be prepared only after the completion of Girdawari. However, occasionally one comes across cases where the patwari has submitted the TRS statement without undertaking or completing the Girdawari. In case a patwari submits the TRS statement without doing the Girdawari it is a serious lapse on his part. It is, therefore, necessary to ascertain correct position and record full facts so as to take up such cases with the state authorities. The date by which the village primary worker is required to submit the TRS/EARAS statement is to be indicated in item 11(a). If the primary worker has submitted the TRS/EARAS statement to the higher authorities, write code 1 against item 11(b), otherwise write 0. If the date of submission of TRS/EARAS statement is "not due " at the time of area enumeration work by Senior Statistical Officer / State Supervisor, give Code-2. In case it was submitted, the actual date of submission is to be recorded in the item 11(c). Normally the village primary worker does not keep any record of the date on which he has completed the area enumeration or on which date he has submitted the crop statement. The supervisor has, therefore, to ascertain these dates from the primary

worker. In order to ensure that the primary worker has reported the correct dates the Supervisor needs to verify this information by referring to the Diary/Despatch register etc. Against item 11(d) mention if the statement was submitted in the form prescribed by the State Authorities and against item 11(e) mention whether the copy of the statement was kept by the State primary worker, as per codes 1 or 0 in the schedule.

3.3.12 Entry against item 11(b) should be consistent with entry against item 10(b). In case, the two entries are not prima -facie consistent (such as submission of TRS statement with Girdawari partially completed or not yet started) reasons should be given in the remarks block No.(1.c). It is also necessary to see that in such cases availability of entries for block 6.3 relating to crop areas for the village as a whole during the current season is consistent with the entries in items 10 and 11 of Block 1 (i.e. normally, entries for sub block 6.3 will be available only if the Girdawari is completed, TRS statement prepared and duplicate copy kept).

3.3.`13 Block (1.a): Particulars of field work and movement of schedules

- **3.3.13** (a) *Sub- Block (1.a.1):* The Senior Statistical Officer/State Supervisor must invariably write his name in block letters and affix his signature alongwith the date. The date of commencement/completion is the date on which he has commenced/completed the work in the village. If the work has been completed in more than one visit, the date of commencement and completion of each visit may be recorded. In case no work could be done during a visit to the village on account of non-availability of record, date(s) of such visit (s) may also be given in item (i). Date of submission of the schedule, is the date of despatch of the schedule or handing over to the Senior Statistical Officer /State Superior Officer. It is to be ascertained that the position recorded against items, such as 10(b),11(b), of block 1 are as on the date of completion of work in the village.
- **3.3.13** (b) Sub Block (1.a.2): The Senior Statistical Officer or his counterpart in the State must fill all the items of this sub block. Against item (i) inspection on spot will also include inspection by the Deputy Director General, if both the Assistant Director and Regional Head inspect the work on two different dates, both the dates are to be given.

3.3.13 (c) *Block* (*1.b*): Self-explanatory.

3.3.14 <u>Block(1.c)</u>: This block may be utilised for recording remarks for general shortcoming, if any, observed in the patwari's crop enumeration work and remarks required as per any abnormal situation. Items, for which information could not be obtained, should be mentioned here and reasons furnished. Besides general remarks information regarding crop condition, rainfall, irrigation, availability of power and fertilizers in the village is to be given in this block.

3.4 Block 2: Selection of sample cluster

3.4.1 For cadastrally surveyed/partially surveyed villages.

The details of selection of basic serial/survey numbers and of the sample clusters will be given in this block. Four basic (key) serial/survey numbers are to be selected for each selected village. For the selection of basic survey numbers, the highest serial/survey numbers (H) for the villages as given against item 1 of block 2 will be considered. The selection of serial/survey number made during the first season will be retained for sample check during the subsequent seasons. If mistakes in selection of clusters are detected in the subsequent seasons, the clusters selected and surveyed during the first seasons should not be changed, but same clusters should be surveyed during succeeding seasons also. However, if mistakes are detected within time in the first season itself, the selection should be corrected and the correct clusters surveyed for all seasons. The selection is to be done as per the following instructions:

<u>Item 1</u>: Record the highest serial/survey number as obtained from the village register against this item. In states where survey numbers are divided into sub-numbers and each sub number has a separate identity in the village records, each such sub-number will be treated as a unit of sampling (except in Uttar Pradesh, where a survey number will be ultimate unit of sampling even though according to land records, sub-numbers may be having separate identity). For arriving at the highest serial/survey number, the Senior Statistical Officer/State Supervisor has to ensure the coverage of the entire area of the villages. In case of cadastrally surveyed villages, all the survey/sub-survey numbers in the village, actually existing as per records will be listed. In certain cases, where some survey/sub survey numbers might have been shown amalgamated in the village map and khasra register, such amalgamated survey numbers will be given one serial number. For instance, if survey numbers 15 and 18 are amalgamated then the lower number i.e. 15 is to be given a serial number for amalgamated nos.15 and 18 together. Again, if a survey number is sub-divided, each sub-survey number is to be given a separate serial number. For instance, if survey number 20 is sub-divided into 20/1 and 20/2 then 20/1 and 20/2 will be given separate serial numbers.

In certain villages, some isolated pockets which were left out while giving survey numbers in the general serial order at the time of settlement operations are subsequently given survey numbers. Suppose, at the time of settlement operation a plot lying in the vicinity of survey number 25 was left un-numbered and the last survey number in serial order was 380, such plot is assigned survey number 381/25, the denominator indicating its vicinity to survey number 25. This particular number is referred to as sporadic survey number and should be given a serial number immediately after that for survey numbers 25. In States/regions, where consolidation of holdings has taken place and the village area is divided into chaks/mustatils, each chak is assigned a number and within a chak, separate serial numbers are given to plot/survey numbers. In such cases, continuous serial numbers will be given to the plots/survey numbers in the village, beginning from the chak bearing serial number 1 to the chak with the last serial number. For example, if in a village there

are 5 chaks, continuous serial numbers will be given as illustrated in the last column below:

Chak No.	Plot/Survey No.	Serial No.
(1)	(2)	(3)
1	1-25	1-25
2	1-23	26-48
3	1-25	49-73
4	1-24	74-97
5	1-25	98-122

The serial number 122 thus obtained is to be added to the other survey numbers of the village outside Chakbandi (consolidation) area. In case, there are 12 such numbers outside the chakbandi area the highest serial number will be 122+12=134. It is to be noted that the highest survey number is to be recorded against item 1 (deleting serial number), only if the village records i.e the map as well as the khasra register, show no amalgamation or sub-division; otherwise the listing of survey/sub-survey numbers has to be done in accordance with the procedure specified above to arrive at the highest serial number (deleting survey number). There are cases where the serial order of the survey numbers is not maintained in the khasra register. In such cases, too, the proper serial numbering has to be done.

- **3.4.3**. In partially surveyed villages list of survey numbers following the procedure indicated in paras above will be prepared for the surveyed portion and to this list will be added unsurveyed portion listing all the unsurveyed portion possessed by each household one after the other, with the corresponding names of holders for subsequent identification. Care will be taken to see that the list of all portions surveyed and un surveyed cover the entire area of the village and no portion is listed more than once. For example if the surveyed portion has got survey numbers 1 to 32, the unsurveyed portion should be given serial numbers 33,34 etc. and the highest serial number obtained.
- **3.4.4** In some States (e.g. Maharashtra) area under rivers, streams, roads etc.are not assigned any survey numbers and in the village records area under these non-crop utilisations is recorded for the village as a whole by grouping them together. In such cases, these areas have not to be considered for selection of serial/survey numbers for sample check. In item (a) of sub-block 3.2 (geographical area of the village) the total geographical area of the village will be recorded including area under such unnumbered portions. Also with an asterisk (*) and in the remarks block the total under such utilisations will be recorded. In case, crops are grown in such areas, necessary remarks regarding the existence of crop areas in such unnumbered portion in the village also be recorded in the remarks block. On the other hand if according to the state procedure, the primary worker is required to assign a number to such cultivated portion, it should be included in the frame by assigning the serial number beyond the last serial/survey numbers of the village.

If the State procedure does not provide for such a treatment, the existence of such crop should be noted in the remarks block and, if possible, the crop area ascertained and reported.

- **3.4.5** In the cadastrally surveyed villages serial numbering may be done in khasra register itself if permitted. Otherwise, the listing of survey/sub-survey numbers will be done in the prescribed form "sampling frame for schedule AS 1.0". Only one copy of the frame should be prepared in the first season of the year and attached with the office copy of the schedule AS 1.0 and will be retained in field office itself. For preparation of the frame latest khasra register will be used. Similarly, the list of households in respect of unsurveyed villages will be attached to the office copy of the schedule AS 1.0 for the first season of the year and will be retained in the field office it self.
- **3.4.6** <u>Item 2</u>: The highest serial/survey number (H) of the village is to be rounded off to H', the next higher multiple of 5, provided H is not itself a multiple of 5. If H is already a multiple of 5, then H' will be the same as H. Enter H' (the adjusted highest serial/ survey number) against item 2.
- **3.4.7** Item 3: For obtaining the interval (I) divide H' by 4 and take the quotient ignoring the remainder. Enter this integer (quotient) against this item.
- **3.4.8** Item 4: A column from the table of random number will be chosen with the Joint consideration of stratum number for ICS in a district and the order of selection of the sample village within the stratum in such a way that the left hand digit (s) of the column number indicates the stratum number and right hand digit indicates the order of selection of the village. If the number thus obtained exceeds 104, the column number will be equal to the remainder obtained by dividing the number by 104 (col. 104 will be taken if the remainder is zero). The following example will elaborate the procedure:

District	Stratum No.	Village order of selection	Column of Random No .(to be used)
(1)	(2)	(3)	(4)
A	1	1	11
	1	2	12
	2	1	21
	2	2	22
	2	3	23
	3	1	31
	4	1	41
	4	2	42
	12	1	17 (121/104=17)
	12	2	18 (122/104=18)
	12	11	67(1211/104=67)

The stratum number of a tehsil/group of tehsils and order of selection of the sample village within a tehsil will be available from the statement showing the list of villages selected for sample check on area. The information regarding stratum number in a district and the order of selection of villages within a stratum will suitably be included in the statement of allocation of villages among Senior Statistical Officers/State Supervisors. For each sample village, for the purpose of selecting a random start for selection of basic survey/serial number consult the prescribed column of random number from the beginning. Select a random number in the range 1 to H' from this column. This random number will be treated as random start and will be entered against item 4. For selecting one, two or three digited random number the right hand digits of the random numbers (4 digit) will be ignored to the extent required. If H' is 100, consult 2 digit random numbers. In case the random numbers to be selected happens to be 00, this will be treated as 100. Similarly, if H' is 1000 consult three digit random numbers treating 000 as 1000. Thus if H' is 100 and the column number to be consulted is 62, the random number to be selected will be 100 since the first number in col. 62 is 0043 and 43 is to be ignored. Similarly if H' is 1000 and the random number column to be consulted is 74 the random number to be selected will be 1000 since the first number in col. 74 is 0003 and 3 is to be ignored.

For selecting 5, 6, 7 or 8 digit random number the left hand digit of the random numbers in the next column will be included, to the extent required, to random numbers under the assigned column. In case, a five digited random number is to be chosen from last column '104 'include extreme left one digit number from column '1' of random table.

- **3.4.9** *Col. 1* : Record one below another cluster numbers of the selected four clusters.
- **3.4.10** <u>Col. 2</u>: The numbers corresponding to R, R+I, R+2I and R+3I should be written in col.2 against the cluster number 1,2,3 and 4 respectively.
- **3.4.11** <u>Col.3</u>: In col.3, serial/ survey number corresponding to the number entered in col.2 should be written. If any of the numbers R+I, R+2I, R+3I entered in col..2, exceeds H' then the number to be taken corresponding to R+3I (say) will be R+3I-H'.
- **3.4.12** <u>Cols.4 to 8</u>: After entering the basic (key) serial/survey numbers in col.3 the clusters of serial/survey numbers containing the basic (key) survey/serial numbers are to be formed. Clusters are formed as 1-5, 6-10, 11-15 etc. When the basic serial/survey number falls between H+I and H' it may be non-existent; in such cases also, the corresponding clusters will be selected. The serial/survey numbers thus selected will be entered in cols. 4 to 8, against each cluster number. In case the selection is in terms of serial number, write within brackets the corresponding survey / sub survey number after it.
- **3.4.13** The above procedure is illustrated below:
 - (i) Let the highest serial survey number of the village be H=151.
 - (ii) H'=155
 - (iii) Interval (I)= $(155 \div 4)$ =(38 %)=38 (quotient)
 - (iv) Random start R = say, 048)

- (v) Entries in col.2 for R, R+I, R+2I, and R+3I are 48, 86,124 and 162 respectively.
- (vi) Entries in col.3 will be 48, 86, 124 and 7 (162-155).
- (vii) The corresponding clusters will be 46 to 50; 86 to 90; 121 to 125 and 6 to 10

If the highest serial/survey number of the village is less than or equal to 20 all the serial /survey numbers will be covered for sample check and the four clusters will be 1 to 5, 6 to 10, 11 to 15 and 16 to 20 ending with the highest serial/survey number of the village.

3.4.14. For 'unsurveyed villages':

For the selection of households in unsurveyed sample villages all the households in the village will be listed on a separate sheet and selection of 4 households will be done. Only one copy of the list of households may be prepared and retained with the office copy along with schedule AS 1.0 for the first season of the year. In unsurveyed villages, where list of plots exist the selection of serial numbers will be done from the list, following the procedure for cadastrally surveyed/partially surveyed villages.

- **3.4.15** <u>Item 1</u>: If the village is not cadastrally surveyed, all the households in the village would be listed and the last serial number of households would be noted against item 1. In such cases, replace "highest serial number/survey number "by "total number of households". However, for unsurveyed villages where a list of plots exists (e.g. case of Diara villages in Bihar and Masahiti villages in Madhya Pradesh) the plots will be given serial numbers and highest serial number will be recorded against item 1. Listing of households should not be undertaken as a general rule, if the State system has no such provision for their usual surveys. The instruction in this regard has limited reference to parts of States where no cadastral survey has been carried out so far.
- **3.4.16** <u>Item 2</u>: The total number of households entered against item 1 is to be repeated and description of the item is to be corrected accordingly.
- **3.4.17** Items 3 and 4: Since the items are inapplicable, put a cross (x).
- **3.4.18** <u>Col.1</u>: Column heading is to be changed as "order of selection of households". Four households are to be selected randomly from the total number of households given against item 1 by choosing 4 distinct random numbers between 1 to H' (total number of households), referring to the assigned column of the random numbers table.
- **3.4.19** <u>Col. 2</u>: Correct the column heading as "name of the head of the household" and enter the same corresponding to the order of selection of the household given in col. 1.
- **3.4.20** <u>Col. 3</u>: The random numbers selected, indicating the serial numbers of the households in the list, corresponding to the order of selection in col. 1 may be entered here. The heading of col. 3 will be changed as "random number selected".

3.4.21 <u>Col. 4 to 8</u>: These cols. may be crossed since these are inapplicable. It may be noted that all the plots possessed by the selected households in the sample village are to be checked.

3.5 Block 3: Area Particulars of Village

- 3.5.1 Sub Block 3.1: Metric system was introduced in the country in 1956 and over the years the same is being gradually adopted by the revenue agency for recording area figures. It is, therefore, necessary to ascertain whether the area figures are recorded in local units such as bigha, biswa, biswansi, guntha etc. or in metric unit i.e. in hectares, cents etc. Local unit means any unit other than hectare. The question of recording the local units and the conversion factor into hectare would arise only when the area figures are still recorded in units other than hectare. The conversion factor is to be given only if the areas are in local units. The Senior Statistical Officer should be careful in recording the correct position as otherwise the area figures though already in hectares would again be converted at FOD Hqrs. into Hectare (assuming to be in local units) by adopting the conversion factor. If the figures are in hectares these should be recorded as such under respective heading. If the figures are in local unit, these should be recorded in local units without any conversion but only indicating the conversion factor upto 4 places of decimals. The conversion in such cases will be done at FOD Hqrs. The local units used for recording area figures in village register and the conversion factors into hectares correct up to 4 places of decimals will be entered against item 1 in the appropriate places provided.
- **3.5.2** <u>Sub-block 3.2, Item(a)</u>: The geographical area of the village as given in the village record in local units will be noted against this item. The geographical area of the village given under this item should generally tally with the total in block 8. Differences if any noticed between this item and total in block 8, should be enquired into and necessary remarks given. In case when local units of area are other than hectare record the area in local units in the column with heading "in local units". As the conversion of area from local units to hectare will be done at FOD, Hqrs. the next column with heading " in (0.00) hectare" may be left blank. If however, village geographical area is available in hectares in the village records, the same may be noted in column with heading: "in the (0.00) hectare".
- **3.6** <u>Sub-block 3.3</u>: Utilisation in the selected survey/sub-survey numbers as per Senior Statistical Officer/State Supervisor and village patwari.
- **3.6.1** This is the main block of the schedule, on the basis of which the quality of the work of the primary worker in regard to area enumeration is assessed. Great care has to be therefore, taken in filling up various columns of this block for which thorough knowledge of State procedures on area enumeration is essential. The District Level Committees have been constituted to probe into reasons for differences between the supervisor's and patwari's entries in selected districts of each state. From the data of this block, important findings on the functioning of the agricultural statistical system in each state are drawn.
- **3.6.2** The utilisation particulars in the selected survey/sub-survey numbers in the sample village will be entered in this block giving both (a) area under each crop/utilisation as

observed by the Senior Statistical Officer/State Supervisor following the prescribed State procedure with details regarding non- crop utilisation also, to account for the entire geographical area of the survey/Sub-survey number selected and (b) the area under different crops/utilisation as recorded by the patwari in village khasra.

- **3.6.3** The block consists of four pages for entries in respect of the 20 selected survey/sub-survey numbers. Separate page will be used for each cluster/household. For the entries in cols. 2,7 & 11 of block 3.3 of Sch. AS 1.0, the local units as reported in the basic records will be reproduced without any rounding off. For each utilisation within survey/sub-survey number one line should be used. Draw totals for cols. 2,7 and 11 after completing the entries for one serial/survey number and enclose the totals between two lines. See that the total of areas under all crops/utilisations entered in col.7 tallies with the geographical area in column 2. It may be noted that in special cases like growing of two crops one after another during the same season, the totals of col.7 or col.11 may exceed that of col.2. In such cases, the position may be explained in a footnote and the letter (D) written within brackets against the name of the second crop in col. 4 raised in the same season. After completing entries for a cluster, total for the cluster is to be drawn. After completing entries for all clusters, draw a line and give the total of geographical area for all the 4 clusters of the village at the end. If the space provided in the four pages is not sufficient for entries of all the selected clusters, sch. AS. 1.0 (supplementary sheets) may be used. Write the number of such supplementary sheets used at the bottom of page 11of Sch. AS 1.0.
- **3.6.4** Enter the cluster number/households numbers 1, 2, 3 and 4 in the space provided for the purpose immediately below the column headings.
- **3.6.5** <u>Col.1</u>: This column is meant for recording serial/survey number. Enter here the serial number and the corresponding survey/sub-survey number within brackets. For unsurveyed villages, where selection of households has been done, serial number of the plots possessed by the household will be given.

3.6.6 *Merger of survey/sub-survey number in the field.*

During spot check it may be noticed that two or more survey/sub-survey numbers have been merged, even though no such merger is shown officially in the records. In such a case, the boundary of the selected survey/sub-survey number should be demarcated approximately and the relevant information recorded for the selected survey/sub-survey number only. This is necessary because these numbers have separate existence in the patwari records and land utilisation details are also given separately.

3.6.7 <u>Col. 2</u>: The geographical area of survey/sub-survey number is to be entered here in local units indicated against col.1 of sub-block 3.3. For unsurveyed villages, the estimated area of the plot is to be recorded. A doubt has been raised as to how area is to be recorded in case area of survey no. in khasra register is different from observation of supervisor. In such case, the figure in settlement register may be taken for this col.

3.6.8 <u>Col. 3</u>: Each patch in the survey/sub-survey number will be given a separate serial number in this column. A patch for the purpose of the sample check will mean a distinct piece of land growing a crop or crop mixture or having other utilisation and demarcated on all its sides either by bunds or by other patches growing other crops or crop mixtures or put to other utilisations. If in a piece of land, only a part of the crop/crop mixture is irrigated, the irrigated and unirrigated portions are to be treated as two different patches. Similarly, the portions growing high yielding or other varieties are to be treated as separate patches. While giving serial numbers to the patches, start from the first patch in the South-West corner of the survey/sub-survey number and proceed in a serpentine manner starting from South-West corner and move towards East and then move from East to West and so on. Each survey/sub-survey number will have an independent set of serial numbers for patches starting from one. In case two or more patches within a survey/sub-survey number are having the same crop utilisation, information for all such patches will be reported in one line, and the serial numbers of all such patches will be indicated in column 3 and the total area under the crop/utilisation in col. 7.

3.6.9 <u>Col.4</u>: The specific utilisation to which a given patch is put, as physically observed by the Senior Statistical Officer/State Supervisor, is to be noted here. In case, a crop mixture is sown in the patch, the names of the constituents of the mixture will be entered one below the other in separate lines under col. 4 with a plus (+) sign in between. In this case, the patch number need not be repeated in Col. 3 For example. If a serial number consists of two patches of which in the first one wheat and barley are grown mixed and in the second wheat is sown pure, the entries in cols. 3 and 4 will be as under:

Col. 3	Col. 4
1	Wheat
	+
	Barley
2	Wheat

If wheat and linseed are sown mixed and linseed is a minor constituent, which is ignored as per the State procedure (e.g.in U.P.), the name of the minor constituent crop i.e. linseed, will not appear in col. 4, but such cases will be recorded in block 5 (a) and an asterisk (*) will be put against the patch number in col. 3 to indicate that this patch is to be reported in block 5(a). It may be noted that even in those states, where the primary workers are required to record areas under non-crop utilisations only in the last season of the year, the Supervisor under ICS will have to record the area patch-wise, crop/crop mixture-wise and also to give a full account of the entire geographical area of the serial/survey number including areas under other utilisations.

3.6.10 In States like Madhya Pradesh, Rajasthan, Uttar Pradesh, etc. certain crop mixtures have been classified as recognised mixtures. Plus (+) sign is to be put between the names of the crops in case of recognised as well as unrecognised mixture in the patch. For recognised mixtures, the area in columns 7 and 11 will appear in one line against the name of crops in cols. 4 and 8 where the names of the crops will be bracketed together.

For unrecognised mixtures, the area against each crop will be recorded as per State procedure.

