# AGRICULTURE CENSUS 2015-16

# Manual of

# **Schedules and Instructions for Data Collection**

(Non-Land Record States)



Government of India
Ministry of Agriculture
Department of Agriculture & Cooperation

`(Agriculture Census Division)



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# **FOREWORD**

The Government of India has been conducting quinquennial Agriculture Censuses since 1970-71. The Census provides crucial information on the structural aspects of Indian Agriculture which continues to be the main stay of Indian Economy. The concepts and definitions used in Indian Agriculture Census are broadly in conformity with those adopted in the World Census of Agriculture.

The Agriculture Census in India relies heavily on the system of land records as prevalent in large part of the country. The diversities in the nature of land revenue systems in different States require that concepts, definitions and procedures adopted for the census should be finalized before start of the fieldwork. In order to incorporate the experiences gained during previous censuses and suggestions made by different stakeholders including data users, the Agriculture Census Division of the Ministry of Agriculture has reviewed the schedules and instructions for use in the current Agriculture Census operations. This document, which is the outcome of this review, provides a detailed description of the concepts, definitions, formats of schedules and procedures to be adopted in the operation and data collection in Agriculture Census 2015-16. The formats of Listing Schedules and Holding Schedule have been improved upon to serve better purpose of either retabulating data from revenue records or its collection through sample surveys. It is our expectation that the document will facilitate the work of the Census in the States and further improve the quality of data by following the guidelines given in this manual.

(Mamta Saxena)

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# **Section - A**

# **Schedules and Instructions for Data Collection**

#### 1 Introduction

- 1.1 Agriculture Census forms part of a broader system of collection of Agricultural Statistics in the country. It is a large-scale statistical operation for collection and derivation of quantitative information about the structure of agricultural holdings in the country. An agricultural operational holding is the ultimate unit for taking decision for development of Agriculture at micro level. It is for this reason that an operational holding is taken as the statistical unit of data collection for describing the structure of agriculture. Through Agriculture Census it is endeavored to provide basic data on all important aspects of agricultural economy of the operational holdings in the country as a whole and for various States.
- 1.2 Periodic Agriculture Censuses are important as these are the main source of information on basic characteristics of operational holdings such as land use, cropping patterns, irrigation status and tenancy particulars. The information on these aspects is tabulated by different size classes and social groups including Scheduled Castes / Scheduled Tribes which are needed for development planning, socio-economic policy formulation and establishment of national priorities. The census also provides basis for development of a comprehensive integrated national system of agricultural statistics and has links with various components of the national statistical system. The whole project of Agriculture Census in the country is implemented in three distinct phases, which are statistically linked together but focus on different aspects of agricultural statistics. In Phase-I, a list of holdings with their area, social characteristics, types of holding and gender of the holders is prepared. In Phase-II detailed data on agricultural characteristics of holdings are collected from selected villages. In Phase-III data on input use pattern are collected from selected holdings in selected villages. Thus the whole operation of Agriculture Census in India is not really a Census in classical sense of the term. It is a combination of Census and Sample Surveys. In non-land record States where the Census data are collected through a sample Survey, the estimates are first prepared at the Block level. These estimates are then aggregated at various levels of administration using appropriate multipliers.

# 2 Objectives

- 2.1 The main objectives of the Agriculture Census are:
  - i) To describe agricultural structure and related characteristics of agriculture by providing statistical data on operational holdings,

- including land utilization, live-stock, agricultural machinery and implements, use of fertilizers etc.
- ii) To provide benchmark data needed for formulating new agricultural development programmes and for evaluating their progress.
- iii) To provide basic frames of households and operational holdings for carrying out future agricultural surveys and,
- iv) To lay a basis for developing an integrated programme for current agricultural statistics.

## 3 Reference Year

3.1 The first countrywide comprehensive Agriculture Census was organized in India by the Ministry of Agriculture with the Agricultural year 1970-71 (1st July 1970 to 30th June, 1971) as the reference period as part of the 1970 World Agriculture Census, which was followed by Agriculture Censuses with reference years 1976-77, 1980-81, 1985-86, 1990-91, 1995-96, 2000-01, 2005-06 and 2010-11. The next Agriculture Census has been planned to be conducted in the country with 2015-16 (1st July, 2015 to 30th June, 2016) as the reference period. The actual fieldwork for data collection relating to the reference year 2015-16 would commence from 1st July 2016. It would be the tenth Agriculture Census in the country.