- **3.6.11** <u>Col. 5</u>: The variety of the particular crop sown in the patch is to be recorded in Col.5. The entry will be '1' for high yielding variety and '2' for local varieties. In case of crop mixtures, the codes will be given against individual crops. For utilisations other than crop/crop mixtures put a cross mark (\mathbf{x}) in this column.
- **3.6.12** <u>Col. 6</u>: The irrigation particulars are to be recorded in this col. If the crop/crop mixture in a patch is irrigated write 1 and if it is unirrigated write 2. For utilisation other than crops put (\mathbf{x}) mark in the column. Percolation of water from nearby tank, river etc. is not to be treated as irrigation.
- **3.6.13** <u>Col.7</u>: For each utilisation recorded in col. 4 for a patch the area in local units is to be noted in col. 7. In case of recognised mixtures, the area for the mixture as a whole will be noted, in case of un-recognised mixtures, area under constituent crops will be recorded against the crops following the State procedure.
- **3.6.14** General instructions for Cols. 3 to 7: A complete account of the geographical area is to be given for the survey/sub-survey number in these columns. The utilisation other than crops will be entered as existing during the season under reference, even though the patwari may not account for the entire area in the given season.'Crop of other season' and 'Crop of other year' has to be indicated in separate lines. Similarly, a line is to be used for recording area, if any, kept 'fallow for the season'.

A list of crops and the ninefold classification of area by the Ministry of Agriculture are given in Annex. I and II for guidance. Attempt should be made to use the name of the crops or the utilisations as per the lists. Any minor cereal, pulse, etc., for which no equivalent name can be assigned from the Annex. I. may be reported in local name with an indication of the broad class to which it belongs, such as small millet, pulse, oil seed, fibre, etc. within brackets. Similarly, for non agricultural uses the terms such as gothan, banshita, etc., used by patwari may be suitably recorded as area under non-agricultural uses". "misc. tree crops and groves" respectively. A few examples given below will clarify the position:

- (i) Urd (black gram) is locally known as 'Biri' in Orissa and 'Mattikalai' in Assam, but the name of this crop must be written as 'Urd' or 'Blackgram' as per Annex. I. Similarly, 'Cholam' and 'Kumbu' in Tamil Nadu must be written as 'Jowar' and 'Bajra' respectively. Likewise, wheat is locally known as "Gandam"in Himachal Pradesh.
- (ii) There are certain small millets, pulses, etc. which are not listed in Annex. I and are called differently in different states such as 'Gojra', 'Batti', Barbatti' etc. It is necessary to record the broad classification alongwith such local names such as "pulses", "small millets", "oilseeds", etc.

- (iii) The grass land must be classified correctly as per State instructions as 'grass(fodder crop), 'Culturable waste' or 'pastures and grazing land' as the case may be.
- (iv) The term 'fallow' should not be used. It should be either 'current fallow', 'other fallow', or fallow for the season as the case may be. Similarly, terms like 'mountain', 'deserts' etc. should not be used. The term to be used is "barren and unculturable".
- (v) It may be noted that mangoes grown in orchards in occupied land are included in net area sown and must be written as "mango orchards". Group of mango trees in unoccupied land are generally classified as "Misc. tree crops and groves" and, therefore, should be distinctly written as per State classification.
- (vi) The name of a crop of other season standing in the field should not be written in the schedule. The entry in such case would be "crop of the other season". The name of this crop should be only in the schedule for the season to which the crop belongs. Similarly, the perennial crops and orchards must be entered only in the season in which these are conventionally recorded as per State instructions.
- **3.6.15** As mentioned earlier, the programme of fieldwork envisages collection of utilisation particulars as per the land records/EARAS procedure of the State. It is, therefore, essential that the Senior Statistical Officer/State Supervisor should acquaint himself thoroughly with the system of land records prevalent in the State concerned. Any difference noticed in the area of crop/utilisation as recorded by Senior Statistical Officer / State Supervisor and as recorded by the patwari should not be due to departure by the former from the prescribed procedure in recording the particulars except when it is necessary to account for the entire geographical area in col.7 by introducing utilisations like 'Crop of the other season', ' crop of other year ' and 'fallow for the season'.

It should be clearly understood that by state practice is meant the procedure prescribed in the land records manual in the state and not the practice usually or uniformly followed by patwaris.

- **3.6.16** The following points may be kept in mind while recording the utilisation particulars:-
 - (i) <u>Mixed crops</u>: Two or more crops of the same season grown in a patch with the constituent crops being sown intermixtured or in different rows, will constitute a crop mixture. The procedure followed to record area under these mixtures varies from State to State. The procedure is either (a) to allocate the area under different constituent crops by eye appraisal of the standing crops or by seed rate or other prescribed method, (b) to record the gross area under the mixture as such. The Senior Statistical Officer / State Supervisor, while making the entries for such mixtures should strictly follow the State procedure. In some States, the State system provides for recording the area under major crops or crop mixture, ignoring the minor constituents. For example, in Uttar Pradesh for a crop mixture like wheat

- + barley+ linseed, the entire area is recorded under wheat +barley by ignoring linseed. In such a situation, while recording the area in block 3, the Senior Statistical Officer / State Supervisor should follow the State procedure and record the area under wheat+barley. However, he should report the particulars of the crops being ignored in block 5(a).
- (ii) <u>Ail or bund</u>: The area under ail or bund may be shown either separately or under the crop/utilisation as per the State procedure. Areas under crops grown on ail or bund will also be treated as per the State procedure.
- (iii) <u>Crops of another year</u>: Crops like sugarcane, cotton, etc. 'pertaining to another agricultural year' may be found standing during the current year. Entries relating to the current agricultural year in respect of such crops are to be made as per State procedure.
- (iv) <u>Orchards</u>: In the case of orchards with different kinds of fruit trees, allocation of the area will be done either according to the different varieties of fruit trees or the area will be shown under mixed orchards, as per the State practice. If a crop is grown in the orchards, the area under the crop and the orchards will be recorded as per the State procedure. In addition, if as per the State procedure account of the trees is to be taken then the number of trees has to be entered in cols. 7 or 11, as the case may be, with 'N' written within brackets.
- **3.6.17** Cols. 8 to 11: These columns are meant for recording the area under crops/cropmixtures / utilisations as per the patwari records. The headings of columns 8 to 11 are identical with those of columns 4 to 7. The general practice in the States is to record the area under utilisation other than crops during the last season of the year. While making entries in columns 8 to 11 record only the actual entries made by the patwari during the particular season. No attempt need be made to account for the entire geographical area, if the state instructions do not require the patwari to do so. For recording patwari's entries from a khasra register for a crop/crop mixture/non-crop utilisation, see that as far as possible these are made in a line corresponding to the description of non-crop use/crop/crop mixture given in col. 4 (supervisor entries). In case for a crop/crop mixture/non-crop use recorded in col. 4, there is no corresponding entry in the khasra register, cols. 8 to 11 will be left blank against that line; conversely if the khasra register shows the entries against any crop/crop mixture/ utilisation not recorded in col. 4 entries will be made in an additional line, under 8 to 11 for which there will be no entry in cols. 4 to 7. A doubt has been raised as to how entries will be made in cols. 9 and 10 when the patwari has not classified the crop as irrigated, unirrigated, high yielding or local. In such case instruction issued to patwaris for recording such details have to be kept in view. However, if patwari has not recorded the crop as high yielding, it may be treated as local. Similarly, if he has not recorded it as irrigated, it maybe treated as unirrigated.

3.7 Block 4: Total area under crops/crop mixtures/non-crop utilisation in selected serial/survey numbers

- **3.7.1** A summary of the areas under crops/crop mixtures/non-crop utilisation recorded for the four clusters/households in sub- block 3.3 is to be given in this block. For totaling the areas under different uses, the Senior Statistical Officer / State Supervisor may use blank sheets as working sheet.
- **3.7.2** <u>Col. 1</u>: Write the names of different crops/crop mixtures and non-crop utilisations in this column .Entries may be made in order of pure crop / crop mixture / non- crop utilisation in one line only. Entries for area under high yielding and local varieties will be made separately.
- **3.7.3** <u>Col.2</u>: Variety of seed i.e. high yielding or local will be indicating by codes 1 or 2 respectively as the case may be.
- **3.7.4** <u>Cols. 3 to 6</u>: Record the area in local units (including hectares, if the local unit is hectare) in cols. 3 to 6 as per the column headings for the description in col. 1 and col. 2. Total should be given for cols. 3 to 6 at the end.
- **3.7.5** *Cols.* 7 *to11* : These are to be left blank.

3.8 <u>Block 5</u>: Crop areas missed by patwaris for lack of provision in land records manual (in selected survey numbers only)

3.8.1 One of the basic objectives of the ICS scheme is to identify the deficiencies in reporting the correct area under crops and to suggest remedial measures. It attempts to study how far the system prescribed and actually followed for area enumeration is adequate. Crops actually grown in the field may not be recorded by the patwari, either because of lack of provision in the land records procedure or because the prescribed dates of Girdawari in two successive seasons are such that short duration crops sown and harvested in-between the two seasons tend to be missed. It may be noted that blocks 5(a) and 5(b) are mutually exclusive. The purpose of this block is to ascertain the extent of area so missed in the selected clusters. Block 5(a) relates to crop areas missed for lack of provision in land record procedure and block 5(b) to short duration crops. For collecting data for this block, the Senior Statistical Officer/State Supervisor may have to contact the cultivators concerned.

3.8.2 Block 5(a): For lack of provision in land record procedure

In the course of the sample check in a season, the Senior Statistical Officer/ State Supervisor may come across some crops *in the selected clusters*, which may not have been enumerated by the Patwari because there is no provision in the land record procedure to account for such areas in the khasra register. Details of such missed area will be noted in block 5 (a). some examples are:

(i) Crops grown in village sites,

- (ii) Crops sown as minor constituents in mixtures, and
- (iii) Crops grown in areas newly formed or in Government land by encroachment.

Crops grown in forest area will not be recorded as crops missed (vide definition of forest).

- **3.8.3** In certain states like Madhya Pradesh, the procedure for allocation of area among the constituents of mixtures is altogether different from that followed in other states. Although the minor constituents are noted at the field level, at the time of preparation of village crop abstracts they are ignored and the area is reported against the major constituents only. In such cases, also the Senior Statistical Officer/State Supervisor is to note the crop areas missed for the minor constituents and report the same in block 5(a) with an asterisk (*) against patch number in col. 3 of sub block 3.3.
- **3.8.4** <u>Cols. 1 and 2</u>: Enter in Col.1 the serial/ survey number in which the crop areas were missed by patwari for lack of provision in land record procedures. Such survey nos. will have asterisk mark (*) in col.3 of sub block 3.3 Col. 2 of block 5 (a) may be left blank in the field.
- **3.8.5** <u>Col.3</u>: Record the name (s) of the crop (s) missed. Report each crop in a separate line.
- **3.8.6** <u>Cols. 4 and 5</u>: Write code 1 or 2 in Col. 4 as the crop was high yielding or local variety. Col. 5 will be left blank in the field.
- **3.8.7** <u>Cols. 6 and 7</u>: Record the area under the missed crop in the patch in local units. Normally, this will have to be done through eye appraisal. Col. 7 may be left blank in the field.
- **3.8.8** *Col.* 8: Type code will be given as per codes given at the bottom of the block.
- **3.8.9** <u>Col. 9</u>: The area under the crop missed would have been included in the area of some other crop. The name of crop under which this area was so included will be shown here.
- **3.8.10** <u>Col.10</u>: Write code 1 or 2 according as the crop shown in col. 9 is high yielding or local variety. Col. 11 may be left blank in the field.

Block 5 (b): Short duration crops sown and harvested in between official seasons and missed by patwari (in selected survey numbers only)

3.8.11 It may happen that certain short duration crops which are sown and harvested in between two successive official visits for Girdawari by the patwari are missed .For example, in some districts of Uttar Pradesh, rabi potato is sown and harvested between the Girdawari periods for kharif and rabi seasons; similarly late wheat is sown after rabi Girdawari. Such cases are to be reported in block 5(b) after eliciting the information by

enquiry from the cultivator(s). It is to be noted that while area figures entered in block 5(a) will not occur in sub- block 3.3, area figures reported in block 5(b) will have to be entered in sub-block 3.3 under supervisor's entries depending on State instructions regarding treatment of such short duration crops.

- **3.8.12** <u>Cols. 1 and 2</u>: Enter in Col.1 the serial/ survey number in which the short duration crop was reported to have been sown and harvested in-between official seasons and missed by patwari. Col. 2 will be left blank in the field.
- **3.8.13** *Col.3*: Write the name of crop missed.
- **3.8.14** <u>Cols. 4 and 5</u>: Write 1 or 2, in col. 4 according as the crop missed was of high yielding variety or local. Col. 5 may be left blank in the field.
- **3.8.15** <u>Cols. 6 and 7</u>: Give the area under the crop missed in local units in col.6 col.7 may be left blank in the field.
- **3.8.16** Cols. 8 and 9: Furnish the month of sowing and harvesting in cols. 8 & 9 respectively in codes. The codes will be 01, 02,.....11, 12 for January, February......November, December respectively.

3.9 Block 6: Area under crop/crop mixtures as per village records

- **3.9.1** This block is divided into three parts of which the first two viz. blocks 6.1 and 6.2 relate to the corresponding season of the previous year and the third viz. block 6.3 relates to the current season. Since in EARAS States, information relating to the previous year for the selected village will not be available; blocks 6.1 and 6.2 will be left blank for these states.
- **3.9.2** In case information is not available for any of the sub- blocks viz. 6.1, 6.2, 6.3, the reason should be given boldly in the body of the block in words.

A list of likely reasons are given at the bottom of the block 6. Common set of codes is given for all the three blocks and the codes applicable to them are also specified below, but these codes will be given at Hqrs. on the basis of reasons recorded on the body of block.

Reason	Code
(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
(vii) Not applicable as for Kerala, Orissa and hilly districts of Uttar Pradesh	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

3.9.3 <u>Sub-Block 6.1</u>: Area under crop/crop mixture for the 20 selected survey/Sub-Survey numbers during the corresponding season of the last agricultural year.

The entries for block 6.1 are to be worked out on the basis of the entries made by patwaries in the village khasra register for the previous year. In case a survey number has undergone change since last year, enter the figure as found in the khasra and make suitable remarks in the remarks block. For arriving at the totals of 20 survey numbers, a supplementary sheet of schedule AS 1.0 may be utilised. In addition to area under crop/crop mixtures, the net area sown for the 20 selected numbers for previous year will be worked out and entered in the relevant space provided at the foot of block 6, on page 15 of sch. AS 1.0. This information will relate to the previous year as a whole and not to the corresponding season of that year. This area need not to be divided into irrigated and unirrigated and a single figure may be recorded. The net area sown represents the area sown with crops and orchards counting areas sown more than once in the same year once only.

3.9.4 Sub-block 6.2: Area under crop/crop mixture as given by the patwari in the crop abstract Statement for the village as a whole in the corresponding season for the previous agricultural year:

The entries of area described in the heading are to be given in this sub block.

Care should be taken to ensure that entries in sub-block 6.1 are consistent with those in sub- block 6.2 (e.g. crops shown in 6.1 should figure in 6.2 also and the areas in 6.1 under a crop should be less than or equal to the corresponding area in 6.2). In case discrepancies exist in the register of crop abstracts this should be specifically brought out in the remarks block (1.C) If sub-block 6.2 has entries and sub-block 6.1 has no entries due to non-availability of crops in the selected survey numbers, "NO CROP" will be retained across the sub-block 6.1.

3.9.5 <u>Sub Block 6.3</u>: Area under crop/crop mixture for the village as a whole as reported by the patwari during the current season through the TRS/EARAS Statements.

The figures in TRS/EARAS statement as communicated to the higher authorities are to be recorded here. In case the copy of the TRS statement is not available with the patwari the figures reported in crop abstract/land utilisation statements may be reported here. In some states, particularly in EARAS States, the totaling for the village as a whole may be done in the tehsil or district office. In such case, the figures will be obtained from that level. These figures are to be copied down in local units from the copy of the TRS statement available with the patwari failing which from the crop abstract statement and conversion of the area into hectare need not be done in the field.

3.9.6 General: If sub-block 6.2 has entries and sub-block 6.1 has no entries due to non-availability of crops in the selected survey numbers, "NO CROP" will be written across the sub-block 6.1. Similarly in case of no entries in sub-blocks 6.1, 6.2 and 6.3, "NO CROP" will be written across each of these sub-blocks.

3.10 Block 7: Details of recognised crop mixture, if any

For crops grown in mixture, for which area is recorded under mixture as such, the State Land Records procedure provides for standard proportions of allocation at levels higher than the village. Such mixtures are generally known as recognised mixtures. Details of such recognised mixtures, if any, in the State are to be recorded in this block with the levels (tehsil/district/State etc.) at which the apportionment is done and the standard percentage allocation to the constituents crops applicable for the village. Care should be taken to report details of all recognised mixtures so that apportioning of area to the constituents crops of the mixtures reported under blocks 3,4 and 6 would be possible subsequently at the tabulation stage. In exceptional cases, the apportioning of area to the constituents of recognised mixtures is done at village level. Such cases also should find a place in this block. The details of the recognised mixtures for the states as reported in block 3.3, 4 and 6 of schedule AS 1.0 are to be entered in this block.

3.11 Block 8 : Area in the village as per nine fold classification

Area under land utilisations and net area sown in the sample village during the last Agricultural year are to be entered here. It is to be ensured that the sum of areas in items 1 to 9 of this block is equal to the geographical area of the village reported against item (a) of sub block 3.2. Reasons for variations should be given in the remarks column. As indicated in the heading of the schedule, this block is to be filled in as far as possible, only in the first season of the agricultural year. In case, this is not available in the first season, the details should be provided in a subsequent season. This block may be left blank in case of EARAS States.

3.12: **General**: The entries for blocks 6 and 8 are transfer entries from village records. The entries may be made in the respective columns in the units as recorded in the village records.

3.13 Supplementary sheet for Sub- Block 3.3 of Schedule AS 1.0

It has been designed for the following purposes: -

- (i) To report the details in regard to the selected cluster/ household which could not be accommodated in the main schedule.
- (ii) To report the entries recorded by patwari in the khasra register which might have been collected at subsequent visit.
- (iii) To serve as working sheet for arriving at the totals to be reported in block 6.1.

Senior Statistical Officer/State Supervisor should take care to see that identification block in the supplementary sheet is filled in properly.

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CHAPTER IV

SAMPLE CHECK ON AREA TOTALS IN VILLAGE KHASRA REGISTER-SCHEDULE A.S.-1.1

- **4.1.1** Schedule AS 1.1 is designed to study the discrepancies between the figures of area under the crops/crop mixtures/non-crop utilisations (i) as totalled by the patwari, (ii) as reported by him in TRS statements/crop abstract/ non-crop utilisation statements and (iii) as checked by the Senior Statistical Officers/State Supervisors. For arriving at (iii), the Supervisor has to total page by page the survey/Sub-survey number wise area figures recorded by the patwari in the Khasra register.
- **4.1.2** The sample check is to be undertaken in each state season (Kharif/rabi/summer etc.) for which the TRS crop abstract, jinswar statement/non-crop utilisation statement is prepared and forwarded to higher authorities in the state. The sample check will normally be undertaken by the Senior Statistical Officer / State Supervisor during the visits to village for sample check on area or crop cutting experiments, without detriment to the work regarding checks on area and crop cutting experiments which will assume priority. In case of EARAS States, where the aggregation may not be done by the primary worker at the village level the sample check will be taken up at the place (tehsil, district Hqrs.) where it is done. The schedule for a particular season will be sent to FOD. Hqrs, Faridabad and SASA, as soon as the work is completed. Separate schedule is to be filled in for each season in the State.
- **4.1.3** For facilitating totalling of area figures page by page a working sheet has been provided. The Senior Statistical Officer / State Supervisor is to total the area figures separately for each season for the crop/crop mixtures/non-crop uses page by page in the working sheets and attach them to the schedule. Only one copy of the working sheet will be prepared and attached to the office copy to be retained by the Senior Statistical Officer/State higher officer. In order to facilitate tabulation at Hqrs. certain boxes have been inserted in the schedule. However, particulars in all the blocks will be written in the field as usual in the space provided for each item of the block.

4.2 Block 1: Identification particulars of villages

4.2.1 <u>Items 1 to 4</u>: Write the name of the state, district, (along with their respective code) and tehsil (with stratum number) to which the sample village belongs against items 1, 2 and 3 respectively. The name of the village and its order of selection will be entered against items 4 (a) and 4 (b).

- **4.2.2** <u>Item 5</u>: Record the highest serial/survey number. This should be the same as recorded for the village against item 1 of block 2 of schedule AS 1.0.
- **4.2.3** <u>Item 6</u>: Number of working sheets used for totalling crop areas, appended with the office copy of the schedule will be reported here.
- **4.2.4** Item 7 and 8: Patwari's name and his Hqrs. will be recorded against these items.
- **4.2.5** <u>Item 9</u>: Local units of area in which village records are maintained are to be indicated against this item.
- **4.2.6** <u>Item 10</u>: Conversion factor for all denominations of local units given in item 9 into hectares is to be recorded against this item.
- **4.2.7** <u>Item 11</u>: Geographical area of the village in local units as given in *item* (a) of subblock (3. 2) of schedules AS 1.0 will be recorded here. If areas are recorded in hectare in village records, entry will be made against the box ' in ha'. and the space against local unit may be left blank.

4.3 Block 2: Position of work done by primary worker including the work done in katcha form

4.3.1 <u>Item 1</u>: The actual position of the work done in respect of aggregation and submission of crop/non-crop use abstract by patwari will be given here. The work in this respect can be divided into three stages: (i) completion of Girdawari, (ii) aggregation in Khasra register or working sheets (called chitha / charkhana etc.) for page totals and (iii) submission of crop/non crop use abstract to higher authorities. The position regarding each stage of work will be given against item 1 (a) to 1(c) respectively as per codes given in schedule.

It may not be possible to record the entries in some of the cols. (4), (5) & (6) of block 3 due to incompleteness of data. The position in different situations is explained below:

- (1) If Girdawari has been completed, aggregation has been done and TRS statement has been submitted (code 1, 1 and 2 against items 1(a), 1(b) and 1(c) respectively). Cols. 4, 5 and 6 of block 3 will be filled in.
- (2) If Girdawari has been completed, aggregation has been done but TRS Statement has not been submitted (code 1, 1 and 3 against item 1(a), 1(b) and 1(c) respectively). Cols. 4 and 6 of block 3 will be filled in.
- (3) If Girdawari has been completed, aggregation has not been done, but TRS Statement has been submitted without completion of aggregation work (code 1.2 and 1 against items 1 (a) 1 (b) and 1 (c) respectively), cols., 5 and 6 of block 3 will be filled in.

- (4) If Girdawari has been completed, but the work of aggregation and submission of TRS statement have not been completed (code 1, 2 and 3 against item 1(a) 1(b) and 1(c) respectively), col. 6 only of block 3 will be filled in.
- (5) If Girdawari has not been completed, aggregation has not been done but TRS statement has been submitted (code 2, 2 and 1 against items 1(a), 1(b) and 1(c) respectively), Col. 5 of block 3 will be filled in .
- (6) If Girdawari has not been done, aggregation has not been done and TRS statement has not been submitted (code 2,2 and 3 against items 1(a), 1(b) and 1(c) respectively), there will be no entry in block 3.
- **4.3.2** <u>Item 2</u>: "Whether different crop abstracts prescribed for different crops "are to be recorded in code, 1 or 2 for yes or no.
- **4.3.3** Item 3: It relates to the remarks of the supervisor.
- **4.3.4** <u>Item 4</u>: This item relates to total number of revenue villages in the stratum and it is not to be filled-in in the field.

4.4 Block 3: Verification of area totals

- **4.4.1** This block is meant for presenting the area figures (i) as per aggregation done by patwari, (ii) as reported by patwari to higher authorities and (iii) as checked by Senior Statistical Officer/Supervisor. If figures entered in any of the columns (4) to (6) of the block are in different units from the local unit mentioned in items 9 to 11 of block 1, the same should be mentioned at the heading of the concerned column. A remark to this effect may be given at item 3 of block 2.
- **4.4.2** <u>Col. 1</u>: All crops/crop mixtures/non-crop uses will be recorded in this column one after another. Entries for crops or crop mixtures may be made first and thereafter entries for non-crop use may be made. For recognised crop mixtures the name of the individual crop in the mixture is to be specified separately (i.e. name of one crop only in one row of col. 1).
- **4.4.3** *Col.* 2: This is not to be filled in the field.
- **4.4.4** Col. 3: This column is to be filled in for the recognised crop mixtures of the state. The standard percentage of constituent crop applicable to the district as a whole is to be entered against each crop.
- **4.4.5** <u>Col.4</u>: Areas as aggregated by the patwari for each crop/crop mixture/non-crop utilisation for the current season either in the khasra register or in any working sheet used by him for totalling (such as Chitha, charkhana, etc.) will be recorded here. While

recording area figures the same figures are to be repeated against each constituent crop of the recognised crop mixture.

4.4.6 <u>Col. 5</u>: Area actually reported by the patwari to higher authorities in TRS crop abstracts/Jinswar statements/ land utilisation statements for the season will be recorded here. If the figures to be reported in col.4 are the same as those in column 5 the figures may be reported accordingly in col. 5 and col. 4. If the figures are different, the reasons for difference may be recorded in remarks block. The figures reported in sub- block 6.3. of schedules AS 1.0 are expected to be identical with the figures reported here. Since the figures are required for different purposes, those will be reported in both the schedules. In case of TRS states, if the figures in TRS statement and normal Jinswar statement are different, the latest information supplied to higher authorities will be recorded here with a note in the remarks block. Area figures for the land uses other than crops will be given in the schedules for the last season of the year. In case the copy of TRS statement/Jinswar statement/ land utilisation abstract is not available with the primary worker, all efforts may be made to get the information from higher authorities (tehsil/taluk office etc.).

4.4.7 <u>Col. 6</u>: Cropwise and utilisation wise area figures as obtained by the Senior Statistical Officer/State Supervisor after totalling for the current season will be recorded here. (In state, where entries are made for recognised mixtures as such and allocation of area to the constituent crops is done at higher level, entries in columns 4, 5 and 6 will be made for the mixture as such). Figures for crop, crop mixture will be given first followed by these for non-crop uses.

General instructions for columns 4, 5 & 6:

4.4.8 While recording area figures in Col.4, 5 & 6 the same figures are to be repeated against each constituent crop of the recognised crop mixtures e.g. if a recognised crop mixture (like wheat + gram + linseed) is to be reported it may be presented in the following manner:-

Col. 1	Col. 2 (not to be filled-in in the field)	Col. 3	Col.4	Col. 5	Col. 6
Wheat		60	1475	1500	1475
+					
Gram		30	1475	1500	1475
+					
Linseed	1	10	1475	1500	1475

After recording a crop, whether sown as single crop (pure) or sown in recognised mixture, one box line (row) has to be left blank which will be used by FOD Hqrs. for recording the area under each crop (after apportioning in case of crop mixture). If need

be, more than one schedule may be used for a village. If so, the schedule should be numbered and tied suitably. For example, if 3 schedules have been used for one village, first schedule will be marked on the top as 1/3, second schedule 2/3 and the third Schedule 3/3.

For these columns total area under mixture in the village is to be reported and it should be in the highest local unit, e.g. if the local units are bigha, biswa and biswansi consider bigha as the highest local unit. In all cases entries in these columns are to be made in five-digited number, one digit is to be written in each square provided against these three columns as per instructions printed in the right hand corner on the bottom of block 3 of the schedule, i.e. putting zeros in the squares from the left if the figure is of less than five digits (e.g. for 67, write 00067 in five columns). On aggregation, if the area of a crop comes to be more than half (0.5) in the highest local unit of area it may be taken as one (1.0), if the area is less than half in the highest local unit then it may be ignored and in case it is exactly half in the highest local unit then the case may be decided on odd and even number basis. For example, 1.5 will be recorded as 2.0, 2.5 as 2.0, 3.5 as 4.0, 4.5 as 4.0 and so on. Moreover, if area of a crop comes exactly to half (i.e. 0.50) in the highest local unit, it may be treated as zero (0) i.e. in this case also area of the crop will be ignored since the number are to be rounded off to even number only in general. Normally the figure, to be reported in columns 4, 5 and 6, may not exceed five digits. However, if it exceeds 5 digited figure in a particular village for a crop, give an identity mark in the appropriate column and write the exact figure with the identity mark at the foot note below block 4.

4.4.9 <u>Item 2</u>: Specify the source from which data were given in col. 5 of block 3.

4.5 Block 4 : Particulars of field work and movement of schedule

4.5.1 Instructions for filling block 4 are the same as for block (1.a) of schedule AS 1.0 (refer para 3.3.13).

4.6 Working sheet for obtaining area total from khasra register

4.6.1 As mentioned earlier, a working sheet is provided to facilitate the totalling of areas under crops/crop mixtures/ non-crop uses. After striking the totals in highest local units in the working sheet, the figures should be transferred to col. 6 of block 3 of schedule AS 1.1.

4.7 INSTRUCTIONS FOR SAMPLE CHECK ON TRANSCRIPTION OF AREA FIGURES FROM FORM I TO FORM II/IIA, III OR FORM III A AND IV AND AREA TOTAL

4.7.1 As Odisha is a permanently settled state, Sample Check on aggregation of area

(schedule AS 1.1) also differs from that for the temporarily settled states, whose instructions are detailed as below:-

Sample checks on aggregation of area figures at the village level under the scheme of EARAS in Odisha is being undertaken as part of the I.C.S. programme from the year 1980-81. As in Odisha, the primary data collected by Statistical Field Surveyor (SFS). in Form-I are transferred to Forms 2, 2A and 3 and submitted to the District headquarters for aggregation, checking of transcription of entries from Form-I to other Forms involves an important item of the sample checks. Taking into consideration the levels at which collection, posting and totalling of area figures are done in Odisha, a suitable procedure for sample checks has been involved, which is different from the procedures adopted in other states. The aims of the checks are two fold-(i) at the stage of transcription, the discrepancies between the area reported in Forms 2, 2A and 3 are to be studied; and (ii) at the stage of aggregation, totalling of area reported by SFS in forms 2, 2A and 3 at the District headquarters, will be checked. Since the aggregation is not done by the SFS at village level, the sample check is done at the hqrs. of the SFS (p.w.) except for summer season after obtaining Forms 2, 2A and 3 from the Distt. hgrs. The observations of the sample checks on transcription and area totals as stated above will be recorded in the schedule AS 1.1 and in the working sheets as outlined in the following paragraphs. The sample checks on area totals will be done in 40%, 30% and 30% of the I.C.S. sample villages of an agricultural year in the three seasons, Autumn, Winter and Summer respectively.

2. For facilitating the study of discrepancies observed in transcription work and totalling of area figures in Forms 2, 2A and 3 page by page, 4 (four) working sheets have been provided. The Senior Statistical Officer/State Supervisor is to conduct checking of transcription work and total the area figures separately for each season for crops/ land uses page by page and record the particulars in the working sheets.

For checking of transcription entries three types of working sheets have been provided.

- i) <u>Working sheet No. 1:-</u> For transcription of area figures of all crops separately (other than Paddy) from Form-I (Khasra) in Form 2 and 2A (for all seasons separately).
- ii) <u>Working sheet No. 2:-</u> Working sheet for transcription of Paddy crop from Form-I to Form 2A for all seasons separately.
- iii) Working sheet No. 3:- Working sheet for transcription of area entries of Land utisation (Non crop utilisation and net area sown) from Form 1 to Form 3 for Summer season only.

For checking aggregation work, one more working sheet has been provided i.e. Working sheet no. 4.

iv) Working sheet no. 4:- All the crops found in the village with areas reported in forms 2 and 2A for all seasons separately input wise, like, Local, High-yielding, Irrigated, Unirrigated including level of land (low, medium and high) will be recorded in working

sheet no. 4 and totalled, for Summer season the land utilisation particulars reported in Form-3 along with seasonal crop recorded in Forms 2 and 2A (inputwise) will be recorded in working sheet no. 4 and totalling to be done.

Explanation:-

The work relating to transcription to Form 2 and 2A is done in all seasons while that relating to Form-3 is done only during the last season i.e. Summer. Form-1 is maintained by the SFS for the year as a whole and seasonwise details are being sent in Forms 2 and 2A and utilisation particulars as per nine-fold classifications with other necessary details prescribed in Forms-3 at the end of the agricultural year to the Distt. Headquarters, for totalling of area figures and onward transmission of area figures in different Forms prescribed for the Distt. Office, such as Forms 4, 4A and 5 to Bureau Headquarters. Hence, the Senior Statistical Officer / State Supervisor will first obtain Form 2, 2A and 3 (for Summer) from the District Statistical Office and visit the headquarter of SFS and check the figures in Form-1 with Forms 2 and 2A for all seasons and checking of Form 3 with Form-1 is done only in Summer season. After the end of agricultural year the SFS submits Form-1 to District office. Hence the work of schedule AS 1.1 will be done at Distt. headquarter by State Supervisory staff and S.RO/N.S.R.O. headquarters by Central supervisory staff after obtaining Forms 1, 2, 2A and 3 from District headquarters with proper requisition and the same would be returned to District offices after completion of work.

The survey numbers where differences in entries between Forms are observed will be noted down in the respective working sheets along with the areas of crop/land use as per Form-1 and Form 2, 2A and 3 (land utilisation). Totals of these discrepant survey numbers as per Form-1 and Form-2, 2A and 3 will first be done for each such page and entered in Block-2 of the main schedule AS 1.1, crop/utilisation wise.

After preparation of working sheets the schedule AS 1.1 designed for the purpose of checking transcriptions and totals will be filled as per instructions given below.

SCHEDULE AS 1.1

Block-1:-

Identification particulars of village. This block contains the identification particulars of the sample village along with some details of sample, primary workers and number of working sheets used etc. which are self explanatory.

Block-1(a):-

Particulars of field work and movement of schedules:-

Instructions for filling block -1(a) are the same as for block 1(a) of schedule AS 1.0.

Block-1 (b):-

Particulars to be filled in at Faridabad. This block need not be filled in at field.

Block-2:-

Verification of area of discrepant survey numbers:-

This block is intended to provide information on mistakes in transcription of area figures of crop/land use from working sheets prepared from form I to forms 2, 2A and 3.

Column-1:-

As in working sheets, pagewise totals of discrepant survey numbers are available, page number of Form-I will be given

Column-2:-

Names of crop / other utilisations for which discrepancies have occurred as per working sheets will be noted here. In case crop is Paddy, local variety, unirrigated and grown in low land (level of land) it may be noted as Paddy (L, Un, Low) and in case of Paddy, HYV, Irrigated, Lowland it will be noted as Paddy (Hyv, Irr, Low), but for other crops level of land need not be recorded since there is no provision for such crops in Forms 2 and 2A. Further all other crops (except Paddy) the variety will be treated as local. In case of Jute crop irrigated it may be noted as Jute (L, Irr) and so on for other crops.

Columns 3 and 4:-

Area of land use/ crops in Form I and Forms 2, 2A and 3 as detailed in working sheets 1, 2 and 3 will be recorded in these columns against corresponding crops/land use etc. in column-2.

Column-5:-

This column may be left blank. Difference will be calculated at FOD Hqrs., Faridabad.

Block-3:-

Verification of Area Totals (for the village as a whole).

This block is meant for recording information after verification of area totals as done at Distt. headquarters and as checked by Senior Statistical Officer/ State Supervisor. This block will be filled in partly from working sheet no. 4 and partly from forms 2, 2A and 3. Working sheet no. 4 gives details of page total as obtained by the supervisory staff for area under crops/ non-crop use (other utilisation) as stated earlier. Hence working sheet no. 4 will provide information for column 4. As regards column-3, the particulars will be recorded from Forms 2, 2A and 3.

Column-1:-

Page number of Forms 2, 2A and 3 will be recorded in the column on the basis of working sheet number-4. Form number and page number will be recorded after exhausting all pages of one form, other Forms will be recorded such as Form 2, then Form 2A and Form 3 systematically.

Column-2:-

This will be done in the same way as done for column 2 of block-2 of schedule AS 1.1.

Column-3:-

Pagewise totals of area as done for crops at distt. headquarters in Forms 2, 2A and 3 will be recorded.

Column-4:-

The area totals obtained and recorded in working sheet no. 4 after totalling the pages for crops/utilisations in Forms 2, 2A and 3 will be recorded in column-4 against the corresponding value as reported in column-3.

Column-5:-

To be left blank and will be filled at FOD headquarters, Faridabad.

Note:- After recording the details of all utilisation form -wise and pagewise, a village abstract is to be drawn. Crop wise (with inputs) and utilisation wise area figures as reported in Forms 2,2A and 3 and as obtained by supervisory staff in working sheet number-4 will be recorded under columns 3 and 4 respectively. A grand total is also to be worked out. The total area in column-3 will correspond to total area figures recorded by District office on the front page of Forms 2 and 2A taken together and Form-3 for area use **or** the figures available against 'b' of Working sheet no. 4 (at the bottom of W.S. no.4). Similarly the total area as given against 'a' of Working sheet no. 4 will be recorded as total for column-4.

<u>Block-4</u> Position of work done by primary workers and remarks:-

This block is self explanatory. General remarks regarding the short comings, if any, observed in work and maintenance of records will be given in this block. Anything particular relating to inconsistencies of figures need be mentioned.

2. General:-

- (i) Block 2 and Block 3 of Schedule A.S. 1.1 are independent.
- (ii) Page wise totals in Form 2, 2A and 3 may be correct but while doing the abstract from the village from pages of Forms 2, 2A and 3 at districts headquarters, there may be mistakes in transferring the entries and totalling. The final figures reported by the district headquarters for the crops will be considered for Grand total figures (village abstract crop wise) such discrepancies need be mentioned in Remarks Block.
- (iii) In block-3 after form wise and page wise utilisation details, crop wise with inputs and utilisation wise area figures for the village as a whole may be given after writing-Grand Total- Village Abstract.

- (iv) For entries in column 3 of block-3 schedule A.S. 1.1 the details are to be recorded from Form 2, 2A and 3 but that for column 4, the working sheet no. 4 need be referred to. The village totals of area of all utilisation in column-3 should be same as totalled by District office i.e. available against 'b' of working sheet no. 4 and total area in column 4 should correspond to the area as worked out and recorded against 'a' of working sheet no. 4.
- (v) It is to be ensured that non-crop utilisations are to be recorded in working sheet no. 4 as well as in Block-3 of schedule A.S. 1.1 for Summer seasons as per instruction and during Summer season it is to be seen and verified that besides seasonal crops and other utilisations as per nine fold classification of the sample village is equal to the Geographical area of the village as reported against item 10 of block-1 of schedule A.S. 1.1 An exercise for such consistency check need be made and recorded under Grand Total- Village Abstract. Any discrepancy should be given in Footnote.
- (vi) A number of supplementary sheets for Block-3 of main schedule AS 1.1 for recording utilisation particulars may be required while conducting sample check for Winter and Summer seasons. It is necessary to workout the totals for columns 3 and 4 page wise with carried over and brought forward or figures proper paging of supplementary sheets need be made.
- (vii) The sample check may be undertaken by the supervisory staff during the visits to village for sample check on area or crop cutting experiments without detriment to the work regarding checks on area or crop cutting experiments which will assume priority. However, this aspect of checking is to be completed as per the time schedule prescribed by F.O.D. for schedule A.S. 1.1.

TIME SCHEDULE FOR SCHEDULES A.S 1.1

Season	Date of Completion	Date of receipt of last s	schedule at FOD
	Completion	Central	State
1	2	3	4
Autumn	26 th Dec.	30 th Dec.	5 th January
Winter	21st April	25 th April	1 st May
Summer	20 th August	24 th August	30 th August

. . .

CHAPTER V

SAMPLE CHECK ON CROP CUTTING EXPERIMENTS SCHEDULE A.S.-2.0

- 5.1.1 Schedule AS 2.0 is meant for recording the observations of the Senior Statistical Officer/ State Supervisor on the actual manner in which the supervised crop cutting experiment has been conducted by the State primary worker. The objective of the sample check is to locate departures from the procedures prescribed for the conduct of experiments and inaccuracies in reporting ancillary information under the Crop Estimation Survey (CES), thereby improving the quality of yield data. This schedule is to be filled in at harvest stage. A point to be noted with regard to sample checks on crop cutting experiments is that unlike in area enumeration, it is a **concurrent supervision**. The supervisor is required to be present at the time of conduct of the experiment and to note whether the primary worker has followed the State instructions in all its aspects. After noting the deficiencies, he is also required to correct the same by providing necessary guidance to the primary worker on the spot itself so that the experiment is conducted properly.
- **5.1.2** In exceptional cases, when the Senior Statistical Officer/ State Supervisor is unable to supervise the experiment at harvest stage for one reason or the other, the supervision will be carried out at post-harvest stage. An experiment is treated as missed, if although conducted by the primary worker, it could not be supervised at the harvest stage by the supervisor. An experiment is considered as lost if the primary worker did not conduct it at all. For experiments missed, the inspection is to be carried out at post-harvest stage and the relevant findings recorded in the schedule. For experiments lost, the supervisor is to fill in all relevant blocks and items of the schedule, which can be filled-up at the post harvest stage.

A doubt has been raised whether an experiment can be conducted in the following circumstances. On the date of harvesting, it is observed that the primary worker had pitched the pegs on the four corners demarcating the experimental plot. Except for this plot, the remaining portion of the field is harvested. At the time of supervisor's visit it is found that location/demarcation of plot is wrong. In this exceptional situation, the experiment may be conducted in the incorrectly marked plot with suitable entries in blocks 2 and 4 and the mistake would not be rectified. However, if the selection of the survey no/field is found to be incorrect and the crop in the correctly selected survey number/ field is found harvested, the experiment will be treated as lost unless the state procedure prescribes otherwise. If the experimental crop is of a category like irrigated / unirrigated / high yielding / local variety, the experiment is to be conducted only on that category. Thus, if a field selected for irrigated crop is found later to be unirrigated, the field should be rejected and the selection should be made a fresh.

5.1.3 Provision has been made in the schedule for recording particulars regarding two crop-cutting experiments on a crop planned in each village. In case only one experiment is conducted on a particular day, the schedule is to be filled in and despatched without waiting for the second experiment to be completed on a subsequent date.

5.2 Field level coding particulars etc:-

- **5.2.1** Entries for items for which codes have been given in the schedule AS 2.0 should only be in the codes.
- **5.2.2** At the top of the schedule AS 2.0 put tick mark (\checkmark) against Central/State, original / duplicate / triplicate as the case may be. For number of experiments, put tick mark (\checkmark) against 1 or 2 as per the experiment (s) covered in the schedule. The year, season and the name of the crop are to be recorded in the space provided.

5.3 Block 1: Identification and other particulars of sample village

- **5.3.1** <u>Items 1 to 4</u>: Indicate the name of the state, district and tehsil against items 1, 2 and 3 respectively. For state and district, record also their codes in the respective boxes provided after the space for the name. Indicate the name of village against item 4 (a) and its order of selection against 4 (b).
- **5.3.2** Item 5: In case the village mentioned against item 4 (a) is different from the village originally selected, the name of the later will be written against item 5(a) and the reasons for substitution will be given against item 5(b) as per codes given below

	No substitution	0
>	Crop not sown	1
>	Entire crop harvested in the village	
>	Record not available	3
>	Others, specify	9

In case of code '0' against item 5 (b), put a cross (x) mark against item 5 (a).

- **5.3.3** <u>Item 6</u>: Highest serial/survey number of the village is to be recorded. This will be in accordance with the instructions prescribed for the conduct of crop cutting experiments in the state.
- **5.3.4** <u>Item 7</u>: The date of supervision will be recorded against item 7 (a) separately for experiments 1 and 2. If both the experiments are not checked on the same visit, put a cross mark (x) under the experiment number not supervised. Against item 7 (b), the stage at

which the experiment has been inspected will be recorded. The reasons for the experiment being missed/lost will be given against item 7(c) in codes as under :-

(i) For exp	periments missed :	
1.	Date of harvest/ change in date of harvest was not intimated	Code-1
2.	Change in date of harvest intimated late	Code-2.
3.	Supervisor could not reach the village in time	.Code-3
4.	Due to overlapping of harvest dates in samples allotted to supervisor	Code-4
5.	Others (specify)	Code-9
(ii) For ex	periments lost :	
1.	Cultivator harvested the field prior to date fixed for harvest	Code-1.
2.	Primary worker did not conduct crop-cutting experiment	Code-2.
3	Delay in selection of survey no./replacement of village	.Code-3.
4	Selection of survey number found wrong and correctly	
	Selected field found harvested	.Code-4.
5.	Others (specify)	.Code-9

5.3.5 <u>Item 8</u>: Write the name and designation of the primary worker to whom the experiments are allotted against items 8 (a) (i) and 8 (b) (i). Against item 8(c) indicate the month and year in which he was last trained in the work pertaining to Crop Estimation Surveys. If the primary worker had not received any training, write "untrained".