# 4 Approach for Data Collection

- 4.1 The basic unit for collecting data in Agriculture Census is the operational holding. The holding of the actual cultivator, who need not be the owner, is the ultimate unit for collection of data. The data for entire land operated by the cultivator is to be collected and the State is the outer limit for pooling of all parcels of an operational holding in Non-land Record States. As comprehensive land records are not available in non-land record States, the required data would be collected through sample surveys by adopting enquiry method. The data would be collected from selected operational holders in selected villages as per the prescribed sampling design in the standardized schedules.
- 4.2 Schedules for data collection for Agriculture Census 2015-16 have been prepared/finalized. Brief guidelines for filling in these schedules are contained in this document. These guidelines may, if need be, suitably modified and elaborated by the State Governments keeping in view the local conditions, before translating into the regional languages.

# 5 Sampling Design

5.1 A stratified two stage sampling design is adopted for Agriculture Census in non-land record States. In view of increasing demand for Agriculture Census

data at Block level, it has been decided that the community Development Block or some other similar homogeneous administrative unit should be taken as the stratum. The first stage unit within the stratum will be the village and the second stage unit will be the operational holding. In States where geographical dispersion of the village is not much, at least 20% of the villages are to be selected by simple random sampling method without replacement from each stratum. These sample villages have to include all the villages selected under the scheme for Establishment of an Agency for Reporting Agricultural Statistics (EARAS). In states where less than 20 percent villages are selected for EARAS, additional villages may be selected using random sampling to bring up the number of selected villages in each stratum to recommended 20 percent. For example if only 15 percent villages have been selected for EARAS, additional 5 percent villages in each stratum will be selected and added to the list of EARAS villages, to get the list of villages where Agriculture Census is to be conducted. This procedure is expected to save time required for selection procedure, besides ensuring comparability with statistics generated through EARAS. The uninhabited village, if found in the sample, shall be replaced by inhabited village for collection of data by enquiry method.

- 5.2 In case of holdings other than institutional holdings, the second stage sampling is to be done in States where the selected villages have a large number of holdings in them. For detailed information, please see para 5.5 for selection of sample villages and sample holdings in the selected villages.
- 5.3 All the institutional holdings in the selected village are to be included in the sample for filling Schedule-H under phase-II.
- 5.4 For adoption of common software for tabulation, it is necessary that all non-land record States follow the above sampling design. However, variations in the size of the sample at the two stages may be warranted to suit the pattern of distribution of holdings and/or villages in the State as also to ensure the presence of adequate units of each type in the sample.
- 5.5 In view of the past experience of census taking, the following three models of sampling are recommended for Agriculture Census 2015-16:
  - i) In Odisha, West Bengal and Kerala the sampling design and sample size described in paras 5.1 To 5.3 will be followed, i.e., the proportions of sample villages at first stage and selection of sample holdings in the selected villages at second stage will be 20% and 25% respectively. In States, like, Arunachal Pradesh, Meghalaya, Sikkim and Manipur the same sampling design and sample size will be adopted for filling Schedule-H. Detailed

- selection procedure for selecting sample holdings in sampled villages may be seen in Annexure-IV and Annexure-XIII.
- ii) In Goa, 50% villages will be selected in each Block/Tehsil at first stage and there shall be no second stage sampling, i.e., all the holdings in selected villages will be enumerated.
- iii) In Nagaland, Mizoram and Tripura, at first stage, 20% villages will be selected and no second stage sampling will be resorted to, i.e., all the holdings in the selected villages will be surveyed.
- 5.6 In smaller UTs, like Lakshadweep and Daman & Diu no sampling will be done and all holdings in all the villages are to be surveyed for Schedule-H.
- 5.7 The above recommended design has been decided keeping in view the geographical conditions of the State, dispersal of villages and holdings and adequacy of sample size for preparing estimates. It is, therefore, suggested that no deviations from this may be made. In exceptional cases, where a State Government finds it difficult to implement the recommended design, a reference should be made to Government of India before implementing the change in the recommended design. The decision on this will be taken keeping in view the technical requirements for building the estimates and problems of the State in implementing the design.
- 5.8 The sampling of operational holdings is to be done separately for Scheduled Castes/Scheduled Tribes/Others categories of operational holders as estimates are to be worked out separately for each of these categories.
- 5.9 The procedure for selection of sample holdings for filling Schedule-H is described in section 20.6 in details.