If the person, who actually conducts the experiment is different from the one whose particulars are mentioned against item 8(a) (i) record the particulars for this person against item 8(a) (ii) in a similar manner as for item 8 (a) (i). If the item is in -applicable, put a cross mark (X). This item is intended to collect information on number of cases in which the primary worker to whom the work was allotted delegated the work to others. It may happen that on the date of harvest the primary worker deputes his junior (e.g.patwari) to conduct the experiment on the ground that he has other pressing work. In this situation the Senior Statistical Officer should supervise the work and make entries suitably in this item.

5.4 Block 2: Particulars regarding selection of survey/sub-survey number

- **5.4.1** The details of the selected survey/sub survey number/field for the experiment are to be recorded in this block. This block is to be filled in the case of missed and lost experiments also.
- **5.4.2** <u>Item 1</u>: The records consulted for the selection of survey/sub-survey number are to be recorded against this item. Entries are to be made in codes viz. khasra-1, map-2, both khasra and map-3, nothing consulted-4.
- **5.4.3** <u>Item 2</u>: Write the survey/sub-survey number finally selected for the experiment in item 2(a) and give the area of the selected survey/ sub-survey number in item 2(b). The area may be ascertained by referring to village records, if available, and entered in 2

places of decimals after rounding off if necessary. In the absence of any record, this may be obtained from oral enquiry from patwari, cultivator etc. and suitable remarks given in block 11.

5.4.4 <u>Item 3</u>: If the selected survey/sub-survey number has been substituted and the experiment is conducted in the substituted number, give reasons for substitution as per codes:

No substitution	Code-0
Crop harvested prior to selection	Code-1
Crop harvested before the date fixed	Code-2
Field partially harvested affecting the location of experimental plot	Code-3
Others (specify)	Code-9

- **5.4.5** <u>Item 4</u>: Record the number of fields (as defined in the State crop cutting instructions) growing the experimental crops in the selected survey/sub-survey number in item 4 (a) and write in item 4 (b) the area under the experimental crop in the selected survey/sub-survey number as per village records (in hectares upto two places of decimal) or through an oral enquiry/ estimation if village records are not available.
- **5.4.6** <u>Item 5</u>: Write the name of the cultivator of the selected survey/sub-survey number against item 5(a). In case the field has been leased in, the name of the tenant only will be recorded. If the person from whom the ancillary details have been elicited, is different from the cultivator, his name is to be recorded against item 5 (b).
- **5.4.7** <u>Item 6</u>: The mistake noticed by the Senior Statistical Officer/State Supervisor in the selection of (a) survey number, (b) sub-survey number and (c) field are to be recorded in codes specified in the schedule.

All information are to be records-cum-enquiry based. It may be noted that if more than one type of mistakes is noticed, all the relevant codes may be given with comas in between.

5.4.8 <u>Item 7</u>: Whether the mistake was rectified or not will be indicated by code 1 (Yes) or code 0 (No). If code in item 6 is '0' put a cross mark (x) against this item.

5.5 Block 3: Measurement of the field and selection of random coordinates

- **5.5.1** Particulars regarding the measurement of the field and the selection of random coordinates along its length and breadth for the location of the experimental plot are to be given in this block. It may be noted that this block is to be filled in for experiments missed and not for experiments lost. For each experiment two lines have been provided, one for entering the information recorded by the primary worker and the other for recording the findings of the Senior Statistical Officer/State Supervisor.
- **5.5.2** <u>Cols. 1 and 2</u>: The experiment number and the source of data are to be given under these cols.

- **5.5.3** Cols. 3 and 4: The length and breadth of the field are to be given in cols. (3) and (4) separately as noted by the primary worker and as verified by the supervisor. The units of measurement must be clearly indicated in the heading of these columns by putting a tick Mark (\checkmark) against the appropriate word and deleting those inapplicable.
- **5.5.4** <u>Cols. 5 and 6</u>: The random coordinates selected for locating the plot in the field along the length and breadth as noted by the primary worker and as verified by the supervisor are to be given under these cols.

5.6 Block 4: Location and marking of plots

- **5.6.1** This block is meant for recording the various types of mistakes noticed, if any, in the marking of the experimental plot. It is to be noted that this block is to be filled in respect of missed experiments also when the peg marks are noticeable. The block is not applicable for experiments lost.
- **5.6.2** *Col. 1*: The description of the item is given in this column.
- **5.6.3** <u>Cols. 2 and 3</u>: Enter code '1' in these cols. against the items given in col. 1, If some mistakes have been noticed, otherwise enter code '0'.
- **5.6.4** <u>Cols. 4 and 5</u>: If the entry in col. 2 or 3 is '1', enter in col. 4 and 5 the type of mistake in terms of code given below:

<u>Item 1</u> : Plot not located according to random coordinates selected	Code 1
Wrong choice of direction	Code 2
<u>Item 2</u> : Wrong dimension of plot	Code 3

If the code entered in col. 2 or 3 is '0' put a cross mark (x) in col. 4 or 5.

5.6.5 Cols. 6 and 7: If the mistakes noticed against the respective items in col. 1 were rectified, enter code '1' otherwise code '0'. If no mistake was noticed, a cross mark (x) is to be put.

5.7 Block 5.1: Particulars regarding conduct of Expts

- **5.7.1** This block is to be filled in for supervision at harvest stage only.
- **5.7.2** <u>Item 1</u>: The date of harvest originally fixed for the conduct of experiment is to be given against item 1 (i) (a). The date on which the experiment was actually conducted will be given against item 1 (i) (b). The dates of threshing of the produce and its first weighment will be given against items 1 (ii) and 1 (iii) respectively. It may be noted that dates of harvest and threshing may be different in some cases, especially for crops like, tur, sesamum, etc. In such cases the Senior Statistical Officer/State Supervisor will have to

pay a subsequent visit and check the threshing and weighing operations. The schedule will be dispatched only after the first weighment has been checked.

- **5.7.3** <u>Item 2</u>: The shape and size of the experimental plot is to be recorded against this item where the plot size is variable, indicate the same by writing 'variable'. If one side of the plot is measured in terms of number of rows of crops, the actual dimension of the side in metres and centimetres is also to be recorded along with the number of rows in brackets.
- **5.7.4.** <u>Item 3</u>: The description of the harvested produce for which the first weight is recorded is to be given against item 3 (i). The description is to be given clearly and unambiguously, such as grain, ear-head, cobs (with or without sheath), pods, kernel, plants, fibre etc. The weight of the produce will be given in kilograms upto three places of decimals against item 3 (ii). Item 3 (iii) will be left blank in the field.
- **5.7.5** <u>Item 4</u>: If any mistake has been noticed in weighment put code 1 in item 4 (i); otherwise put code '0'. If the code is 1 in item 4 (i), code 1 will be entered against 4 (ii) if the mistake was rectified and code '0' otherwise. Incase of code '0' in item 4 (i) put a cross mark (X) in item 4 (ii).

5.8 Block 5.2: Weight of each picking for cotton

- **5.8.1** This block is intended for recording the weight of the produce (kapas) obtained from the experimental plot in each picking in case of experiments on cotton. The schedule will be dispatched only after supervising the stipulated number of pickings for the experiment. A cross mark (X) may be put on the Sl. No. of the picking which could not be supervised by the Senior Statistical Officer/State Supervisor and which was meant for supervision as per the list of sample allocation. It may be noted that yield as per primary worker should not be entered in such cases. It should also be noted that even if a picking is missed, the subsequent pickings should be inspected.
- **5.8.2** <u>Col. 1</u>: The serial number of picking is given under this column. Space has been provided for 11 pickings. In case the total number of pickings exceeds 11, use an additional sheet.
- **5.8.3** Cols. 2 and 3: The date of picking and the corresponding weight of kapas in Kgs. upto three places of decimal will be recorded in cols. 2 and 3 respectively. After supervising all the requisite number of pickings, strike the total of weight in col. 3.
- **5.8.4** <u>Cols. 4 to 6</u>: These columns are to be filled in for experiment II in a similar manner as explained above.
- **5.8.5** Just below the total weight of cotton picked from various pickings, give the total number of pickings done by the state primary worker, in case of villages under group 'A' (meant for supervision of all the pickings). For experiments where the crop has failed, number of pickings to be reported will be '0' (zero).

5.9 Block 6: Details regarding equipment

5.9.1 This block is meant for reporting on the position regarding supply of equipment in the case of supervised experiments and also regarding the use of supplied equipment. This block is to be filled in for all stages of inspection. However, information has to be obtained only from primary worker if available, in the case of lost or missed experiments.

5.9.2 <u>Item 1</u>: The system of codes provided combines information on supply of equipment and its use. The codes are illustrated below:-

Description	Code
(a) Supplied and used	0
(b) Supplied but locally procured items used:	
(i) Standard	1
(ii) Non Standard	2
c) Supplied but not used though required	3
(d) Supplied but not required to be used	4
(e) Not supplied but locally procured items used:	
(i) Standard	5
(ii) Non Standard	6
f) Not supplied and also not used though required	7
(g) Not supplied and not required	8
(h) Information not available	9

Thus for instance, if an item was not supplied and locally procured item, which was not standard, was used, the appropriate code will be 6.It may be noted that in some cases an item of equipment may not be required to be used. Thus when the yield from experimental plot is nil, balance and weights are not required to be used.

5.10 Block 7: Details regarding post harvest operations

This block is for reporting details on post harvest operations. While item 1 will be applicable for both experiments supervised at harvest stage and those missed, item 2 will be applicable only for missed experiments. The description and weight of the green produce as recorded by the primary worker will be copied. If the produce kept for driage is available for supervision, the weight of the produce on the date of supervision will be recorded against item 2 (iii).

5.10.1 If driage experiment is not planned in the village, code 4 will be entered. If driage experiment is planned, code 0 or 1 will be entered according as the arrangement for storage of the produce is satisfactory or not irrespective of weight of the produce in the experimental plot.

5.10.2 <u>Item 2</u>: Against 2 (i), record the date of harvest/first weighment. Against items 2 (ii) (a) and 2 (ii) (b) the description and weight of the green produce as reported by the primary worker will be copied. If the produce kept for driage is available for supervision, the weight of the produce on the date of supervision will be recorded against item 2 (iii).

5.11 Block 8: Data on inputs

5.11.1 This block is meant for recording the data on inputs such as seed, irrigation, fertilizers, manures and pesticides which have direct bearing on the yield. These data are to be given for the experimental fields in all cases including missed and lost experiments. For each experiment two columns have been provided one for recording the entries made by primary worker, vide col. heading 'p', and the other by the Senior Statistical Officer/State Supervisor, vide col. heading 's'. Besides, the corresponding entries of the patwari as made in khasra register will be given for item 1 (i) and 2 (i) in columns marked 'kh'. If no entry has been made by the patwari in Khasra register, put N.A. in the column marked 'kh'. Also with an asterisk (*) specify in the footnote the reason such as no provision for recording or omission.

5.11.2 <u>Item 1</u>: The variety of seed of the experimental crop applied in the selected field is to be given against item 1 (i). Indicate high yielding by code '1' and all other varieties by code '2'. In case of high yielding, give the name and strain number against item 1 (ii), otherwise put a cross mark (x). A list of high yielding varieties as available from the State Department of Agriculture should be consulted for this purpose.

The rate of application of the seed by the cultivator in kg/hectare is to be given against item 1 (iii). For recording against this item, the seed rate that has actually been applied by the cultivator in the experimental field for the experimental crop is to be noted and not the general seed rate. For this purpose, the Senior Statistical Officer/State Supervisor will make enquiry from the cultivator concerned about the quantity of the seed actually applied in the field and then arrive at the seed rate in kg/hectare as per area of the field. In case of crops sown in mixture the rate of application for the experimental crop is to be given without inflating it to the seed rate which would be obtained had the crop been sown pure. For sugarcane crop, the seed may be given in quintals/ha. This item will not be applicable to sugarcane (ratoon). In the situation of crop being transplanted, the seed rate is to be ascertained first on the basis of seeds required in nursery for getting required number of plants for its transplantation in the selected field. Then on the basis, the seed rate required for sapling of plants in an area of one hectare of crop is to be calculated and reported in block 8 item 1 (iii) under supervisor's entry. While reporting the item of input in general, any departure in the procedure followed in the State, particularly of transplantation crop, and other practices of sowing in the State may be given in the remarks block.

5.11.3 <u>Item 2</u>: Against item 2(i), enter code '1' if the field is irrigated and '0' if it is not irrigated. Against item 2(ii) indicate the number of irrigations applied. The pre-sowing irrigation is also to be included for counting the number of irrigations. For more than one pre-sowing irrigations, count the number as one only. If irrigation is effected by a continuous flow of water, say, by a channel cut off from a stream in hill areas, if may not

be possible to give the number of irrigations. In such cases the fact will be indicated by writing "continuous flow".

The source of irrigation is to be given against 2 (iii) in codes as under: -

1.	Canal	Code-1
2.	Tank	Code-2.
3.	State tubewell	Code-3.
4.	Private tubewell	Code-4.
5.	Well	Code-5.
6.	Others (specify)	Code-9.

In case irrigation is from more than one source, the codes for all the sources should be written with comma (,) in between. The sources should be recorded in order of intensity of irrigation, the major source being recorded first. For unirrigated fields, put a cross (X) against items 2 (ii) and 2 (iii).

- **5.11.4** <u>Item 3</u>: If fertilizer has been applied to the field it would be indicated by code '1' against item 3 (i), otherwise write '0'. If the code entered against item 3 (i) is '1', write the name against item 3(ii) (a). The quantity of constituents (N, P & K) in Kg/hectarte will be arrived at with the help of information on the composition of various fertilizers. If more than one fertilizer is applied, give the names of all of them. Enquire from the cultivator the total quantity of each of the fertilizers recorded in item 3(ii) (a) applied to the field and record it against item 3 (ii) (b). Rate of application of fertilizers in the experimental field in Kg/hectare in terms of the nutrients, i.e. Nitrogen (N), Phosphorous (P) and Potassium (K) will be recorded against 3 (ii) (c). It may be noted that the composition of fertilizer will be known either from the cultivator, Village Level Worker (V.L.W.), Agriculture Extension Officer, or the State Agriculture Department. The Regional Head of the NSSO located at the SASA Hqrs. will arrange to collect this information from the concerned State Department and supply to all the staff.
- **5.11.5** <u>Item 4</u>: If the experimental field is manured, write code '1' otherwise write code '0' against item 4(i). If the code against item 4 (i) is 1, specify the name (s) of the manure (s) applied against item 4(ii) in codes- farm yard manure-1, green manure-2, others-9. If there is more than one code, write all of them with comma in between.
- **5.11.6** <u>Item 5</u>: If any pest control measures have been adopted by the cultivator in the experimental field, write "1" against item 5 (i); otherwise give code "0". If the code entered against item 5(i) is 1, specify the measures adopted in item 5 (ii).

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5.12 Block 9: Particulars regarding crop condition

5.12.1 This block is divided into two sub-blocks sub-block 9.1 for recording the condition of the crop in the experimental field as well as the experimental plot, sub-block 9.2 for recording the details of the crops sown in field. This block is to be filled in by enquiry for missed and lost experiments also.

SUB- BLOCK 9.1

- **5.12.2** <u>Item 1</u>: Indicate the density of the crop in the experimental field as well as the experimental plot under the respective columns in codes- uniform 1, irregular -2, scanty-3.
- **5.12.3** <u>Item 2</u>: Indicate the maturity of crop such as unripe, ripe or over ripe through the appropriate codes.
- **5.12.4** <u>Item 3</u>: Indicate the maturity of the crop in the experimental field as well as the experimental plot according as whether it is good (code 1), normal (code 2) below normal (code 3) or completely destroyed (code 4). Crop condition is to be reported taking into account, among others, the cultivator's normal judgement and expectation from that field / plot. For this the Senior Statistical Officer/State Supervisor should consult the cultivator.
- **5.12.5** <u>Item 4</u>: If the crop is affected by heavy rain, flood, drought, pests or other factors, codes 1, 2, 3, 4 or 9 would be given. If the crop is not affected at all put code '0'.

SUB-BLOCK 9.2

- **5.12.6** <u>Details of crops sown:</u> The information on area of the experimental field, the name (s) of the constituent crop(s) and the percentage proportion of constituent crops are to be recorded here. This block is to be filled in even when only a single crop is grown in the field.
- **5.12.7** <u>Col.2</u>: The area of the experimental field as per the estimate of the Senior Statistical Officer/ State Supervisor is to be given in hectares up to two places of decimal. If the survey/sub-survey number consists of a single field, the total area of the survey/sub-survey number will be noted from the records. In case where whole field harvesting is done, as in some cases in the hill area of Uttar Pradesh, the area will be recorded in square meters. It may be noted that this area is to be consistent (i.e. less than or equal to) with the entries made in items 2 (b) and 4 (b) of block 2.
- **5.12.8** <u>Col.3</u>: The names of all the constituent crops sown in the field are to be recorded one below the other, giving the name of the experimental crop in the first line, and underlining the same.
- **5.12.9** <u>Col. 4</u>: The percentage proportion of area under the constituent crops as given in form 1/2 of the primary worker is to be given against each crop noted in col. 3. If the experimental crop is sown pure in the field, write '100' in this column.

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5.12.10 *Col. 5*: The supervisor is to record in this column the percentage proportion of the constituent crop worked out by him on the basis of the prescribed state procedure for crop cutting experiments. In absence of the prescribed procedure, under mentioned guidelines may be followed: -

The crop mixtures can be of the following two types:

- (i) field in which constituent crops are sown exclusively in the separate rows (Without any other crop in the same row).
- (ii) field in which constituent crops are sown by mixing the seeds and not in rows.

In the first case, the percentage of the constituent crops may be worked out as follows:

No. of rows of experimental crop actually falling in the specified experimental plot
-----x 100
No. of rows which could have fallen in the specified plot, had the experimental crop sown pure

In the later case, the percentage will be decided by seed rate supported by an eye estimate.

5.13 Block 10: Sketch of the field showing experimental plot

5.13.1 Draw a sketch showing the shape of the experimental field and the location of the experimental plot within it clearly indicating the dimensions of the field and the plot along with the random co-ordinates for location of the plot. Care should be taken to see that the sketch reflects adequately the irregularities of the field as also the approximate location within the field of the experimental plot. In case of row crops, the length/breadth of the experimental plot may be given in meters up to 2 places of decimal, where-ever it is specified in numbers of rows in block 3. For missed expts. also sketch may be drawn and the relevant details may be given. Besides, the supervisor may give the details of (i) total no. of rows in the selected field (ii) average no. of rows that can be accommodated in 5 metres / 10metres as the case may be (iii) and actual measurement of all the 4 sides and 2 diagonals of the experimental plot.

5.14 Block 11: Remarks

5.14.1 This block is intended to record the general observations of the Senior Statistical Officer/State Supervisor in regard to the conduct of experiments by the primary worker. The remarks should be precise and should be such as to throw light on the deficiencies in the quality of fieldwork. Any aspect which could not be covered in the other blocks should also be highlighted here.

5.15 Block 12: Particulars of field work and movement of schedules

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- **5.15.1** This block is divided into two sub-blocks namely 12.1, to be filled in by Senior Statistical Officer/State Supervisor and 12.2 by the Senior Statistical Officer /State higher authorities.
- **5.15.2** <u>Sub-Block 12.1:</u> Against the date of fieldwork record the date of conduct of experiment by the primary worker and against date of sample check note the date on which experiment was checked. The date of submission of schedule is the date on which it has been despatched or handed over to the Officer-in charge, SRO / State higher Officer. Other items are self-explanatory.
- **5.15.3** <u>Sub-Block 12.2</u>: The items are self-explanatory. In block 12.2 item 1 inspection on spot will include the inspection by the NSSO Regional Head. If both the Assistant Director and the Regional Head inspect the work on two different dates, both the dates are to be given. The Officer-in charge, SRO /State higher officer should invariably fill in all items of this block clearly before schedule is despatched.
- **5.15.4** Sub-Block 12.3: This block is for the use by F.O.D. Hqrs. office.

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CHAPTER VI

WORK COMPLETION REPORT - SCHEDULE A.S.-3.0

- **6.0** When a particular item of work such as sample check on area, on crop cutting experiments or page totaling in Khasra registers is completed in a village, the Senior Statistical Officer, NSSO, will fill in the schedule AS 3.0 and post one copy to his Regional Head.
- **6.1** At the top of the schedule indicate the identification particulars such as State, Sub-Regional Office, district, tehsil and village with order of selection.
- **6.2** In the second part give information regarding date of completion, volume in terms of number of crop cutting experiments and name of crop for schedules AS 2.0 and details of the dispatch of schedules under relevant column.

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CHAPTER VII

INSTRUCTIONS FOR SCRUTINY OF AS SCHEDULES UNDER ICS

7. General

7.1.1 The scrutiny of schedules relating to the scheme for Improvement of Crop Statistics (ICS) shall be completed by the Officer in-charge of SRO / Scrutiny officers of SASA, immediately after the receipt of schedules from the Senior Statistical Officers/State Supervisors. All the basic entries and the codes shall be made by the Senior Statistical Officers/State Supervisors before submitting the schedules to Officer in-charge of SRO /Scrutiny Officer. The scrutinised and corrected schedules shall be sent to FOD/SASA within three days of the receipt of the schedules. In case a schedule cannot be corrected at scrutiny level and has to be referred back to the field for correction/re-survey etc. Although the number of such cases may be negligible, yet such schedule shall be detained by the Regional Head/Scrutiny Officer. Immediate steps shall be taken to rectify the discrepancies in such a schedule and to forward the same to FOD/SASA. No schedule shall be sent to FOD/SASA Hqrs without proper scrutiny by the officer of NSSO/ Scrutiny Officer of SASA.

The field level scrutiny is not only aimed at rectifying the mistakes unlike the previous years but also making the schedule appropriate for data entry into the computer. The field scrutiny should ensure that the data are consistent with the local practices and state instructions. It should also avoid back references from FOD /SASA. For scrutiny, ordinary or lead pencil only should be used. No red pencil /pen will be used. Thick line boxes of the A.S. Schedule are to be coded at Hqrs. Faridabad, hence to be left blank at field level.

Scrutiny of Schedule AS 1.0 (Sample Check on Area Enumeration)

- **7.2.1** <u>General:</u> Coding of all the items will be done by the Senior Statistical Officer/State Supervisor at the field level itself. These are to be ensured at the time of scrutiny.
- **7.2.2** <u>Heading</u>: In the schedule heading, see that the sample type namely Central or State are properly tick marked. Inapplicable item(s) should be struck out. See also that the code box is filled up with 1 for Central and 2 for State Sample.
- **7.2.3** See that the original, duplicate or triplicate is properly ticked and inapplicable item struck out. Original schedules and not the photocopies are to be mailed to FOD, duplicate to SASA and triplicate to be detained as office copy. The duplicate and triplicate can be a photocopy.
- **7.2.4** <u>Season</u>: See that the name of the season is properly recorded in the spaces provided in the schedule. The name must be the standard name used in the State

However, Phase I, Phase- II or Visit I or Visit II etc.wherever applicable may be recorded. The relevant code box may be checked for appropriate codes.