# 6 Item Coverage

- 6.1 Data on various characteristics of operational holdings would be collected during Agriculture Census with the agricultural year 2015-16 (July 2015 to June 2016) as the reference year. During Phase-I, viz., the listing phase, data on Number and Area of Operational Holdings according to prescribed size classes for different social groups, types of holdings and gender will be collected. In Phase-II, though only for selected holdings in selected villages, the data on following aspects will be collected.
  - i) Area operated by Tenancy.
  - ii) Land Utilization and
  - iii) Cropping pattern.

6.2 The data will be compiled separately for the operational holdings of four groups, viz., Scheduled Castes, Scheduled Tribes, Others and Institutional, and also for the total of these groups. The Priority Table-1 which relates to number and area of holdings by various size classes will be prepared gender-wise also. The detailed instructions on tabulation plan for Phase-II will be separately issued.

# 7 Primary Fieldwork

- 7.1 The primary fieldwork, which would consist of collecting information in respect of resident cultivators in sampled villages, would be done by statistical staff of State Governments. The supervision will be done by the senior Statistical staff.
- 7.2 The above approach would call for a conscientious effort in preparing a complete list of resident cultivators and also in identifying the location of their holdings either within the village or outside. In Phase-I of Census operations, a complete list of resident cultivators in the selected village is to be prepared by house-to-house enquiry. The first step in this regard is to prepare the list of resident cultivators irrespective of the fact whether they are cultivating land within the village or outside. The existing records of right over land alone may not be of much help in preparing the list of resident cultivators. A fresh list is, therefore, to be prepared and verified from of each household. In a household, there could be more than one cultivator independently operating certain number of parcels of land. Members of two households might also be jointly operating a holding. The list of resident cultivators should take into account all these cases.
- 7.3 In some of the non-land record States the listing work is done by the revenue staff. It has been noticed in past that this staff relies on the record of rights available with them for preparation of the list of resident operational holders in the selected village instead of making a house-to-house enquiry. This results in many omissions in the list of operational holders so prepared. The incomplete frame may also lead to errors of various types in the estimates. As preparation of a correct frame is the first pre-requisite for an efficient sample survey, the States should make all efforts to motivate the primary staff to prepare complete and accurate lists of resident operators by actually visiting each household in the sampled villages.
- 7.4 Non-resident cultivators will not be covered in the Survey.
- 7.5 A separate list of institutional holdings will also have to be prepared for each sampled-village.

# 8 Training

- 8.1 It is necessary to impart thorough training, both to the primary workers and the supervisory officers before the fieldwork is undertaken. The training of primary and supervisory staff could be arranged at 3 or 4 levels depending upon the conditions in each State. District Officers in charge of census operations, could initially be trained either at the State headquarters or at the Divisional Headquarters. They, in turn, would impart training to the officers at the tehsil/block level. The tehsil/block officers should conduct the training classes for the primary field staff. Officers of the Agriculture Census Division of the Central Government must be invited for training courses, both at supervisory and primary level for which an advance intimation may be sent.
- 8.2 It is important that training should be conducted just before the fieldwork is scheduled to start. The copies of manuals in local language may be provided to the trainees in advance. The trainees may be instructed to go through the manuals and schedules before coming for the training. This would facilitate easy absorption of concept, definitions and procedures by the trainees. The trainees could also come prepared to the training session to seek clarification for any doubts that might have arisen while going through the manual.
- 8.3 The training at different levels is to be oriented towards responsibilities of trainees. The following points are to be covered in training for supervisory and field functionaries.

# 8.4 Training at Supervisory Level:

- 8.4.1 The main points which are to be covered necessarily in the training of supervisors include:
  - 1. The responsibilities of administrative and statistical supervisors are to be explained.
  - 2. All the concepts and definitions given in Annexure-IX should be explained.
  - 3. The supervisory officers are to be advised that they have to ensure that all the land owning/operating households are listed in Schedule L-1. To ensure this they may compare the L1 prepared by fieldworkers with such other records as may be available and are relevant. These could be the voter lists used for recent panchayat/general elections and register of ownership right of land. Supervisory Officers may also choose some houses randomly to verify that these have been included in the list.