The appropriate codes are:

Season	Code
Kharif	1
Early Kharif, Bhadai, Autumn	
and Phase I for Tamil Nadu	2
Late Kharif, Aghani, Winter,	
and Phase II for Tamil Nadu	3
Rabi, Phase III for Tamil	
Nadu and Rabi I for	4
Puducherry	
Summer, Zaid Rabi, Garma,	
Rabi II for Puducherry	5
Whole Year	6

- **7.2.5** While scrutinising the schedules for second or subsequent season, the schedules for the first season/previous season may be consulted for ensuring the correctness of some of the entries which are required to be the same in different season. In case of difference, the correctness of the subsequent schedules may be justified with appropriate remarks.
- **7.2.6** In case of Andhra Pradesh and Odisha, where there is a first visit, the schedule (single copy) should be called for by the Officer of NSSO/Scrutiny Officer of SASA immediately after the completion of the visit, for scrutiny so as to ensure the correctness of selection and other relevant particulars. The schedule may be returned to the Senior Statistical Officer/State Supervisor for the next visit of the first season.
- **7.2.7** See that the selected serial/survey numbers are correctly repeated during the subsequent season. In case the selection of survey numbers is found to be wrong in the subsequent season, the incorrect survey/serial number in which the field work was conducted during Kharif season should only be considered and no fresh selection need to be made.

Even if entries are repeated in the schedule the same are to be written again and again and no ditto mark (") should be made.

7.2.9 Block -1

i) <u>Item 1 to 4</u>: Compare the entries with the identification particulars given in the sample list. If the name of the village does not tally with that recorded in the list, ensure that there is necessary explanatory note in the remarks block. Ensure that the codes corresponding to State and District are properly recorded along with names.

- **ii**) <u>Item 5:</u> In some States where there are more than one primary worker(PW) for the sample village, name of all such PWs should be given in item 5.1 and it may be ensured that items 5.2 contains relevant information for all such officials.
- **iii**) <u>Item 6:</u> For TRS States, these columns are self explanatory but entries reported in the subsequent season should be checked with the entries given in the first season. In Odisha, ensure that the number of EARAS villages allotted to the Statistical Field Surveyor (SFS) is recorded against item 6(a) and cross mark is put against item 6(b). In those states where there are more than one primary worker (PW) for the sample village it may be ensured that item 6 contains relevant information for all such officials.
- **iv**) <u>Item 7.1 and 7.2</u>: See that the items are replied properly and are not left blank. The relevant code box may be checked for appropriate codes. The appropriate codes are:
- (a) for item 7.1 fully 1, partially 2, not surveyed 3, N.A. 4
- (b) for item 7.2 In case there is code 1 or 2 against item 7.1, ensure that the year in which map was last updated is recorded otherwise put cross(x) mark.
- v) <u>Item 8</u>: Ensure that the appropriate code viz., "Yes-1 or No-0" is recorded.
- vi) <u>Item 9:</u> See that entry is made here in all cases where code 1 is in item 8. Cross mark (X) is expected here if code 0 is in item 8.
- (vii) <u>Item 10:</u> See that the date in item 10(a) is as per State instructions. If as per item 10(b) crop enumeration is reported to have been completed, see that the entries under cols. 8 to 11 of sub-block 3.3 of block 3 have been made. Entry in item 10(d) is to be made only if Girdawari is not completed as per 10(b) otherwise a cross mark (X) is to be put. i.e in case of code 2 or 3 in item 10(b) reasons must be specified in terms of codes in item 10(d). When entry in item 10(b) shows that girdawari has not been started, item 10(e) and 10(f) become inapplicable, in such cases, a cross mark (X) is to be put against item 10(e) and 10(f).
- **viii**) <u>Item 11:</u> See that all the sub-items are properly filled in. If actual date of submission in item 11(c) is earlier than the date in item 10(c) ensure that appropriate remarks are given in remarks block viz sub-block 1.c. Also in cases of code zero (0) in item 11(e), see that suitable remarks are given regarding entries in item 10(b) and sub- block 6.3, in the remarks block 1 (c).
- **ix**) In case, entries are available in sub- block 6.3, code 1 should be in item 10(b) of block 1 otherwise suitable remarks are to be given, in the remarks block 1 (c).

7.2.10 Sub- Block 1(a)

- i) Check that the entries in sub- block (1.a.1) are made correctly by the Senior Statistical Officers/State Supervisors. In case more than one visit is paid to the village, the date of completion must indicate the date of the last visit. Ensure that the entries in item 10 and 11 of block 1 are in accordance with the position as on the date of completion of field work. Check that the date of completion of girdawari in item 10(c) or date of submission of TRS / EARAS statement as in item 11(c) are not later than the date of completion of work in the village.
- ii) Ensure that all the entries in sub-block (1.a.2) are completed.
- iii) Sub-block (1.b) is for the use at tabulation agencies (FOD Hqrs./SASA).

7.2.11 Block 2:

- i) *Item 1:* See that the items are filled in properly without leaving them blank. Further check that the highest serial/survey number tallies with the last serial number in sampling frame of schedule AS 1.0 (SF) which should be attached with the office copy.
- **ii**) The selection of sample clusters should be checked very carefully. Ensure that all items in this block are recorded neatly and correctly. Verify the adjusted highest serial/survey number (H') with reference to the entry in item 1 of block 2. and the interval (I) are correctly calculated and recorded.
- iii) Check the random start (R) by referring to random number tables and verify the selection of key numbers and formation of clusters. If the sample selection is found wrong, issue instructions for re-visit of village for correct sample clusters immediately, if the time permits, otherwise retain the selection as it is, for the entire agriculture year with a suitable fact note. In case of revised sample selection, the schedules containing the data referring to newly selected cluster only should be sent to FOD Hgrs./SASA.

7.2.12 Block 3:

- *i)* <u>Sub-Block 3.1</u>: See that the local units are correctly recorded together with their conversion factors in case these units are other than Hectares.
- *ii*) <u>Sub-Block 3.2:</u> Check that the information regarding geographical area of the village is recorded in all cases. In the event of non-availability of information with primary workers, the information must be collected from higher authorities.

iii) Sub-Block 3.3:

(a) <u>Col. 1</u>: Verify that entries noted under the Col.1 are in conformity with the entries in Block-2, cluster-wise and serial /survey number wise.

- **(b)** <u>Col. 2</u>: The total geographical area is to be fully accounted for under 'a' entries i.e. entry in Col.2, and the same should be equal to total of entries in col.7 for each survey/sub- survey number.
- (c) <u>Col.7 & 11</u>: See that the Area in Columns 7 & 11 are recorded in local units or hect. as noted in sub-block 3.1 of Block 3.
- (d) <u>Cols. 4 & 8</u>: This item needs VERY CAREFUL scrutiny. Check that the names of crops/crop-utilisations are written only in standard names and in clear terms. The names of crop/crop-utilisation written ambiguously or in local names will only lead to misclassification of area.

Check that:

- I. The names of the crops are written only as per their standard names specified in Annex-I of this Manual. For any crop which is not listed in **Annex-I**, the specification such as 'minor cereals', 'other pulses', 'oilseeds', 'fiber', 'fodder crops', 'fruit crop', 'other crops' etc. are written along with the name of the crop.
- II. For utilisations other than crop, the standard nomenclature as indicated in **Annex-II** of this manual are to be used. These instructions are to be followed strictly leaving no chance for misunderstanding about the classification of utilization.
- III. For fodder grass grown and treated as crop as per State Land Record Manual (LRM), it may be ensured that grass (fodder crop) is written. For permanent pasture and grazing land, the non crop utilisation as given in **Annex-II** should be written. Similarly, the term 'garden' is ambiguous. For fruit crops classified as 'net area sown', use the term 'orchards', other tree crops and bushes not included in forest will come under 'misc. trees crops and groves'.
- **IV.** The names of crops in these cols. will appear only for the crops which belong to the season under reference. For crops of other seasons standing in the field "Crop of other season" is to be written without writing the name of the standing crop.
- **V.** In case of mixture crops ensure that each crop is written in one line, one below the other and also a plus (+) sign is put between the crops of that mixture.
- VI. The entry for a crop/crop mixture/utilisation in cols. 8 is made in a line corresponding to the entry in col.4. If this is not possible, use a separate line.
- (e) Cols. 12 to 15: See that these cols. are left blank at field level.
- (f) <u>Cols. 5,6,9 and 10</u>: See that either code 1 or 2 is noted under these cols. for a crop/crop mixture in col. 4 and 8. In case of non-crop utilisation, see that a cross (x) mark is recorded in these columns.

- (g) <u>Col.7</u>: See that the total area noted patch-wise under col.7 tallies with the geographical area of the serial/survey number given in col.2. For area sown more than once during the same season, crop should be indicated with a subscript (D) to explain the excess over geographical area because of double cropping in the same season. Ensure whether this has been done.
- (h) <u>Col.11</u>:- If the total area under col.11 against a particular serial/survey number, (i.e. as per patwari) exceeds the area recorded under col. 2 i.e. the geographical area of the serial/survey number, see whether a suitable remark to this effect has been given in the remarks block.
- (i) Verify that all serial/survey numbers which constitute the sample clusters are accounted for in this block.
- (j) Verify that the patchwise, survey no.wise, clusterwise totals and the grand total are properly reported.

7.2.13 Block 4:

See that the crops/crop mixture/other utilisations appearing in sub-block 3.3 of block 3, also appear in this block and make suitable corrections, if necessary, in block 4. See that total of entries in col.3 & 4 of Block 4 is equal to total geographical area of all the four clusters in col.2., sub-block 3.3 of block 3 except in case of double cropping within the same season. Cols. 7 to 11 are to be left at field level as they are for the use of tabulation agencies at FOD Hqrs./SASA.

7.2.14 Block 5(a).

Col.1: Ensure that the serial / survey number having an asterisk (*) in col. 4 of sub-block 3.3 is recorded here.

Col.2: Ensure it is left blank at the field level.

Col.3 to 7 and 9 to 11: Ensure that corresponding entries referring to the sl. survey no. in col. 1 are recorded here.

Col.8: Check that the type code for area missed is consistent with the State Land Records Manual.

7.2.15 Block 5(b):

Ensure that entries are made as per instructions in Agricultural Statistics Manual (ASM) Part-II. While scrutinising this block, it is necessary that the Senior Statistical Officer of NSSO/ Scrutiny Officer of SASA is well aware of the local conditions and has knowledge of the areas where such short duration crops are likely to be

missed by patwari as well as by Senior Statistical Officer / State Supervisor and further ensure whether proper probing has been done about the sowing and harvesting of such short duration crops in between the official seasons from the cultivator.

7.2.16 Block 6:

- (i) There are three sub-blocks (i.e. 6.1, 6.2 & 6.3) check that information is properly recorded in these sub- blocks. Normally the crops grown and total cropped area in the current season and the corresponding season of last year are expected to be broadly comparable. Wide variations require scrutiny and clarification sought.
- (ii) If the entries in any of the sub-blocks is not available ensure that the reasons are noted in the body of the sub-block boldly as given at the bottom of the block-6 and appropriate code is given in the specific code cell, as per coding programme issued by Faridabad Hqrs. Check that the area under cols. 4 and 5 of block 6.1 does not exceed the total geographical area under selected survey numbers. Similarly, ensure that the area under cols. 8 and 9 of block 6.2 does not exceed the total geographical area of the village (i.e. sub-block 3.2 item "a" of Block 3).
- (iii) It may be noted that if the entries are filled in sub-block 6.3, the codes in item 10(b) of block 1 should normally be 1 i.e. fully completed. In case code is 2 or 3 (i.e. partially completed or not yet started) in item 10(b) of block 1 and entries in 6.3 are also made, remarks should invariably be given indicating the position. The remarks are to be given otherwise when there is no entry in block 6.3 and the girdawari is reported to have been completed and office copy is available as per entry in item 11(e) of block 1. The sub-block 6.1, 6.2 are inapplicable for EARAS states and hilly districts of Uttar Pradesh.
- (iv) Ensure that net area sown during the previous year in selected 20 sl./survey nos. is recorded in local units in bottom line of block-6. See that net area sown relates to the entries of previous year and not to a particular season.

7.2.17 Block 7:

Examine that information given in this block is correct as per State Land Records procedure. Ensure that the entries are made for all the recognised crop mixtures reported in blocks 3,4 (both under the supervisor and the patwari entries) and 6.

7.2.18 Block 8:

Check that the total area recorded against item 1 to 9 tallies with the geographical area of the village recorded against sub-block 3.2 of block 3. In case of minor differences due to rounding etc. see that suitable remarks are given. In case of major differences, village records may be consulted to arrive at the correct position. This block is to be filled in only in first season of Agricultural year. In case, information is not available in the first season, the block may be filled in subsequent season. The block is inapplicable for EARAS states and hilly districts of Uttar Pradesh.

7.3. SCRUTINY OF SCHEDULES- A.S. 1.1 (Sample check on aggregation of area)

7.3.1 Block-1:

Verify the identification particulars given in this block with the list of selected villages and also with those given in the corresponding schedules AS 1.0.

7.3.2 Block 2:

- (i) <u>Item 1(a)</u>: Check if the crop enumeration has been completed fully for the village as a whole the entry is recorded as 1 otherwise viz. partially or not completed, entry is 2. Also see that the entry made is consistent with the entry recorded in item 10(b) of block 1 of schedule AS 1.0. In case of difference, suitable remarks are given.
- (ii) <u>Item 1(b)</u>: Check that for aggregation done by patwari entry recorded is 1 and if not done, entry recorded is 2.
- (iii) Item I(c) (i) (ii) & (iii): See that the entries recorded against these items are consistent with the entries made against item 11(b) of block 1 of schedule AS 1.0
- (iv) Item 2: See that code 1 or 2 is invariably given.

7.3.3 Block 3:

- (i) <u>Col.1:</u> Verify that the crops/crop mixtures reported in this block, exhaust all those reported in the working sheets and that the name of the crops are recorded clearly and unambiguously. It may also be ensured that geographical area as totalled by the supervisors in col.2 of block 2 of the working sheet is tallying with the geographical area reported in item (a) of sub- block 3.2 of schedule AS 1.0 and in case of difference suitable remarks are given.
- (ii) <u>Col.2</u>: This item is not to be filled in at the field.
- (iii) <u>Col. 3:</u> Check that the standard percentage of constituent crop applicable to the district as a whole is given correctly in those states where recognised mixtures of crops are available and in the remaining states where no recognised mixtures are prevalent, this column will remain blank.
- (iv) <u>Col. 4,5&6:</u> See that col. 4,5 &6 are filled in properly. Ensure that area figures for all utilisations (crop/crop mixture/Land uses) are given in the highest local unit of area after rounding them off. Also when the entries for col. 4 & 5 are identical, it may be ensured that both the columns (i.e. col. 4,5) are filled in with data instead of giving a remarks like 'entries are the same 'or 'Ditto' or 'do' etc.
- (v) Item 2: See that the source of information for col.5, block 3 is invariably given.

7.3.4 Special Scrutiny points regarding blocks 2 and 3 of Schedule A.S 1.1

- (A) The actual position of the work done in respect of aggregation and submission of crop / land use abstract by the patwari is given in block 2. The work in this respect has been divided into three stages: (i) completion of Girdawari, (ii) aggregation in Khasraregister of working sheets (called chitha/charkhana etc.) for page totals and (iii) submission of crop/land use abstract to the higher authorities. The position regarding each stage of work is given against items 1(a) to 1(c) respectively.
- (B) It may not be possible to record the entries in some of the cols. 4, 5 and 6 of block 3 due to incompleteness of data, see that the position in different situations is as follows:
- (i) If Girdawari has been completed, aggregation has been done and also TRS Statement has been submitted (i.e. code 1, 1 and 2 against items (1 (a), (b) & (c) respectively of block 2), see that entries are there in cols. 4, 5 & 6 of block 3.
- (ii) If Girdawari has been completed and aggregation has been done but TRS Statement has not been submitted (i.e. code 1, 1 and 3 against item 1(a), (b) and (c) of block 2), see that there is no entry in col. (5) of block 3.
- (iii) If Girdawari has been completed, aggregation has not been done, but TRS statement has been submitted without completion of aggregation work as per block 2 (i.e. code 1, 2 & 1 against item 1 (a), (b) & (c) respectively of block 2), see that there is no entry in col. 4 of block 3.
- (iv) If Girdawari has been completed, but the work of aggregation and submission of TRS statement have not been completed (i.e. code 1, 2 & 3 is against item 1(a), (b) & (c) of block 2), see that entries are given in col. 6 of block 3 only and no entries are given in cols. 4 and 5.
- (v) If Girdawari has not been completed, aggregation has not been done but TRS statement has been submitted (i.e. code 2, 2 & 1 against items 1 (a), (b) & (c) of block 2) see that entries in col. (5) only of block 3 is there and no entries are given in cols. 4 and 6.
- (vi) If Girdawari has not been done, aggregation has not been done and TRS statement has not been submitted (i.e. code 2, 2 & 3 against items 1 (a), (b) & (c) of block 2), see that there is no entry in any column in block 3.

7.3.5 Block 4:

Ensure that all the entries in this block are recorded before the schedules are dispatched to FOD Hqrs. Faridabad /SASA. Assistant Director /Officer-in charge, SRO / Scrutiny Officer of SASA must invariably put the date of scrutiny and despatch and his signatures. In case, the field work is done in more than one visit, see that date of each visit is also recorded against item (i).

7.4 <u>SCRUTINY OF SCHEDULE AS 2.0</u> (Sample check on crop cutting experiments.)

- **7.4.1 (i)** General: Assistant Director / Officer-in charge, SRO /Scrutiny officer of SASA should ensure that the coding of items like State, District is done correctly.
- (ii) <u>Season</u>: See that the name of the season is properly recorded in the space provided in the schedule. The name must be in the standard form used in the State. Moreover as the nomenclature of crop Paddy in Tamil Nadu State is as Paddy (Kar / Kurawai / Sonawari), Paddy (Samba / Thaladi / Pishanam) and Paddy (Navarai / Kodai), it is appropriate to classify the same with reference to the corresponding season rather than calling it as a whole year crop. Accordingly, for Tamil Nadu state only, the name of the seasons and their code in Sch. AS 2.0 may be reported as under.

Crop Season (code)

(i)Paddy (Kar/Kurawai/Sonawari)	Early Kharif (2)
---------------------------------	------------------

- (ii)Paddy (Samba/Thaladi/Pishanam)-----Late Kharif (3)
- (iii)Paddy (Navarai/Kodai)------Summer (5)
- (iv)All other specified crops------Whole Year (6)

7.4.2 Block 1:

- (i) <u>Item 1 to 5:</u> Compare the entries with the list of selected sample villages. If the name of the village does not tally with that recorded in the list, see if there are any remarks about the correction of the name of the village. In case of substitution of the sample village, it is necessary that name of original selected village is recorded against item 5(a) and that it tallies with the name given in the sample list.
- (ii) <u>Item 7:</u> Check the date of inspection and that proper code is recorded for stage of inspection in the space provided. If only one of the experiments planned has been inspected on the particular date of inspection a cross (x) mark must be put under the experiment which is not inspected. If the code for item 7 (b) is 2, then the entry against 7(c) should relate to the reasons for missed experiment. If, however, the code in 7(b) is 3, the corresponding code should relate to the reasons for loss of experiments as given at the bottom of page-1 of schedule A.S. 2.0.
- (iii) <u>Item 8:</u> See that the item is filled-in properly. If the experiment(s) was/were conducted by the primary worker to whom these were entrusted, cross mark (x) will be put in item 8(a) (ii) to 8(c) (ii).

7.4.3 Block: 2:

Item 6: Generally it has been observed that a cross mark is given for no mistake. Officer of NSSO/Scrutiny Officer of SASA should ensure that in case no mistake was noticed, code for item 6 should be 0 and not (x). If any mistake is noticed but as per entry for item 7 it is not rectified, see that reasons for not rectifying the mistake are given in remarks block.

7.4.4 <u>Block-3</u>: Block 3 is to be filled in both for harvest and post harvest stage of inspection. Check that the selection of random coordinates is consistent with the dimensions of the field as per the procedure for CES in the State. See that the random coordinates used are of the same digit and also less than or equal to the corrected length and breadth, (corrected length and breadth of the field is obtained after deducting the number equivalent to length and breadth of plot from actual length and breadth respectively). See that in case of row crops, the length/breadth of the experimental field are given in meters upto two places of decimals in block 10, wherever it is specified in number of rows in block 3.

7.4.5 Block 4:

See that this block is filled in only for harvest stage inspection and/or for post harvest stage only if marks of the pegs are available. If as per col. 2/3 any mistake is noticed corresponding code should have been given in cols. 4/5. In case mistake noticed is not rectified (as per cols. 6/7) necessary reasons should have been given in remarks block.

7.4.6 Block 5.1

- (i) <u>Item 1</u>: If the inspection is at harvest stage, the entry in item 1(b) will be the same as entry in item 7(a) of block 1. See that the time lag between harvesting, threshing and Ist weighment is as per State instructions. In case the date of threshing and Ist weighment differed with actual date of harvest see that it is duly supervised in the field and the schedule is despatched only after completing the entries in 3(i) & (ii) in confirmation with State instructions.
- (ii) <u>Item 2:</u> See that the entries, both for shape and size, are given and are in conformity with the State instructions. For variable plots, size (actual) and dimensions must be recorded.
- (iii) <u>Item 3:</u> See that the description of produce weighed conforms to State instructions viz. fibres/ grains/cobs/ earheads /pods etc. in item 3(i). See that weight of produce is given in kgs upto 3 places of decimals in item 3(ii). Item 3(iii) is not to be filled in by Senior Statistical Officer /State Supervisor in the field.
- **7.4.7** Block 6: See that codes are properly recorded and no item is left blank.
- (i) In case of experiments checked at post harvest stage entries regarding use of equipment are to be made on the basis of enquiry. See that necessary entries are made accordingly.
- (ii) See that in case of code 3, 7 and 9 against any of the items proper remark is given as to how the experiment was conducted without the equipment.

- (iii) In case of zero yield, the items such as balance and weights are not required to be used. See that code 4 or 8 is given with remarks.
- (iv) In case of experiments where spring balance is used, a cross (x) is to be put against weight.
- **7.4.8** <u>Block 7:</u> In case of harvest stage inspection, check that only item 1 is filled in whereas for post harvest stage inspection, all the items are filled up. Ensure that the weight in item 2(ii) is consistent with the weight recorded in item 2(ii) (b).