- 4. All consistency Checks provided by Department of Agriculture & Cooperation, Government of India (Annexure VII) are to be explained and the trainees are to be advised to make use of these checks in their supervision to ensure quality of data.
- 5. Even though the total area held by all the resident operational holders of a village may be different from the total operated area in the village, generally the two may not differ markedly. It is expected that for most villages area operated by resident cultivators outside the village which has been included in the holding and the area operated in the village by non-resident cultivators which has been excluded, would broadly match each other. The supervisory officers are expected to match the two figures (operated area in the village and area operated by resident operational holders) and ascertain the reasons for difference to satisfy themselves that all the holdings held by residents of the village have been accounted for.
- 6. Entire format of all schedules should also be explained item wise to avoid any misconception.
- 7. The procedure for selection of sample holdings and Manual Scrutiny is to be explained in detail.
- 8. It is to be emphasized that all the institutional holdings in the selected village are to be included in the sample.

# Training at Field Level:

- 8.4.2 The main points to be elaborated in field training are:
  - 1. It is to be checked whether all the resident operators of the village and their operated area are accounted for.
  - 2. The entire format of all schedules and all concepts and definitions (Annexure-IX) should be explained item-wise to avoid possibilities of errors.
  - 3. Preparation of list of Operational Holdings in the Sampled Villages: The most important part of sample survey would be the preparation of list of operational holdings, which will later be utilized as the sampling frame. The procedure for preparing the list of operational holdings is to be explained in detail in the training classes, focusing particularly on the aspects which are relevant for primary field workers. The list is to be prepared by house-to-house enquiry. Some order, for instance, starting from the north-western

corner of the village going by all the rows of houses towards the south-eastern corner, should be followed while listing the households/operational holdings of the village. The list may be compared with the list of households prepared during the recent population census and/or the electorate list to ensure that there are no omissions. Such lists may be carried by the fieldworkers while making house-to-house enquiry for ready reference.

- 4. Selection of Villages and Operational holdings: The selection of villages as well as the operational holdings from each selected village is preferably to be done by the statistical staff. They must be trained thoroughly in the usage of random number tables and other procedures of selection. However, where availability of qualified statistical manpower is a constraint, a simplified procedure described in paras 20.6.9 to 20.6.11 may be adopted. This procedure, however, needs to be explained and demonstrated in detail in the training classes.
- 5. *Institutional Holdings:* Institutional holdings are also to be covered in the Agriculture Census. Holdings like Government farms, farms of sugarcane factories, tea gardens, plantations, cooperative farms, temple land managed by a Trust through hired labour are to be treated as institutional holdings. Temple lands, plantations etc., which are leased out to individuals are, however, to be considered as individual holdings. In the training classes, the concept of an institutional holding may be explained in detail and the fieldworkers are to be apprised that they have to include all the institutional holdings in the selected villages for filling Schedule-H.
- 6. Fieldworkers should be familiarized with codes to be used for various crops (Annexure-XI). Their attention should also be drawn to the fact that many new crops have been introduced in this Census and also the codes of some of the crops have been changed. It should also be emphasized that data of new crops (mostly horticultural crops) is to be necessarily obtained.
- 7. System of Units and Script of Numerals: Even though it is preferable to use metric system for measurement of area (hectare), the States may decide to use local units. But the unit of area used for filling various listing Schedules (L1 to L4), Table SS and Schedule-H, which are to be computerized, should be uniform within a tehsil/Block and decimal system should be used for

expressing fractions. Use of different units of area within a tehsil/Block (Stratum) creates difficulties in computerized tabulation. To the extent possible, only Arabic numerals i.e., 1, 2, 3, 4, 5 ....., should be used for filling schedules. Area unit and its conversion factor to hectare (in 3 decimal places) must be mentioned while filling up the schedules.