7.4.9 Block 8:

- (i) See that the entries in this block are recorded for all stages of inspection viz. harvest, post harvest or lost.
- (ii) <u>Item 1</u>: See that in case of code 1 in item 1(i) name and strain number of seed is recorded in item 1(ii). In case in item 1(iii), if the rate of application is considered as abnormal, seek clarification from the concerned Senior Statistical Officer /State Supervisor. Ensure that the entries recorded under "Kh." are properly filled in along with the relevant explanation in footnote if required. See that in the case of Sugarcane crop, the seed rate is given in item 1(iii) in quintal /ha. and the unit corrected accordingly in col.1.
- (iii) <u>Item 2</u>: If the entry in item 2(i) is 'yes' (code 1) see that information on number of irrigation and source of irrigation is given in item 2(ii) and 2(iii) respectively. In case irrigation is done through more than one source, see that codes for all the sources are given by putting a comma in between them. Ensure that the entries under 'kh' are properly filled in along with the relevant explanation in foot note, if required.
- (iv) <u>Item 3</u>: If the information recorded against item 3(i) is 'yes' (code 1) see that the name of the fertilizer and quantity is invariably given in item 3(ii) See that the constituents are consistent with the name of the fertilizers. Ensure that the quantity recorded is in Kg. per hectares. In case of abnormally high or low quantity used, seek clarification from the field. Also check that constituents recorded in item 3 (ii) (c) are consistent with the name of the fertilizer recorded in item 3 (ii) (a).
- (v) <u>Item 4:</u> If entry in item 4(i) is yes (code 1) see that type of manure is given in item 4(ii).
- (vi) <u>Item 5:</u> If entry in item 5(i) is yes (code 1) see that measures adopted are specified in item 5(ii).

7.4.10 Block 9:

(a) **Sub- Block 9.1:**

See that all the entries are recorded clearly. Check that the information is broadly consistent with the weight of produce recorded in item 3 of block 5.1 for harvest stage inspection and item 2 of block 7 for post harvest stage inspection and inter-consistency within the block is also maintained.

(b) Sub-Block 9.2

- (i) <u>Col. 2</u>. Check that the area of the field is broadly consistent with the dimensions of the field recorded in block 3. Consistency of the area of the field may be checked with the entry against item 4 of block 2 for the corresponding experiments keeping in view the single/multiple patch/patches and manner of apportioning the area to the specified crop as per State procedure.
- (ii) <u>Col.3</u>: See that the name of the experimental crop is written first and that of other crops sown in mixture follows.
- (iii) <u>Cols. 4 & 5:</u> Ensure that the percentage for the constituents crops is calculated in accordance with the procedure laid down in State CES instructions. In the absence of this, the procedure laid down at page 68 (para 5.12.9 and 5.12.10) of this book is to be followed and add upto 100.

7.4.11 Block 10:

- (i) See that the sketches are consistent with the entries in block 3 and item 2 of block 5.1.
- (ii) See that in case of row crops, both the lengths, breadths and diagonals of the experimental field are given in meters upto 2 places of decimal wherever it is specified in number of rows in block 3.
- **7.4.12** <u>Block 11:</u> See that the remarks are clear and to the point and that they explain reasons for situations like mistakes noticed but not rectified as in block 2, item 7 or in block 5.1,etc.

7.4.13 Block 12:

See that all the items are filled-in, scrutinised and signed by AD / Officer-in charge, SRO /Scrutiny Officer of SASA in the appropriate space, and the date of sample check is consistent with item 7(a) of block 1 and item 1 of block 5.1.

7.4.14 General:

It must however be noted that for the provision in the state CES manual, the followin points may be followed:

- (a) the experimental crop has not germinated or has failed but its area is recorded in Record of Rights- Tenancy and Crop inspection (RTC)/ concerned records by village Accountant / P.W. Pahani (RTC) is a very important revenue record, as it contains details of land such as owners' details, area, assessment, water rate, soil type, nature of possession of the Land, Liabilities, Tenancy and Crops grown, etc.
- (b) the field growing the experimental crop is grazed by cattle or damaged partially or completely by wild life, or
- (c) the experimental crop is affected by pests /diseases / heavy rainfall/ inadequate rainfall, even then-

the field must be considered for selection for conduct of crop cutting expts. and yield obtained from the plot must be recorded. In case the experimental crop is damaged completely, then yield must be recorded as zero.

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ANNEXURE - I

LIST OF CROPS

PADDY
JOWAR
JOWAR
BAJRA
POTATO
SWEET POTATO
TAPIOCA
SUGARCANE
TOBACCO
MAIZE
RAGI
WHEAT
BARLEY

OTHER TUBER CROPS (SPECIFY) KODON-KUTKI

SMALL MILLETS (SPECIFY)

GRAM

CHILLIES

TUR (ARHAR/RED GRAM)

URD (BLACK GRAM)

TURMERIC

MOONG (GREEN GRAM) OTHER CONDIMENTS AND SPICES (SPECIFY)

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PEAS MOTH

COCONUT KHESARI (LAKH / TEORA) ARECANUT OTHER PULSES (SPECIFY)

CARDAMOM BANANA
GROUNDNUT PAPAYA
SESAMUM (TIL/GINGELLY) CASHEWNUT

LINSEED OPIUM CASTOR INDIGO

SOYABEAN OTHER PLANTATION CROPS (SPECIFY)

RAPE & MUSTARD NIGER

ORCHARDS SAFFLOWER

MIXED ORCHARDS OTHER OILSEEDS (SPECIFY)

COTTON JUTE

MESTA SUN - HEMP

OTHER FIBRES (SPECIFY)

ANNEXURE - II

DEFINITION OF NINEFOLD CLASSIFICATION OF AREA ADOPTED BY THE MINISTRY OF AGRICULTURE

ITEM	DEFINITION
1. Forests	Area under forest, includes all lands classed as forests under any legal enactment dealing with forests or administered as forests, whether state owned or private, and whether weeded or maintained as potential forest land. The area of crop raised in the forest and grazing lands or areas open for grazing within the forests should remain included under the forest area.
Area not available for cultivation	
2. Area under non-agricultural uses	This stands for all lands occupied by buildings, roads, and railways or under water, i.e. river and canals and other land put to uses other than agriculture.
3. Barren and unculturable land	This covers all barren and unculturable land like mountains, deserts, etc. Land which cannot be brought under cultivation unless at a high cost shall be classed as unculturable whether such land is in isolated blocks or within cultivated holdings
Other uncultivated land excluding Current fallow	
4. Permanent pastures and other grazing lands.	These cover all grazing lands, whether they are permanent pastures and meadows or not. Village common grazing lands shall be included under this head.
5. Miscellaneous tree crops and groves not included in the area sown6. Culturable waste	Under this class is included all cultivable land which is not included under "net area sown" but is put to some agricultural use. Lands under Casurina trees, thatching Grass, bamboo bushes and other groves for Fuel etc. which are not included under orchards shall be classed under this category. These include all lands available for

cultivation whether not taken up for cultivation or taken up for cultivation once but not cultivated during the current year and last five years or more in succession. Such lands may be either fallow or covered with shrubs and jungles which are not put to any use. They may be assessed or unassessed and may be in isolated blocks or within cultivated holdings. Lands once cultivated but not cultivated for five years in succession shall also be included in this category at the end of the five years.

Fallow lands

7. Fallow land other than current fallow.

This implies all lands which were taken up for cultivation but are temporarily out of cultivation for a period not less than a year and not more than five years. The reasons for keeping a land fallow may be one of the following:-

- (1) poverty of cultivators
- (2) inadequate supply of water
- (3) malarial climate.
- (4) silting of canal and rivers and
- (5) unremunerative nature of farming.

This class comprises cropped areas which are kept fallow during the current year. For example if any, seedling area is not cropped again in the same year it may be treated as current fallow.

This represents the area sown with crops and orchards counting areas sown more than once in the same year only once.

The latest figure of geographical area for the State/ Union Territory/ Districts as furnished by Central Statistical organisation based on the Suveyor General of India's data should only be used.

8. Current fallow

9. Net area sown

Geographical area

					ANNEXURE
केन्द्रीय/C	entral	1	क्रम सं∘ ि	प्र∘वि॰	
राज्यीय/St	ate	2	Serial No.	E.P.	
1 N = 1 D				ट्रीय प्रतिदर्श सर्वेक्षण कार्यालय	off position and the second
				NATIONAL SAMPLE SURVEY OFFICE परिगणना की प्रतिदर्श जांच 2011	
मौसम/Sea				neck on Enumeration of area 2011	
संकेतांक/C					मूल प्रति/द्वितीय प्रति/तृतीय प्र
सकताक/С	ode				Original/duplicate/triplica
	खण्ड ((1): ग्राम की प	हचान तथा अन्य विवरण/BI	ock (1): Identification and other particulars of	village
1. राज्य/State	e	4. 1	गम/अन्वेषक अंचल*	5. पटवारी का विवरण/Patwari's particulars	
2. जिला/Dis	trict	1	/illage/Invt. Zone*	5.1 पटवारी का नाम/Patwari's Name	
3. तहसील	(अ) नाम	(3	अ) नाम	5.2 पटवारी का मुख्यालय/Patwari's Headqu	arters
Tehsil	(a) Name) Name	6. पटवारी के हल्के में ग्रामों की संख्या	(अ) कुल
	(ब) स्तर नं॰	(ब) चयन क्रम	Number of villages in the	(a) Total
	(b) Stratum	(b	Order of Selection	patwari's circle	(ब) सा.सू.यो.
	No.				(b) TRS
		the second secon		विवरण/Cadastral survey particulars	
	तदर्श ग्राम का भूकरीय			 क्या पटवारी के पास नक्शा उपलब्ध है? 	
	:1, अंशत:2, सर्वे			Is map available with patwari? (yes-1,	no-0)
	er the sample village w				
	-1, partially—2, not 1 के समक्ष पूर्णत:/अं	The same of the sa		9. यदि (8) के समक्ष हां तो क्या नक्शा उ	min #2
	केस वर्ष अद्यतन किर		ना श्तत	(हाँ-1, नहीं-0)	वयागा हर
	/partially against 7.1		map	If yes against (8), is it usable ? (yes-1,	no-0)
	st up-dated			The second second second second second	
10. गिरदाव	री सम्बन्धी विवरण/Gi	rdawari particul	ars	11. सा.स्.यो./कृ.सां.प्र.अ.स्था.विवरण TRS/E	ARAS Particulars
-	की नियत तिथि			(क) सा.सू.यो./कृ.सां.प्र.अ.स्था. फसल विवरण	
	ate for completion			भेजने की नियम तिथि	
(ब) सम्पूर्ति	की स्थिति (पूर्णतः—।	1, अंशत:—2, अ	भी आरंभ नहीं हुआ—3)	(a) due date for submission of TRS/EAR/ (ख) क्या सा.सु.यो./क्.सां.प्र.अ.स्था. फसल वि	
	of completion (fully—		not yet started—3)	उच्चाधिकारियों को प्रस्तुत किया गया? (हां	
	पूरित हो तो वास्तविक pleted fully, actual dat			(b) Is TRS/EARAS crop statement submi	tted to higher authorities?
	म्पृरित नहीं तो उसका		क में)	(yes-1, not yet due-2, no-0)	
	ompleted reason there			(ग) यदि हां, प्रस्तुत करने की वास्तविक तिथि (c) if yes, actual date of submission	
	विरो के लिए अद्यतन फाम			(घ) क्या सूचना मान्य फार्म में भेजी गयी (हां-।	. नहीं-0)
	r latest form for gird			(d) whether TRS/EARAS statement was s	submitted
	री का विवरण किस तफार्ममें—1, कच्चाप			in standard form (yes-1, No-0) (ङ) क्या फसल क्षेत्रफल विवरण की प्रतिलिपि	
		hi4 H—0)			पदवारा के पास
(नियमि		•		रखी गई है (हा-1 नहीं-0)	
(नियमि (f) record	of girdawari kept in r form—1, Katcha forn	m—0)		रखी गई है (हाँ-1, नहीं-0) (c) whether duplicate copy of TRS/EARA statement is kept with patwari (yes-1,	S crop

(13.1) वरिष्ठ सांख्यिको अधिकारी/राज्य पर्यवेक्षक द्वारा पूरा करने के लिए
(1a.1) To be filled in by Senior Statistical Officer/State Supervisor
(1a.2) केन्द्रीय/राज्य उच्चाधिकारी द्वारा भरने के लिए
(1a.2) To be filled in by Central/State higher officer
(1a.2) To be filled in by Central/State higher officer

उच्च निरीक्षण अधिकारी का नाम तिथि/date of (i) अभिलेख उपलब्ध न होने से राज्य पर्यवेक्षक का नाम/ Name of higher Inspecting Officer (i) मौके पर निरीक्षण, यदि हो 'निरीक्षण दौरा निष्फल Name of Sr. Stat. Officer/ inspection on spot, if any infructuous visits, if any State Supervisor (ii) अनुसूचियों की प्राप्ति as records not available पदनाम/designation (ii) आरम्भ पदनाम/designation Receipt of schedules commencement (iii) संवीक्षा मुख्यालय/headquarters (iii) सम्पूर्ति Scrutiny completion (iv) क्षे.सं.प्र./रा.कृ.सां.प्रा. तिथि सहित हस्ताक्षर (iv) अनुसूचियों का प्रस्तुतीकरण को प्रेषण तिथि सहित हस्ताक्षर Signature with date despatch to (FOD)/SASA submission of schedules Signature with date

@ভত্ত 1.10 (ব)/Block 1.10 (d)

अन्य कार्यों में व्यस्त—1, सा.स्.यो. कार्यक्रम समय पर सूचित नहीं किया गया—2, अन्य (निर्दिष्ट करें)—9 Occupied with other work—1, TRS programme not intimated in time—2, other (Specify)—9

*मात्र केरल राज्य के लिए/For Kerala State only

मोटी लाइन वाले खाने मुख्यालय फरीदाबाद में भरे जाने हैं। Thick line boxes are to be filled in at Hqrs. Faridabad. खण्ड : (।ब) मुख्यालय फरीदाबाद में भरे जाने हेतु: Block: (1b) To be filled in at Hqrs. office-Faridabad:

	अधिकारी/Officials	दि	नांक/Date(s)			क्या संवीक्षा
पदनाम Designation	नाम Name	प्राप्ति Receipt	संवीक्षा Scrutiny	दर्ज, संकेतांक रूपान्तरण इत्यादि Posting, Coding, conver- sion etc.	दर्ज संकेतांक इत्यादि संवीक्षा की जांच Checking of Coding Conver- sion Scrutiny etc.	टिप्पणी भेजी गर्य (हां-1, नहीं-2) whether Scrutiny note issued (Yes-1, No-2)
1	- 2	3	4	5	6	7
1. क. सां. अधि. Jr. Statistical Officer						
2. व. सां. अधिकारी Sr. Statistical Officer			THE THE W			
3. स. निदेशक Asstt. Director	The second of the second					S AND SHE ALL

खण्ड : (1स) पर्यवेक्षक द्वारा भरा जाना

Block: (1C) To be filled by field Supervisor

Remarks/अभियुक्तियां

		3					
		खण्ड (2) : प्रतिदर्श		14 17			
		Block (2) : Selection	n of Sample clusters				
	हम/सर्वेक्षण सं. t Serial/Survey	2. समायोजन Adjusted	3. अन्तराल (अ) Interval (I)			क प्रारम्भ (या) om start (R)	
समुच्चय	आधारित क्रम/सर्वेक्षण संव	ब्या					
संख्या	के चयन के लिए प्रयुक्त स	ांख्या आधारित क्रम/सर्वेक्षण सं	ख्या	चयनित स	मुच्चय के क्रम	/सर्वेक्षण संख्या	
Cluster	Number used for	Basic Serial / Survey no	umber			in the Selecte	d cluste
number	selection of basic serial / survey numb		पहला	दूसरा	तीसरा	चौथा	पांचवा
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4							
(i) (ii)	units of area in village re		(i)				हैक्टेयर
(iii)			(iii)				हैक्टेयर
				H 19 19 19 1			
3.2 भौगोलिक Geographic			स्थानीय इक in local u			टेयर में (0.00) ha.(0.00)	
(अ) ग्राम (a) village							
	अंचल (मात्र केरल राज्य के वि gator Zone (for Kerala S						
(ोली भूमि का क्षेत्रफल सर्वेक्षण संख्याओं की संख्या भी	कोष्ठक में दें)					
	rea under wet land no. of survey nos. may als	o be given in parentheses)			100		
(ii) स्	खी भूमि का क्षेत्रफल						

(सर्वेक्षण संख्याओं की संख्या भी कोष्ठक में दें)

(ii) Area under dry land (no. of survey nos. may also be given in parentheses)

मुख्यालय फरीदाबाद में भरे जाने हेतु to be filled in at Hrs. office Faridabad	irrigation code क्रिक्म शुह चित्र प्राप्त	15										
बाद में भर्रे Irs. office	क्षेत्रहं संकेतांक.	14										
मुख्यालय फरीदाबाद में भरे जाने हेतु be filled in at Hrs. office Faridat	कांक्स संकेतांक Variety	13										
मुख्या to be fill	कारका संकेताक crop code	12										
	स्थानीय इकाइयों में क्षेत्रफल area in local units	11										
के अनुसा patwari	सिंचाई (सिंचित-1, अधि-2) [पांडुation (1-1, Ul-2)	10										
(ब) पटवारी के अनुसार (b) as per patwari	बीज (अ. उ-1, स्था-2) Seed (Hy-1, L-2)	6										
	फसल/फसल मिश्रण/गैर फसल उपयोग@ Crop/crop mixture/ non crop use@	8	समुच्चय सं Cluster No.									
16	स्थानीय इकाइयों में क्षेत्रफल area in local units	7	ō	0								
अनुसार visor	सिंचाई (सिंचित-1, अधि-2) Irrigation (I-1, UI-2)	9								The state of the s		
(अ) पर्यवेक्षक के अनुसार (a) as per supervisor	बीज (अ. उ-1, स्था-2) Seed (Hy-1, L-2)	5										
(अ) पर (a) as į	फसल/फसल मिश्रण/गैर फसल उपयोग@ Crop/crop mixture/ non crop use@	4						和声				
	पेच संख्या patch No.	. 3										
स्थानीय इकाइयों में भौगोलिक क्षेत्रफल	geographical area in local units	2										
क्रम/सर्वेक्षण संख्या	Serial/Survey No.	-	N. FG									

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(a)स्तम्म (4)/(8) Col. (4)/(8) (1) मिश्रण के लिए फसलों के नाम एक-दूसरे के नीचे यह (+) चिह्न अंकित करते हुए लिखिए। (1) मिश्रण के लिए फसलों के नाम एक-दूसरे के नीचे यह (+) चिह्न अंकित करते हुए लिखिए। (1) For crop mixture write the name of crops one below other with (+) sign in between

(2) गैर-फसल उपयोग के लिए स्तम्भ (5), (6), (9) और (10) में (x) चिह्न अकित करें। (2) In case of non-crop utilisation put cross (x) against columns (5), (6), (6), & & (10)

प्रत्येक समुच्चय के लिए अलग पना इस्तेमाल करें। Use separate sheet for each cluster.

bad	ctror code	15	Barrer Gall										10.34	
जाने हेतु Faridal	ehoo noilegini कांत्रकंम श्रह		30.15									7/2		
ाद में भरे s. office	कांठर्कम् ड्राष्ट्रांत्र	14												
मुख्यालय फरीदाबाद में भरे जाने हेतु to be filled in at Hrs. office Faridabad	कांत्रक्ष स्टब्से अवाश्य youde	13												
मुख्य to be fil	कार्कम् सम्म eboo qoro	12							21.04					-
	स्थानीय इकाइयों में क्षेत्रफल area in local units	11	7							,	•			
के अनुसा patwari	सिंचाई (सिंचित । , अभि - 2) (S-IU , I-I) noiseginl	10										7		
(ब) पटवारी के अनुसार (b) as per patwari	बीज (अ. उ-1, स्था-2) Seed (Hy-1, L-2)	6								i .				
(e)	फसल/फसल मिश्रण/गैर फसल उपयोग@ Crop/crop mixture/ non crop use@	8	समुच्चय सं॰ Cluster No.	iley The si	(N=)							10.00		
	स्थानीय इकाइयों में क्षेत्रफल area in local units	7	D				*							
अनुसार visor	(१-धीरः ,। -तनिसी (१-१) (१-१), (१-१) moissginl	9							1					
अ) पर्यवेक्षक के अनुसा (a) as per supervisor	बीज (अ. उ-1, स्था-2) Seed (Hy-1, L-2)	5												
(अ) पर्यवेक्षक के अनुसार (a) as per supervisor	फसल/फसल मिश्रण/गैर फसल उपयोग@ Crop/crop mixture/ non crop use@	4		A STATE OF THE STA	- 11 - 11 - 12 - 13 - 13 - 13 - 13 - 13 - 13 - 13 - 13						1.			
	पैच संख्या patch No.	3							100					
स्थानीय इकाइयों में भौगोलिक क्षेत्रफल	geographical area in local units	2					*	* 54,170			0.519			
क्रम्/सर्वेक्षण संख्या	Serial/Survey No.	1												

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() सिक्षण के लिए फसलों के नाम एक-दूसरे के नीचे यह (+) चिह्न अंकित करते हुए लिखिए।

(1) For crop mixture write the name of crops one below other with (+) sign in between

गैर-फसल उपयोग के लिए स्तम्भ (5), (6), (9) और (10) में (x) चिह्न अकित करें।
 In case of non-crop utilisation put cross (x) against columns (5), (6), (9) & (10)

प्रत्येक समुच्चय के लिए अलग पना इस्तेमाल करें।

Use separate sheet for each cluster.