# 9 Supervision

- 9.1 Supervision plays an important role in improving the quality of the data collected through Surveys. Effective supervision, therefore, is to be organized to ensure that the various phases of Agriculture Census work are carried out according to the prescribed time schedule and also according to the instructions. The extent of supervision would, however, vary from State to State depending upon the administrative set up. Senior statistical staff should inspect the work of primary staff. State Government should prescribe suitable proforma for the purpose. With a view to ensuring that the list of resident cultivators is prepared properly, the entries in the listing Schedules L1 and L2 should be checked by supervisory officer in all the sample villages.
- 9.2 The inspection should be carried out particularly on the following aspects:
  - i) Whether the selection of the sample of operational holdings has been done according to instructions?
  - ii) Whether all the parcels forming part of an operational holding within and outside the village have been covered.
  - iii) Whether institutional holdings are fully covered and land owned by them has been correctly classified. For details, please refer para 8.4.2(5).
  - iv) Whether entries regarding land utilization, cropping pattern, irrigation etc. have been correctly made.
  - v) It must be checked that the net area sown is equal to or less than the gross cropped area. Similarly, the net irrigated area should be equal to or less than the gross irrigated area.
  - iv) Whether the enumerator has followed all the concepts and definitions and has correctly used them for collection of data.
  - vii) Whether all the codes in schedules have been correctly used.

- viii) Whether the schedules have been legibly filled and the prescribed system of units and script of numerals have been used and also the local area units and their conversion factors to hectare have been mentioned in the Schedule.
- ix) Whether data in various columns of Schedules are meeting the check-points given in Annexure-VII.
- x) Any other points, which the inspecting officer wants to mention on the quality of data collected or any other problem faced.
- 9.3 A report of the inspection of the above aspects should be submitted to next supervisory officer and the enumerator be advised to rectify the mistakes before the schedules are passed on for data processing. The next higher supervisory officer has to ensure that the errors noticed by the lower supervisory officer have been rectified before his inspection. He would check these schedules randomly before certifying them complete in all respects.
- 9.4 The quantum of inspection to be carried out by various supervisory levels should be laid down. Cent percent checking of schedules for internal consistency of data, legibility of figures and use of units is to be carried out in the field before they are dispatched to block level where 25% schedules would be checked randomly. At district level about 10% schedules would be checked.

# 10 Flow of Schedules

- 10.1 After preparing schedules L1 and L2 for the sampled village, the enumerator would make a copy of each of these schedules pertaining to the operational holdings in the village and send it to the block Headquarters for preparation of Table T-1 which involves estimation of number and area of operational holdings by various groups (SC/ST/Others/Institutional/Total) and gender. Alternatively, table T-1 may be prepared for the village by the field functionary at the village level itself, and same is submitted to the block Headquarters along with the schedules for preparing block level T-1. The estimates will be prepared for the stratum (Tehsil/Block) on the basis of the listing schedules L1 and L2.
- 10.2 Clear-cut instructions should be issued regarding the flow of holdings schedules (H) from the village level to the tabulation center. The filled in schedules should be scrutinized thoroughly at each level before they are passed on to the next higher level so as to avoid unnecessary correspondence and delay at the tabulation stage. It is advisable that the concerned enumerator remains available for answering any query and/or rectification of errors when his schedules are taken up for checking.

# 11 Time Calendar

11.1 The schedules of Phase-I and Phase-II should be distributed together to the field functionaries of the villages selected for Phase-II of the Census. The Phase-II schedules shall be canvassed immediately after completion of Phase-I field work. The time calendar for conduct of Agriculture Census and presentation of results prepared in consultation with Govt. of India should be conveyed to all the field level functionaries for timely completion of Census operations. The time calendar should indicate the time limit for completion of following items of work.

S.No.	Item of Work	Time Limit	
i)	Completion of printing of Schedules and	by April 2016	
	Instructions in local languages by States and		
	their distribution to field staff		
ii)	Training of primary and supervisory staff for by June 2016 Agriculture Census		
iii)	Completion of field work for Phase-I	July 2016 -	
	(Schedules L1/L2/L-3) of Agriculture Census Sept. 2016 and supervision.		
iv)	Manual scrutiny/coding of Schedules and	by November	
	preparation of provisional village/Tehsil T-1 2016		
	and their delivery to data entry centre/agency		
v)	Submission of provisional Table-1 by	by December	
	States/UTs to GOI. 2016		
vi)	Completion of data entry of Table-1. by March 2017		
vii)	Completion of fieldwork of Phase-II (Schedule-	e- by June 2017	
	H) of Agriculture Census and supervision.		
viii)	Finalization of Table T-1 by States and their submission to GOI.	by June 2017	
ix)	Manual Scrutiny/Coding of Schedule-H and	d by August 2017	
	their delivery to data entry center/agency.		
x)	Completion of data entry for Schedule-H.	by January 2018	
xi)	Generation of trial Phase-II tables of the	by June 2018	
	Census.		
xii)	Submission of final Phase-II Tables by	by August 2018	
	States/UTs to GOI.		
xiii)	Submission of State Reports to GOI.	Sept. 2018	

11.2 It is planned to bring out provisional Table T-1 of current Agriculture Census 2015-16 at all India level within 3 months of completion of fieldwork of Phase-I of the Census for timely availability of basic data in public domain to enhance its utility and credibility.

# 12 Constitution of State Co-ordination Committees

- 12.1 Since different Departments would be involved in work of Agriculture Census in States, it would be necessary to have a Coordination Committee at the State level to review the progress from time to time. The Committee may be headed by the Agriculture Census Commissioner of the State who may be Financial Commissioner or Revenue Secretary or Agricultural Production Commissioner or Agriculture Secretary or some other Senior Officer of the State. The other members may include representatives from State Departments of Revenue, Agriculture and Statistics etc. Officials from Computer Cell of the State and/or Data Entry Agency engaged for computerization and NIC may also be included as a member in addition to a representative from Agriculture Census Division of Ministry of Agriculture, Government of India.
- 12.2 It is necessary to form similar Committees at district level. These would be headed by the Collector/Dy. Commissioner who will be designated as District Agriculture Census Officer. Members of this Committee may include, representatives from the District authorities of Revenue, Agriculture and Statistics. This would help in better coordination, smooth conduct and timely completion of Agriculture Census operation.

# 13 Publicity

13.1 The importance of publicity for the Agriculture Census cannot be overemphasized. Experience shows that adequate publicity among the persons concerned helps a great deal in conducting and completing the Census operations properly in time. The State Governments should take adequate steps to give due publicity to this work through the mass media and through village Panchayats, and create necessary climate for the successful completion of this gigantic task. It is necessary that the respondents are made aware of the importance of statistics and they are told that the data supplied by them for Agriculture Census, particularly on aspects relating to tenancy, division of holding or crops cultivated will not be utilized for settlement of any dispute in any court of law or for deciding any taxes to be levied on them.

#### 14 Units for Measurement of Area

14.1 It has been experienced that various units for measurement of area are prevalent in the country. Even within a State many systems of measurements and units are present in different regions. For preparing all India estimates it is necessary to adopt a uniform unit of measurement. It has, therefore, been decided that all the results of Agriculture Census at All India level will be released in metric system with hectare as unit of area. In States where it is difficult to adopt hectare as unit uniformly, it is suggested that for filling various schedules, local units and system of measurement may be used, but final total

should be expressed only in decimal system. In such cases conversion of units could be made using the computer programme. But it must be ensured that within each Tehsil (Stratum) only one unit is used for accounting of area. In other words, please indicate the area unit and conversion factor of area unit to hectare (in 3 decimal points) in the schedule at the time of filling-up them.

- 14.2 In case where table T-1 at village/Block level is prepared in some unit other than hectare, it should be converted to hectares before submission to District level. All further aggregation of T-1 will be done in hectares only.
- 14.3 Areas under a holding could be filled in local unit but decimal system is to be used for expressing fractional parts, eg., the area of plot with dimensions "12 feet 3 inch i.e. 12.25 feet –by- 12 feet 6 inch i.e. 12.50 feet" should be given as "153.125 square feet". The conversion factor of area units to hectare must be given in 3 decimal places to make the conversion of area figures in local units to hectare with the help of computer programme.

# Script of Numerals

14.4 Only Arabic numerals (1,2,3,4,5 etc) should be used for filling various schedule.

# Manual Scrutiny

- 14.5 All the Schedule-H and the listing Schedules L1, L2 & L3 are to be manually scrutinized by statistical staff before these are submitted for data entry. The following points are to be checked in Manual Scrutiny.
  - i) Whether the schedules have been filled legibly.
  - ii) Whether the instructions for use of area unit and system for expressing fractions have been followed.
  - iii) Whether conversion factor of area unit to hectare in 3 decimal places have been given.
  - iv) Whether the column totals in Schedule-H have been provided.
  - v) Whether the data given in the schedules are consistent. All the consistency checks given in Annexure-VII are to be applied at the manual scrutiny stage.
  - vi) Whether correct codes have been used.
  - vii) Whether all the columns have been filled-up.