to be filled in at Hrs. office Faridabad	be filled in at Hrs. office Faridabad		irrigation code	əboə noilsgini कांक्रिंम शह	oboo noilegini कांत्रकम त्रीह	oboo noingaini कांक्रिक डीह	oboo noisgini कांक्रिक प्रह	oboo noilegini कांत्रकार द्रीह	oboo noilegini कांत्रकार द्रीह	oboo noilegini कांत्रकार द्रीह	oboo noilegini कांत्रकार द्रीह	oboo noilegini कांत्रकार द्रीह	oboo noilegini कांत्रकार द्रीह	oboo noilegini कांत्रकार द्रीह	oboo noilegini कोर्क प्रह	oboo noileginii — क्रिक्स डीह	aboo noileginii — क्रिक्स डीह	oboo noileginii — — — — — — — — — — — — — — — — — —
filled in at Hrs. offic	filled in at Hrs. office		किस्म संकेताक Variety code	जिस्म संकेतांक Variety code मिंचाई संकेतांक	कांप्रकेताक Variety code कांप्रकेताक	कांप्रकेताक Spoo yisirey ट्र	कांप्रकेताक Variety code कांप्रकेताक	काम संकेतांक Variety code चित्रांहरे संकेतांक	काम संकेतांक Variety code चित्रांहरे संकेतांक	क्स संकेतांक Variety code ————————————————————————————————————	किस्म संकेतांक Variety code - सिंचाई संकेतांक	किस्म संकेतांक Variety code - सिंचाई संकेतांक	किस्म संकेतांक Variety code निवाई संकेतांक	किस्म संकेतांक Variety code निम्म संकेतांक	किस्म संकेतांक Variety code मिंचाई संकेतांक	किस्म संकेतांक Variety code	किस्म संकेतांक Variety code	किस्म संकेतांक Variety code मिंचाई संकेतांक
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ed (Hy-I, L-2) (सिचत-I, अभि-2) ation (I-I, UI-2)	ed (Hy-1, L-2) (संचित-1, अभि-2)) होह	01 6															
中田尚/ 中田尚 (日親町/引え 2) 中田尚 3年間 3年間 (日報 1) 日本田 3年間 (日本日 1) 日本田 1) 「日本日 1	बीय (अ. उ-१, स्था-२)	•	समञ्जय मंः	सम देवत से	Juster No.	Cluster No.	Cluster No.	Cluster No.	Cluster No.	Cluster No.	Cluster No.	Cluster No.	Cluster No.	Cluster No.	Cluster No.	Cluster No.	Cluster No.	Cluster No.
Seed (Hy-I, L-2) मिनाई (सिन्ति-1, अभि-2) Irrigation (I-1. UI-2) units and local	Seed (Hy-I, L-2) (सिंचाई (सिंचित-1, अभि-2) (प्रांचाव (सिंचित-1, प्रांचीय इस्मानीय इसमानीय इसम	·护] ,	प्रमास्त्रय में	Cluster No														
(3. उ-1, स्था-2) Seed (Hy-1, L-2) (सिन्दाई (सिन्दा-1, अभि-2) (LU-1) Irrigation (I-1)	2-(1, स्था-2) Seed (Hy-1, L-2) (प्रांची (मिन्नी), अभि-2) (Liugation (I-1, Ul-2)	5 班																
फसल/फसल मिश्रण/गैर फसल उपयोग@ h Crop/crop mixture/ non crop use@		4				THE RESERVE AND PROPERTY OF THE PERSON NAMED IN COLUMN TWO IS NOT THE PERSON NAMED IN TRANSPORT OF THE PERSON NAMED IN TRANSPORT NAMED IN TRANSPORT NAMED IN TRANSPORT NAMED IN TRANSPOR												
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(बोस्तम्भ (4)/(8) Col. (4)/(8) (1) मिश्रण के लिए फसलों के नाम एक. दूसरे के नीचे यह (+) चिह्न ऑकत करते हुए लिखिए।

(1) For crop mixture write the name of crops one below other with (+) sign in between

(2) गैर-फसल उपयोग के लिए स्तम्भ (5), (6), (9) और (10) में (x) चिह्न अकित करें। (2) În case of non-crop utilisation put cross (x) against columns (5), (6), (9) & (10)

प्रत्येक समुच्चय के लिए अलग पना इस्तेपाल करें। Use separate sheet for each cluster.

bad	error code	15										
जाने हेत् Farida	inigation code कांक्सि डोह	-		-	-							
ाद में भरे S. office	कांत्रकंस सम्म	4										
मुख्यालय फरीदाबाद में भरे जाने हेतु to be filled in at Hrs. office Faridabad	कार्क्स संकेतांक Variety code	13										
मुख्य to be fil	कांक्स संकताक crop code	12										
	स्थानीय इकाइयों में क्षेत्रफल area in local units	=										
हे अनुमा patwari	सिंचाई (सिंचित-1, अभि-2) (1-1) (1-1) (1-2)	01										
(ब) पटवारी के अनुसार (b) as per patwari	Seed (Hy-1, 1-2)	6										
(a)	The state of the s											×
	फसल/फसल मिश्रण/गैर फसल उपयोग@ Crop/crop mixturc/ non crop use@	00	समुच्चय संः Cluster No.			2011				•		
	स्थानीय इकाइयों में क्षेत्रफल area in local units	1	5									
अनुसार rvisor	भिचाई (मिनित-।, अपि-२) (६-१८, १८-१)	9										
(अ) पर्यवेक्षक के अनुसार (a) as per supervisor	बीज (अ. उ-1, स्था-2) Seed (Hy-1, L-2)	5										
(अ) पर्य (a) as j	फसल/फसल मिश्रण/गैर फसल उपयौग्	. 4										
	पैच संख्या patch No.	3										
H. M	geographical area in local units	2										
क्रम/सर्वेक्षण संख्या	Serial/Survey No	-										

		1									33	•							
367		-	200		4 0				1				T					Π	7
				+										17					
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	10					-		100 10				-		18.57	1000	1 E SE	-		-
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	41.0									N. T.								7	
		- 0.5		42-92	a profile												77 \$1 .105	30-1	
																	Williams	2011100	

@स्तम्म (4)/(8) Col. (4)/(8) (1) मिश्रण के लिए फसलों के नाम एक-दूसरे के नीचे यह (+) चिह्न अंकित करते हुए लिखिए। (1) For crop mixture write the name of crops one below other with (+) sign in between

(2) गैर-फसल उपयोग के लिए स्तम्भ (5), (6), (9) और (10) में (x) चिक्क अंकित करें।

(2) In case of non-crop utilisation put cross (x) against columns (5), (6), (9) & (10)

प्रत्येक समुच्चय के लिए अलग पना इस्तेमाल करें। Use separate sheet for each cluster.

चुने हुए क्रम/सर्वेक्षण संख्याओं की संख्या no. of selected serial/survey numbers फसलों के अन्तर्गत कुल क्षेत्रफल (0.00) हेक्टेयर Total area under crops (0.00) ha

ण्ड (4) : चयनित इ तर्गत कुल क्षेत्रफल					-	4							
ock (4): Total a ected Serial / Su			mixture / i	non-crop util	isations in		मुख्यालय फरीदा be filled in at F						
फसल /	RM2)		श्यानीय इकाइ area in the	यों में क्षेत्रफल local units			मानक इकाइयों में निबल क्षेत्रफल (0.00) हेक्टेयर Net area in standard units (0.00) ha.						
फसल मिश्रण / t फसल उपयोग@ crop / crop mixture / non crop use@		पर्यवेक्षक व as per su		पटवारी के अनुसार as per patwari		फसल + बीज संकेतांक crop + seed	पर्यवेक्षक व as per su		पटवारी के अनुसार as per patwari				
	मीज (असिंचित unirrigated	सिंचित irrigated	असिंचित unirrigated	सिंचित irrigated	code	असिंचित unirrigated	सिंचित irrigated	असिंचित unirrigated	सिंचित irrigated			
1	2	3	4	5	6	7	8	9	10	11			
7													
			The same same	August 1									
		- 1											
							7						
A mile													
		150	N										
		2 10					7.7						
							1.8						
योग TOTAL	T _x					x							

खण्ड 5: पटवारी द्वारा छूट गया/अगणित फसल क्षेत्रफलों का विवरण (केवल चयनित सर्वेक्षण संख्याओं में)

Block 5: Details of crop area missed / not accounted for by patwari (in selected survey numbers only)

खण्ड ५ (अ): भूमि अभिलेख में प्रावधान के अभाव के कारण पटवारी से छूट गया फसल क्षेत्रफल (केवल चयनित सर्वेक्षण संख्याओं में)

Block 5(a): Crop area missed by patwari for lack of provisions in Land Record Manual (in selected survey numbers only)

	क्षण संख्या urvey no.		फसल का of crop mis		फसलाधीन area und	er crop	स्बरूप संकेतांक @	crop for v	फसल जिसमें क्षेत्रफल दर्शाया गया है crop for which area is reported				
संख्या number	संकेतांक code	फसल crop	अ.उ1 स्था2 Hy—1 L—2	फसल संकेतांक crop code	स्थानीय इकाइयों में in local units	हेक्टेयर (0.00) में in (0.00) ha.	type code@	फसल crop	अ.उ1 स्था2 Hy—1 L—2	फसल संकेतांक crop code			
1	2	3	4	5	6	7	8	9	10	11			
						The second second	N./						
							Later						
								1 3 3 3					

@ खण्ड 5(अ) स्तम्भ 8 : ग्राम फसलों में उगाई गई फसलों तथा जो भूमि अभिलेख के अनुरूप फसल के अन्तर्गत दर्शायी गई हो-1 कम संघटक के रूप में बोई गई फसलें -2 अपरचित क्षेत्रों में अथवा सरकारी भूमि का अतिक्रमण कर उगाई गई फसलें-3

@ Block 5(a) col. 8: Crops grown in village site and not accounted for as per the land records—1 Crops sown as minor constituents—2, Crops grown in areas newly formed or in govt. land by encroachment—3 Other reasons—(specify)—9

खण्ड 5 (ब): सरकारी मौसमों के मध्य बोई गई तथा काटी गई और पटवारी से छूट गई अल्पावधि फसलें (केवल चयनित सर्वेक्षण संख्याओं में) Block 5(b): Short duration crops sown and harvested in between official seasons and missed by Patwari (in selected survey numbers only)

	क्षण संख्या irvey no.		ाई फसल का न e of crop misse			धीन क्षेत्रफल under crop	मास संकेतांक month code*		
संख्या number	संकेतांक code	फसल crop	अ.उ1 स्था2 Hy-1 L-2	फसल संकेतांक crop code	स्थानीय इकाइयों में in local units	हेक्टेयर (0.00) में in (0.00) ha.	बुवाई संकेतांक sowing code	फसल कटाई संकेतांक harvesting code	
1	2	3	4	5	6	7	8	9	
						医 1 节 1 不 英			
la de									
		A delication				10/62/32			
						7.35			
			Title a		Table 12	LAID BOOK			
		is unit				OCC 2			

(6.3) चालू मौसम में सा.सू.यो. के अन्तर्गत पूरे ग्राम में हेक्टेयरों में (0.00) 压as per TRS statement for current season 15 in (0.00) ha for the village as a whole असिं 14 स्थानीय इकाइयों में 压 -13 in local units 新三 12 年 -हेक्टेयर में (0.00) in (0.00) ha In the village as a whole (6.2) सम्पूर्ण ग्राम में असिं 10 गत वर्ष (201 -1) के तदनुरूपी मौसम की अविध में during the corresponding season of the last year (201 स्थानीय इकाइयों में in local units 年 -6 असि: 00 हेक्टेयर में (0.00) in (0.00) ha 连一 1 (6.1) चयनित क्रम/सर्वेक्षण संख्याओं में In the selected SI/Survey number असि 9 ग्राम अभिलेखानुसार फसल/फसल मिश्रण के अन्तर्गत क्षेत्रफल Area under crop/crop mixture as per village record स्थानीय इकाइयों में in local units 连一 5 असि 4 फसल संकेतांक Crop Name of crop / crop mixture 3 फसल/फसल मिश्रण का नाम 34.3. 1, स्था.-2 Hy-1, L-2 0 खण्ड (6) Block (6) फसल Crop

क् मा । 0 A.S. I.0 खण्ड (7): यदि गांव में कोई मान्य फसल मिश्रण हो तो उसका व्यौरा Block (7): Details of recognised crop mixtures, if any, in the village

		संघटक फसलों का प्रतिशत निवृतन percentage allocation to constituent crops							
मान्य मिश्रण का नाम name of the recognised crop mixture	अनुभाजन किस स्तर पर किया गया level at which apportioning is done	फसल crop	प्रतिशत Percent	फसल crop	प्रतिशत Percent	फसल crop	प्रतिशत Percer		
1	2	3	4	' 5	6	7	8		

बण्ड (8): गत कृषि वर्ष (201.... 1....) की अवधि में नौस्तरीय वर्गीकरण के अनुसार ग्राम का क्षेत्रफल (वर्ष के प्रथम मौसम में ही भरा जाए) Block (8): Area in the village as per ninefold classification during the last agriculture year (201.....1....) (to be filled in the first season only)

क्रम सं॰ Serial no.	भूमि वर्गीकरण land classification	क्षेत्रफल स्थानीय इकाइयों में area in local units	क्षेत्रफल मानक इकाइयों में 0.00 हेक्टेयर area in standard units (0.00 ha)
1	2	3	. 4
1.	वन/forest		
2.	गैर-कृषि उपयोग में भूमि का क्षेत्रफल/area under non-agricultural uses		
3.	बंजर तथा उष्ण भूमि/barren and unculturable land		
4.	स्थायी एवं अन्य चारागाहें/permanent pastures and other grazing lands	The state of the s	
5.	विविध वृक्ष फसलें तथा वृक्ष कुंज जो बोए गए निवल क्षेत्रफल में सम्मिलित नहीं हैं miscellaneous trees crops and groves not included in the net area sown		
6.	कृष्य खाली/culturable waste		
7.	वर्तमान पड़ती के अलावा अन्य पड़ती fallow land other than current fallow		
8.	चालू पड़ती/current fallows		
9.	बोया गया निवल क्षेत्रफल/net area sown		
	योग/Total		

		The state of the s		
केन्द्रीय/CENTRAL	। क्रम संख्या	प्रयोगों की संख	आ 1	
	Serial No			
राज्यीय/STATE	S	ननुसूची क्॰ सां॰ 2.0 : फसल कटाई प्रयोगों की प्रतिदर्श ichedule A.S. 2.0 : Sample Check on Crop	l Sample Survey Office मौसम/Season र्ग जांच फसल/Crop Cutting Experiments	CATE TE
(1) प्रतिदर्श ग्राम की प	हचान तथा अन्य विवर	ण/Identification and other particulars of samp	ole village	
 राज्य/State जिला/District 			5. (अ) मूलत: चयनित ग्राम/अन्वेषक अंचल@ का नाम यदि प्रतिस्थापित हो (a) Name of originally selected	
3. तहसील/Tehsil			village / Invt. zone@, if substit (ब) प्रतिस्थापन कारण (संकेतांक)* (b) Reason for substitution (code)*	uted
4. (अ) ग्राम/अन्वेषक (a) Name of v (ब) चयन क्रम (b) Order of s	illage/Invt. zones@		(b) Reason for Substitution (code)* 6. उच्चतम क्रम/सर्वेक्षण संख्या Highest serial/survey no.	
7. निरीक्षण का विवरण	I/Inspection particul	ars	प्रयोग-I/exptI	प्रयोग-II/exptII
(b) State (harvest (स) प्रयोग के छूटने **	न्यई उपरान्त−2, क्षति−3 -1, post-harvest-2,	lost-3) तांक)	mary worker's particulars	
8. प्राथमिक कर्मचारी का Primary worker's		(i) प्राथमिक कर्मचारी जिसे काम सौंपा गया P.W. entrusted with experiment	(ii) प्राथमिक कर्मचारी जिसने प्रयोगों का संचालन [यदि मद (i) से भिन्न हो] P.W. who conducted the expt. (s)[if	
(ঞ) নাম (a) Name				
(ৰ) पदनाम (b) Designation			Market Lawrence	
(ম) प्रशिक्षण की तिशि (c) Date of traini	ng (month and year			
1.5(萬) * प्रतिस्थापन यदि मद 5 (b) * no subs in case of 1.7(स) ** कटाई की पर नहीं प्र (c) ** date of s village i 1.7(स) † क्षक ने त के पुन: स्थ	नहीं-0, फसल बोई ना (ब) में '0' हो तो 5 (titution-0, crop not of code '0' against i तिथि/तिथि में परिवर्तन रूंच पाया-3, पर्यवेक्षक व harvest/change in d n time-3, due to ov नेश्चित तिथि से पहले प ग्रापन में विलम्ब-3, सर्वे r harvested the fiel	tem 5(b), put a (x) mark against 5(a). की सूचना नहीं दी गएं-1, कटाई की तिथि में परिवर्तन को आवंटित प्रयोगों की कटाई की तिथियां एक साथ अ ate of harvest was not intimated-1, change verlapping of harvest dates in sample allott कसल काट ली-1, प्राथमिक कर्मचारी ने फसल कटाई 'क्षण संख्या का चयन त्रूटिपूर्ण पाया गया और सही चय	ge-2, records not available-3, other (specify)— की सूचना देर से दी गई-2, पर्यवेक्षक गांव में समय ाने के कारण-4, अन्य (निर्दिष्ट करें)-9 in date of harvest was intimated late-2, supe ted to supervisor-4, other (specify)-9. प्रयोग सम्पन्न नहीं किया-2, सर्वेक्षण संख्या के चयन/गांव नित क्षेत्र की फसल कट चुकी थी-4, अन्य (निर्दिष्ट करें mary worker did not conduct the c.c. experin	rvisor could not reach the

[2] स	वैक्षण संख्या/उप-सर्वेक्षण सं	ड्या का विवरण/Particulars of	survey/sub-surve	y no.				
	. щ ite		प्रयोग-1 exptI	प्रयोग-II exptII	में प्रयोगाधीन प क्षेत्रफल (0.00		प्रयोग-1 expt1	प्रयोग-II exptII
	(1)	(2)	(3)	mixture und	der experimental cro ler selected survey/sub ber (0.00 ha.)		
(R	भिलेख जिसकी सहायता ली खसरा-1, नक्शा-2, दोनॉ-3, व ecord consulted (Khasra othing consulted-4)	नुछ नहीं-4)			5. (अ) কৃষক ব (a) name	हा नाम of cultivator		
	अ) चयनित सर्वेक्षण/उप-सर्वेध i) selected survey/sub-s			grafie (s	(ब) सूचक ((b) inform	यदि कृषक के अतिरिक्त ह ant (if other than cult	ivator)	
	ब) चयनित सर्वेक्षण/उप-सर्वेक्ष (0.00 है.) area of the selected number (0.00 ha.)				mistakes no	ई गलतियां (संकेतांक)@ sticed in selection (co 1/(a) survey number	de)@	
	दि प्रतिस्थापित हो तो प्रतिस्थापन संकेतांक)£	का कारण			(ब) उप-सर्वेक्षण सं number	ख्या/(b) sub-survey		
If	substituted, reason for	substitution (code)£			(स) खेत/(c) field			
	अ) चयनित सर्वेक्षण/उप-सर्वेध सल के खेतों की संख्या	तण संख्या में प्रयोगाधीन			whether rec	किया गया (हां-1, नहीं-0 ctified (yes-1, no-0) N/(a)survey number		
	 Number of fields grovelected survey/sub-survey 	ving experimental crop in t	he		(ब) उप-सर्वेक्षण स	iख्रा/(b) sub-survey nu	mber	
36	nested salvey/sub-survey	in the said			(स) खेत/(c) field	NEW YORK		
3] खे	त का माप तथा यादृच्छिक नि	देशांकों का चयन/Measureme	nt of field and se	lection of r	andom coordinates			
प्रयोग				dimensions		यादृच्छिक निदेशांक/ran	dom coordinates alor	ng
संख्या xpt. 10.	ऑकड़ों का स्रोत source of data			लम्बाई length	चौड़ाई breadth			
1)	(2)	(3)		(4)	(4) (5)			(6)
	प्रा॰ कर्म॰ की							
-1-	प्रविष्टि/p.w.'s entry पर्यवेक्षक के निष्कर्ष/ supervisor's findings				ager for time			-
_II-	प्रश्कर्म की प्रविष्ट/p.w.'s entry	na si isi kensa			10 70 5			
-11-	पर्यवेक्षक के निष्कर्ष/ supervisor's findings							18-18-3
		(फसल कटाई	उपरान्त जांच के लि	ए भी इस खण	location and marki ड को भरें जब खूटियाँ	ng of plots के चिन्ह स्पष्ट हो) rks are noticeable)		
मद item		क्या कोई गलती पाई whether any mist	गई(हां-1, नहीं-0)		त्रुटि प्रकार (संकेत type of mistak	iक)££	क्या परिशोधन किया ग Whether rectified	
		प्रयोग-1	प्रयोग		प्रयोग-1	प्रयोग-11	प्रयोग-।	प्रयोग-11
		exptI	exp	-	exptI	exptII	exptI	exptII
(1)		(2)	(3	3)	(4)	(5)	(6)	(7)
-	वण्ड अवस्थिति/plot locatio	_				and the second		
	वण्ड माप/plot measuremen		1			N SHOP LESS		
- The contract	इ 2 मद 3/block 2 item				सर्वेक्षण/उप-संख्या			
					सर्वेक्षण/उप-संख्या	of survey/sub-numbe	F	
		rop harvested prior to selec				ation of survey/sub-n	umbers	
		ती गई/crop harvested before			खेत का गलत चर	वन/wrong selection of	field	
		ो प्रभावित करते हुए खेत की आंधि ting the location of experi		1, 3	अन्य निरिष्ट करें	others specify		
		unig the location of experi		9				
	· · · · · · · · · · · · · · · · · · ·					और 4/block 3 col. 3		
	ड 2 मद 6/block 2 item	6:-			जो लागू न हो उसे	काट दीजिए/delete whic	hever is inapplicable	
ु खण						भ 4 और 5/block 4 co नित यादृच्छिक निदेशांको व		
लती						।।।। भाषा प्राच्यमा । गद्रशाका व	जितार स्थित गहा ह	
लती च्वतम	क्रम/सर्वेक्षण संख्या का ग	तत उपयोग		1			random coordinate	s selected
लती च्चतम rong	क्रम/सर्वेक्षण संख्या का ग use of highest serial/Su	rvey number			Item-1: plot not दिशा का गलत चु	located according to	direction	
लती ज्वतम् vrong गदुच्छि	क्रम/सर्वेक्षण संख्या का ग use of highest serial/Su	rvey number		2	Item-1: plot not दिशा का गलत चु	located according to	direction	