# 15 Printing of Schedules

15.1 While sending the schedules for printing, it is important to ensure that order of the columns/blocks given in the schedules is not changed. Any change in order of the columns adversely affects the use of standard computer programmes which are prepared keeping in view the standard format of the schedules prescribed by Government of India.

# 16 Delivery of Schedules to Data Entry Agency

16.1 A table (Table-SS) indicating total number of holdings and holdings selected in the sample village in various size classes and social groups will be prepared for each sample village in the proforma given in Annexure-V. This table will be attached on the top of the bundle containing Schedule-H for the village. At the time of receipt of village Table (T1) in a Tehsil/Block, it must be checked that Table-SS is also received. These may be forwarded to District/State along with Block/District tables. The data entry agency will utilize Table-SS to ensure that all the operational holders and their particulars have been filled up in Schedule-H for sample village. Table-SS would also ensure that the data entry has been completed for all these holdings which are listed in Schedule-H.

# 17 Seeking Clarifications

- 17.1 Any issue regarding Concept, Definition and Procedures for Agriculture Census 2015-16, which could not be clarified at the State level should be referred to Government of India at the following addresses.
  - i) Dr. Mamta Saxena, Deputy Director General-cum-Agriculture Census Commissioner, Department of Agriculture & Cooperation, Government of India, Krishi Bhawan, New Delhi. Tele Fax No.: 011-23382523.
  - ii) Shri Janardan Yadav, Director, Department of Agriculture & Cooperation, Government of India, Krishi Bhawan, New Delhi. Tele Fax No.: 011-23384348.
  - iii) E-mail:
    - agcensus.krishi@nic.in

# **Section - B**

# 18 Schedules

- 18.1 There are four listing schedules common for the sample village and one Household schedule which will be used for collection of information from each selected operational holder of the selected village.
- 18.2 These schedules whose specimens are given at Annexure I to VI, are:

Schedule – L1	List of all Households and Operational Holdings in	
	the sample village.	
Schedule – L2	List of all Institutional Holdings in the sample	
	village.	
Schedule – L3	Village Summary.	
Schedule – L4	List of Operational Holdings in the sample village	
	and sample selection of holdings.	
Table SS	Sample Selection Summary in the sample village.	
Schedule – H	Detailed data on selected Operational Holding in the	
	sample village.	

# 19 Concepts and Definitions

19.1 Concepts and Definitions to be adopted for the Agriculture Census are explained in Annexure-IX and frequently answered questions and other clarifications are given at Annexure-X.

# 20 Instructions for Filling Schedules

20.1 Detailed Instructions for canvassing the schedules are given in the following paragraphs:

# **20.2** Listing Schedule L1: List of all Households and Operational Holdings in the sample village

- 20.2.1 The primary worker has to prepare a complete list of all the households residing in the sample village. These households would not necessarily be operating any land in the sample village or elsewhere. In other terms, all the households, irrespective of their economic activity and land owning/operating status, will be listed in the first instance and their land owing/operating status to be ascertained afterwards. The purpose of the schedule L-1 is to prepare a sampling frame, i.e., complete list of operational holdings for selection of sample holdings for the detailed enquiry in Schedule-H, and also to prepare priority table T-1 on number and area of holdings based on data of the sample villages.
- 20.2.2 The primary worker would have to visit each and every household within the geographical boundary of the sample village. As a preliminary to the Population Census 2011, house numbering and house listing operations were

conducted. For this purpose, notional maps, layout sketches and house lists were prepared for each village/urban block. If the house numbers given during the Populations Census operations are still available, these can be used. These house lists could be updated to take care of changes, which might have taken place in the intervening period. Alternatively, the enumerator may use voters list or any other such list as is readily available. In any case, the Primary Worker has to update the list available by visiting each house, and recording additions, deletions and/or any other structural changes that might have taken place since the house numbering was done. In case no such house numbering is readily available the primary worker would be required to do the fresh house numbering by using geru or chalk following a pattern adopted in Population Census 2011. Concepts of Building, House and Household as adopted for 2011 Population Census may be adopted for Agriculture Census 2015-16 also. This is an important and essential operation in order to ensure that no building or house or household is missed or left uncovered.