	[5] Particu	[5] X	योग संचालन पूर्व कटी g conduct of expts	उपज के भार का वि	वरण	200 1 200 2		
[5.1] प्रयोग संचालन सम्बन्धी विवरण (Particulars regarding conduct of exp (केवल कटाई स्तर निरीक्षण के लिए/only fo	eriments)		[5.2] प्रत्येक वृ	त#/कपास/अरण्डी ach circle#/pick	की चुनाई का भार			
मद item (1)	प्रयोग - I expt I (2)	expt I expt II		प्रयोग - I/Experiment - I		प्रयोग - II/Exp	eriment - II	
1. বিখি/Date of (i) কঠাई/harvest (अ) मूलत: নিश্चিत/(a) originally fixed			वृत*/चुनाई की क्र॰सं @ Sl. No. of circle#/ picking@	चुनाई/कटाई की तिथि Date of harvest/ picking	भार (0.000 कि॰प्रा॰) Weight (0.000 kg.)	वृत्त*/चुन की क्र.सं• Sl.no. circle# picking	@ की तिरि of date of harvest	(0.000 किन्प्रा॰) weight (0.000 kg.)
(ब) वास्तविक/(b) Actual			(1)	(2)	(3)	(4)	(5)	(6)
(ii) गहाई/Threshing			1			i		
(iii) प्रथम तौल/first weighment			2			2		
2. प्रयोगाधीन भू-खण्ड की आकृति Shape and size of experimental plot			3	-		3		
3. कटी उपज/Harvested produce			5	-		4		
(i) विवरण*/(i) Description*			6			6	-	
(ii) भार (0.000 कि॰ग्रा॰)			7		The same	7		
Weight (0.000 kg.)			8			8		
(iii) निवल भार (ग्रामों में)£			9		P	9		
Net weight (gms)£			10			10		
4. (i) क्या तोल में कोई गलती पाई गई (हां - 1, नहीं -0)			11			11		
Whether any mistake noticed in			योग	x		योग	X	
weighment (yes-1, no-0)			Total			Total		
(ii) यदि हां, तो क्या परिशोधन किया गया (हां - 1, नहीं - 0) If yes, whether rectified (yes - 1, no - 0)			चुनाइयों की कुर Total no. pic	चुनाइयों की कुल संख्या \$ चुनाइयों की कुल संख्या \$ Total no. pickings \$ Total no. pickings \$				
\$ केवल समस्त चुनाईयों की जांच हे. [6] उपकरण सम्बन्धी ब्यौरा ££ Details regarding equipment ££	31 12 111	THE TOTAL	y for vinages selec	[7] फसल कटा Details re (कटाई तथा	है उपरान्त संकार्य सम् garding post-ha कटाई उपरान्त जांच	rvest oper के लिए भरें)	
मद/Items	1-			THE RESERVE OF THE PARTY OF THE	r harvest and pe	ost-harvest	-	
	Х	योग-I/exptI		म	₹/Items		प्रयोग-I/exptI	प्रयोग-II/exptII
(1) I. (i) चेन**/टेप/भा.सां.सं. उपकरण*		(2)	(3)		(1)		(2)	(3)
Chain**/tape/I.S.I. equipment*				ा. सुखवन प्रया की व्यवस्था	ग के नियोजन तथा भं	ह्यरण		
(ii) तराजू/स्प्रिंग तराजू				संतोषजनक -	-0			
Balance/spring balance				त्रुटिपूर्ण —				
(iii) ব্যান/Weight				नियोजित नई	1 — 4 Planned and arra	10 1		A 200 - 100
(iv) ख्ंबे/Pegs				for storage sai	tisfactory-0, defe	ective—1,		
6. ££आपूर्ति की गई और प्रयोग में लाई गई/ऽ आपूर्ति की गई लेकिन स्थानीय मर्दे प्रयोग में Supplied but locally procured items (i) मानक/Standard—1, (ii) गैर मानक आपूर्ति की गई लेकिन प्रयोग में नहीं लाई ग Supplied but not used though requi	िलाई गई/ used : /Non-standard ई यद्यपि आवश्य	L_ 2		संकार्य की जांच/ operation at p (i) कटाई/प्रथम । (i) Date of ha	rvest/first weigh	iage ge only		
आपूर्ति की गई लेकिन प्रयोग में लाने की आ	वश्यकता नहीं ।	थी/		(ii) हरी उपज/G				e too ball the
Supplied but not required to be used आपूर्ति नहीं की गई लेकिन स्थानीय मर्दे प्रयं	1-4				(a) Description*			
Not supplied but locally procured in	tems used			(ৰ) भार (0.000 (b) Weight (0.		200		1-120/2019
(i) मानक/Standard-5 (ii) गैर मानक/N	on-standard-6			Section Sectio	थि को उपज का भार			
आपूर्ति नहीं की गई लेकिन प्रयोग में भी नहीं not supplied and also not used thou आपूर्ति नहीं की गई और आवश्यक नहीं थी/	लाई गई यद्यपि	। आवश्यक थी/		(0.000 कि. ग्रा)				
not supplied and also not used though required-7 आपूर्ति नहीं की गई और आवश्यक नहीं थी/ not supplied and not required-8 सूचना उपलब्ध नहीं/information not available—9. 6.1 *पश्चिम बंगाल के संदर्भ में/*For West Bengal State only **जो लागू न हो उसे काट दीजिए/**delete whichever is inapplicable					duce on the date	e of		

मद	T.	योग-I/expt	I		प्रयोगII/expt.II		
Item	प्रा॰ कर्मचारी पर P	र्विक्षक S	खसरा Kh	प्रा॰ कर्मचारी P	पर्यवेक्षक S	खसरा Kh	
(1)	-	(3)	(4)	(5)	(6)	(7)	
1. बीज/seed (i) बीज का किस्म (अधिक उत्पादनशील-1, अन्य - 2) type of seed (Hy-1, other - 2)							
(ii) यदि अ॰ उ॰ हाँ तो नाम तथा स्ट्रेन सं॰ If HY, name and strain number			х			х	
(iii) व्यवहार में लाने की दर (किण्ग्रा॰/है.) Rate of application (kg./ha.)			х			х	
2. सिंचाई/irrigation (i) क्या व्यवहार में लाये (हां-1, नहीं - 0) whether applied (yes - 1, no - 0)							
(i) यदि हां, सिंचाईयाँ की संख्या if yes, number of irrigations			x			х	
(ii) स्रोत (संकेतांक) * source (code) *			х			х	
Codes *नहर/canal तालाब/tank राजकीय नलकूप/state tubewell	1 2 3		गैर सरकारी नलकूप/p कुऑ/well अन्य निर्दिष्ट करें/oth		4 5 9		
平			प्रयोग-	I/exptI	प्रयोग-11/6	xptII	
iter	ns		प्रा॰ कर्मचारी P	पर्यवेक्षक S	प्रा॰ कर्मचारी P	पर्यवेश्वक S	
(1)		(2)	(3)	(4)	(5)	
3. उर्वरक/fertilizers	(i) क्या व्यवहार में लाए (हां-। Whether applied (yes-1,					# (# (# (# (# (# (# (# (# (# (# (# (# (#	
	(ii) यदि हां/if yes		1		1		
	(अ) नाम/(a) name(s)		3		3		
	(ब) प्रायोगिक मात्रा (कि॰ग्रा॰/	17	1		1		
	(b) quantity used (kg/ha.)		2		2		
A CONTRACTOR OF THE PARTY OF TH	(-) James (agims)		3		3		
	(स) व्यवहार में लाने की दर	₹7/N	x				
	(কিপ্সাং/ই.) (c) rate of application	पी/Р	X		x		
•	(kg./ha.)	के/K	х		х		
4. GIC/manure	(i) क्या व्यवहार में लाए (हां-1 Whether applied (yes-1,	no-0)					
	(ii) यदि हां, निर्दिष्ट करें (संके if yes, specify (code) @						
5. कीट नियंत्रक उपाय pest control measures	(i) क्या व्यवहार में लाए (हां-1 Whether applied (yes-1,						
	(ii) यदि हां, उपाय निर्दिष्ट करें if yes, specify the measur	res					
4. (ii) @फार्म वार्ड खाद/farm yard manure हरी खाद/green manure	1 2	THE REAL PROPERTY.			Kh-as per Khasra reg P - primary worker's		

[9.1] फसल की स्थिति					[9.2] फस ल	नें का ब्यौरा				
Condition of crop						ils of crops so	wn			
मद item	प्रयोग-1 exptI प्रयोगाधीन प्रयोगाधीन खेत में भू-खण्ड में in exper- imental imental		in exper- imental imental	ptII प्रयोगाधीन भू-खण्ड में in exper- imental	प्रयोग संख्या expt. no	प्रयोग संख्या (0 expt. no are	रयोग क्षेत्रफल संख्या (0.00 है.)	संघटक फसल /फसलों का नाम name(s) of	Percentage constituent (if pure, wri	शुद्ध हो तो 10 proportion of crops te 100)
91. 8%	field	plot	field	plot		field (0.00 ha.)	constituent crop(s)	प्रपत्र-। के अनुसार as per form-l	पर्यवेक्षक के अनुसार as per supervisor	
(1)	(2)	(3)	(4)	(5)	(1)	(2)	(3)	(4)	(5)	
1. फसल घनत्व crop density (एक समान-1, असमान-2, अल्प-3) (uniform-1, irregular-2, scanty-3)										
2. फसल परिपक्वता crop maturity (अनपकी-1, पकी-2, अधिक पकी-3) (unripe-1, ripe-2, overripe-3)					I					
3. फसल की स्थित/crop condition (अच्छी-1, सामान्य-2, सामान्य से नीचे-3, पूर्णतया क्षत-4) (good-1, normal-2, below normal-3 completely destroyed-4)			77 i li		distribution of the second					
4. क्या निम्न से प्रभावित हुई whether affected by (भारी वर्षा-1, बाढ़-2, सुखा-3, कीट-4, अन्य-9, प्रभावित नहीं हुई -0) (heavy rain-1, flood-2, drought-3, pests-4, others-9, not affected-0)					п					
	[1	0] प्रयोगाधीन	भू-खण्ड की	अवस्थिति दशी	ते हुए खेत का ion of experir	रेखाचित्र				
पयोग-	I/experimen		e field show	ing the locat	ion of experif		योग-II/expeim	ent-II		
*HIЧ/measurement	Dexperime	11-1	N		*माप/me	asurement	41-1 II/expelli	iciit-11	N	
Services of the services of th	altitude Stang for galler 2 at altitude	EV Proposition	w s	-Е				V	V E	

नोट-*कतार में बोई गयी फसलों के प्रयोगाधीन भू-खण्ड की चारों भुजाओं एवं दोनों कणों का ठीक-ठीक माप जांच कर दिया जाए।

Note -*In case of row crops, furnish the exact length of all the four sides of the experimental plots alongwith the length of its both the diagonals.

[11] निरीक्षण अधिकारियों द्वारा अभ्युक्तियां Remarks of the inspecting officers [12] क्षेत्र कार्य विवरण तथा अनुसूचियों का संचालन Particulars of field work and movement of schedules [12.2] केन्द्रीय/राज्य के उच्चाधिकारी द्वारा पूरा करने के लिए To be filled in by Central/State higher officer [12.1] केन्द्रीय/राज्य पर्यवेक्षक द्वारा पूरा करने के लिए To be filled in by Central/State Supervisor तिथि/date of केन्द्रीय (का॰सं॰)/राज्य पर्यवेक्षक का नाम तिथि/date of उच्च निरीक्षण अधिकारी का नाम/ प्रा॰ कर्म द्वारा क्षेत्र कार्य (i) मौके पर निरीक्षण (i) मौके पर निरीक्षण, यदि हो Name of higher inspecting officer Name of Central/State inspection on spot, if field work by Supervisor..... any P.W. पदनाम (ii) अनुसूचियों की प्राप्ति (ii) प्रतिदर्श जांच designation..... receipt of schedules sample check अनुसूचियाँ का प्रस्तुतीकरण (iii) संवीक्षा scrutiny (iv) क्षे॰ सं॰ प्र॰/रा॰ क्॰ सं॰ प्रा॰ की प्रेवण designation..... headquarters..... submission तिथि सहित हस्ताक्षर तिथि सहित इस्ताक्षर of schedules signature with date..... despatch to (NSSO)/SASA signature with date... खण्ड (12.3) मुख्यालय फरीदाबाद में भरे जाने हेतु Block (12.3) To be filled in Hqrs. office Faridabad: दर्ज संकेतांक क्या संवीक्षा टिप्पणी इत्यादि/संवीक्षा भेजी गयी। दर्ज संकेतांक की जांच (हां-1, नहीं-2) संवीक्षा रूपांतरण इत्यादि प्राप्ति पदनाम नाम Checking of Whether Scrutiny Designation Name Receipt Scrutiny Posting, Coding, Coding, Note issued Conversion etc. Conversion, (Yes-1, No-2) scrutiny etc. हस्ताक्षर signature (1) (2) (3) (4) (5) (6) (7) कनिष्ठ सांख्यिकी अधिकारी X X Junior Statistical Officer वरिष्ठ सांख्यिकी अधिकारी 2. X X Senior Statistical Officer सहायक निदेशकं X X Asstt. Director

ANNEXURE-IV

Crop:

SELECTION OF MOUZAS FOR CROP CUTTING EXPERIMENTS IN WEST BENGAL UNDER ICS

From the list of mouzas for crop cutting experiments obtained from DSO, the mouzas, which are selected for sample check on area enumeration, are identified. While doing so, the following cases may arise:

Case I The number of mouzas thus identified is equal to the number of mouzas on which supervision of crop cutting expts. is to be undertaken. In this case no further selection is required. These pre-assigned mouzas will be taken as the required sample for crop cutting experiments. The order of selection of mouzas will be of the same order as they appear in the list.

Case II The numbers of pre-assigned mouzas are more than the required number of mouzas on which supervision of crop cutting experiments is to be done. In this case required no. of mouzas will be selected from the list of pre-assigned mouzas with simple random sampling without replacement (SRSWOR) procedure.

Case III The number of Crop Cutting mouzas required is less than the number of mouzas on which supervision of crop cutting experiments is to be done. For instance, there are 30 CD blocks in the district of 24 Pargana (S) and as per plan of work for Aman Paddy, 26 crop cutting expts. are to be supervised. Hence the required sample size is 13. If out of 13 mouzas 4 are pre-assigned, then these 4 mouzas will be considered in the sample. So we have shortfall of 9 mouzas. In order to select these 9 mouzas following two stages will be followed:

Stage1: First select the 9 blocks from the list of remaining 26 blocks (the blocks which has the pre-assigned mouzas are excluded) systematically with probability proportional to size (i.e. PPS), size being the gross cropped area of the specified crop in the block. The format for this purpose will be like this:

TABLE -1: STATEMENT FOR SELECTION OF BLOCKS

Region:				
Sl. no. of block	Block name	Crop area(CA) of the specified crop	Cumulative Total of CA	Order of selection
1	2	3	4	5
			_	

Year:

Stage II: To select 9 mouzas, consider only these 9 selected CD blocks and from each block only one mouza will be selected by SRSWOR procedure. The block with order of selection 1 will be considered first and the mouza will be selected and so on till all the

District:

selected blocks are exhausted. The order of selection of these additional mouzas will be the numbers subsequent to the highest number of order of selection of pre-assigned mouzas.

TABLE-2: STATEMENT FOR SELECTION OF MOUZAS (Final Sample list for the stratum as a whole)

17.....

Dist.:		y ear:		Crop:					
Sl.	Block		Order of selection						
No.	name	Mouza name	Pre-assigned mouza	Additional mouza					
1	2	3	4	5					

Case IV The above procedure will be adopted even if there is no pre-assigned mouza.

Note:

D: ~4 .

- 1. For selection of blocks for the central sample for a particular district, the nth column of the Random Number Table is consulted, where n is the stratum code for the district. For state sample the (n+1)th column of the Random Number Table will be consulted.
- 2. For different crops different random numbers may be used. These may be the subsequent numbers in the same column.
- 3. For central and state samples, two non-over-lapping sets of crop cutting mouzas will be selected by following the same procedure as stated above and the same is to be handed over to BAE&S.

ILLUSTRATIONS

Suppose in a district there are 'm' blocks, which had cultivated the experimental crop in the previous year and from which 'b' blocks are to be selected. The cropped area of the 'm' blocks for each crop in each season is available. In the first stage the cumulative total of the area of the blocks are determined. Let **T** be total cropped area of all the blocks, which had the experimental crop.

For selection of blocks for the central sample for a particular district, the n^{th} column of the Random Number Table is consulted, where n is the stratum code for the district. If V mouzas are to be selected then the Interval will be $I=\{Integral\ part\ of\ (T\ /\ V)\ \}$. A random number may be taken from 1 to T, which will be the Random Start. Let it be R. So the subsequent Random Numbers will be R, R+I, R+ (b-1)*I and so on. It has to be seen in which block does the Random Numbers lie, when it is compared with the cumulative totals.

If it lies in the b_i block it will be the selected block. This procedure is to be repeated till the required number of blocks i.e. b blocks, are selected.

From the selected blocks, the mouzas are to be selected using Simple Random Sampling without Replacement.

For the selection of the blocks for the state sample for a particular district the $(n+1)^{th}$ column of the Random Number Table will be consulted, where 'n' is the stratum code of the district. For selection of the mouzas the same procedure will be adopted, with the exception that, if a particular mouzas selected in the state sample is also represented in the central sample, that mouzas will not be selected for the state sample and the next random number will be taken so that non-overlapping mouzas are selected for the central sample and the state sample.

Following example will help to understand the procedure of making cumulative totals and selection of the blocks.

Suppose there are 'm' blocks named as b₁, b₂, b₃, b₄,, b_m.

Let the cropped area of the 'm' blocks be a_1 , a_2 , a_3 , a_4 , a_m respectively.

Total cropped area will be $T = a_1 + a_2 + a_3 + \dots + a_m$

The Table-3 demonstrates the working out of the cumulative totals.

Table-3

Sl. No.	Block	Area	Cumulative area
1	2	3	4
1	b ₁	a ₁	a ₁ =C ₁
2	$\mathbf{b_2}$	a 2	a ₁ +a ₂ =C ₂
3	b ₃	a ₃	$a_1 + a_2 + a_3 = C_3$
4	$\mathbf{b_4}$	a 4	$a_1 + a_2 + a_3 + a_4 = C_4$
m	\mathbf{b}_{m}	a _m	a ₁ + a ₂ + a ₃ +
	o _m	um	$+a_{m}=C_{m}$
	Total =	$T=a_1 + a_2 + a_3 + \dots + a_m$	

Here T=C_m

If $C_{i-1} < R + (b-1) * I \le C_i$ then the b_i block is selected.

EXAMPLE FOR SELECTION OF CROP CUTTING MOUZAS BY PPS

In the district of 24 Pargana (s) 26 crop cutting experiments are to be supervised for Aman paddy in a particular agricultural year. Hence 13 crop cutting mouzas are to be selected. There are 4 pre-assigned mouzas. The blocks, where pre-assigned mouzas are situated, are not considered for selection of additional mouzas. So remaining 26 blocks are taken in Table-1 for selection of 9 blocks and from each selected block only one mouza is to be selected.

A) SELECTION OF BLOCKS

These 9 blocks are to be selected by PPS. The cumulative total of crop area is being generated in the column 4. The total crop area of these 26 blocks for Aman paddy is 296393 = A (say). The required no. of additional mouzas = n (say). Hence interval = I = Int[A/n] = Int [296393/9] = 32932. Form the 9^{th} Column of Random Number table and considering digit random number from 1 to 296393 we get R= 111111. Following the procedure of PPS, the required no. of 9 blocks is selected. The order of selection of the blocks is shown in column 5.

B) SELECTION OF MOUZAS

All the pre-assigned and the selected blocks are considered in Table-2. The name of the mouzas are taken in column 3. The order of selection of the pre-assigned mouzas is recorded in col. 4 and the order of selection is assigned from 1 to 4. Only one mouza is selected from each selected block by arranging the mouzas within the block in ascending order of Jurisdiction List No (J.L.) number with SRSWOR. Subsequent random numbers are to be considered while selecting the mouzas. The order of selection for the additional mouzas will start from 5 and continue upto 13. This sample list is to be used for conducting supervision of crop cutting experiments for Aman season in that agricultural year in respect of dist. 24 pargana (S).

Note: Here Int [296393 / 9] = integral part of (296393 / 9)

TABLE – 1: STATEMENT FOR SELECTION OF BLOCKS

Dist: 24 Pargana. (S) Year:

Crop : Aman (Winter Paddy) Region: W.B.(S)

SI No Rlock name		Cuan auga		ive Order of selection		
Sl.No.	Block name	Crop area	Cumulative	Order of selection		
Of Disale		(CA of the speci-	Total of CA	A=296393		
Block		fied crop (area in		R=111111		
		hectare)		I= 32932		
(1)	(2)	(2)	(4)	n=9		
(1)	(2)	(3)	(4)	(5)		
1.	Bhangore-I	11560	11560			
2.	Bhangore-II	5775	17335	7		
3.	Sonarpur	5828	23163			
4.	Baruipur	15130	38293			
5.	Joynagar-I	8910	47203	8		
6.	Joynagar-II	14956	62159			
7.	Kultali	25191	87350	9		
8.	Canning-I	14276	101626			
9.	Canning-II	15421	117047	1		
10.	Basanti	23193	140240			
11.	Thakurpukur-	1525	141765			
	Metiaburz					
12.	Maheshtala	41	141806			
13.	Bishnupur-I	7680	149486	2		
14.	Bishnupur-II	6577	156063			
15.	Budge-Budge-I	1498	157561			
16.	Budge-Budge-II	4605	162166			
17.	Diamond-Harbour-I	3220	165386			
18.	Diamond-Harbour-II	6864	172250			
19.	Magrahat-I	9283	181533	3		
20.	Magrahat-II	7838	189371			
21.	Mathurapur-II	16856	206227			
22.	Patharpratima	36262	242489	4		
23.	Namkhana	16808	259297	5		
24.	Falta	9987	269284			
25.	Mandirbazar	9922	279206	6		
26.	Kulpi	17187	296393			
	TOTAL – 296393=					
	A (say)					

TABLE-2: STATEMENT FOR SELECTION OF mouzas (Final Sample list for the stratum as a whole)

Dist.: 24 Pagrana.(S) Year:

Crop: Aman (Winter Paddy) Region: W.B/(S).

Crop: Aman (Winter Paddy)		Region: W.B/ (S).							
Sl. No.	Block name		Order of selecti	on					
		Mouza name	Pre-assigned mouza	Additional mouza					
(1)	(2)	(3)	(4)	(5)					
1.	Gosaba	Kalidaspur	1						
2.	Mathurapur-I	Chattabhog	2						
3.	Kakdwip	Bhubannagar	3						
4.	Sagar	Bishnupur	4						
5.	Canning-II	Bakultala		5					
6.	Bishnupur-I	Khirishtala		6					
7.	Magrahat-I	Kurkuria		7					
8.	Patharpratima	Nilerhat		8					
9.	Namkhana	Debnagar		9					
10.	Mandirbazar	Khurda		10					
11.	Bhangore-II	Bhagabanpur		11					
12.	Joynagar-I	Punpo		12					
13.	Kultali	Mondalerlat		13					