- 20.2.3 The first few columns on the top of the Schedule L-1 relate to identification of the village to which the list of holdings pertains. It is expected that the primary worker in the first instance fill-up these details in words. The codes will be filled up later in consultation with his supervisor while submitting the schedule to Block/Tehsil Headquarters. However, it is advisable that the code for the State is printed on the form itself using the appropriate code from Annexure-XII. If there is no change in the boundary of a District/Block since the previous Census, the code assigned to the District/Block in that Census should be retained in the current Census also for comparability.
- 20.2.4 Item-wise description of the schedule L-1 is given in subsequent paragraphs.

Column 1: Serial number

20.2.5 Serial number in Col. 1 refers to the houses. This will be a continuous running number in the selected village and the last serial number would indicate the total number of houses listed.

#### Column 2: House number

20.2.6 As explained above, the primary worker can use the house-numbering adopted for Population Census 2011 or any such other record as may be readily available. If a new house has come up which is not numbered, it should be given the same number as of the preceding house with 'N' recorded in bracket to indicate that this is a new house. In case, 2 or 3 new houses have come up between house nos. 125 and 126, they could be numbered as 125/N/1, 125/N/2 and 125/N/3 etc. Further, in case suppose some household no.128 has been bifurcated, the new households could be numbered as 128/1 and 128/2. In case, new house(s) has come up in an area which was not listed earlier, fresh numbers

may be given to such houses. The first house in this area would have number following the last number given in the earlier listing operation. Similarly, in case a house is demolished or it does not exist at the time of filling schedule-L1, the serial number given in the population Census may be repeated but 'D' may be recorded in Col.2 to indicate that it is deserted or demolished. This would ensure one-to-one correspondence with the reference list.

#### Column 3: Household Number

- 20.2.7 A household is a group of persons who commonly reside together and take their meals from a common kitchen, unless the exigencies of work prevented any of them from doing so. The household may comprise of persons related by blood or of unrelated persons or combination of both. The important factor in deciding whether a group of people living together make a household or not, is the existence of common kitchen for them. If a group of persons live in a house but do not take their meals from a common kitchen, they would not constitute a household. A cook or servant living in the house of the employer and taking his food from the same kitchen would be considered as a member of that household, otherwise, he/she would be treated as a member of separate household.
- 20.2.8 Normally one household would be living in one house. However, it is possible that there may be some cases of more than one household living in the same house. The primary worker must ascertain the correct position so that no household is left out in listing. If there are two or more households in one house, each will be given a separate serial number in Col.3. It is not necessary that serial number in Col.2 corresponds with serial number in Col.3.

# Column 4: Name of the Head of the Household

20.2.9 Head of the Household would normally be the person on whom the responsibility for the management of the household falls. He need not necessarily be the eldest member. The primary worker should record the full name of the person (with the name of his father/her husband) who is actually acknowledged as Head of the household.

#### Column 5: Name of the Informant with relationship to the Head of Household

20.2.10 The name of the person whom the enumerator could contact in the household for eliciting the information of the schedule and his relationship with the head of the household should be entered here. However, the information should as far as possible be collected from the head of the household only.

#### Column 6: Household Size

20.2.11 All persons, irrespective of sex and age, who are normal residents of the household, who may or may not be present at the time of listing, would be taken into account for arriving at the size of the household.

#### Column 7: Land Owned

20.2.12 The primary worker should enquire from the head of the household whether the household owns any land. The land may be owned by all or some members of the household. Land owned by the household need not be necessarily within the same sample village. It may be in adjoining village(s) or even at far off places. The land owned could be partly/wholly in the sample village, and/or partly/wholly outside the sample village. It is the extent of land owned and not its location, which is to be ascertained and recorded in this column.

20.2.13 If the respondent reports that the household does not own any land, 'No' will be entered in this column. If the head reports that he owns land, a specific question should be put to him as to whether the household owns the land in the village or outside. In the latter case, the names of villages and the area owned in each village should be ascertained so as to ensure that no operated area is left out.

# Column 8: Operated Area

20.2.14 Before filling this column, it is necessary to understand clearly the difference between the Ownership Holding and the Operational Holding. In the case of Ownership Holding, the owner should have the right of permanent heritable possession over the land. Land held under owner-like possession is also considered as owned. This would include land held from the Government or others under a grant, lease or assignment with right of permanent heritable possession with or without the right of transfer and land operated under perpetual lease. An Operational Holding is defined as "All land which is used wholly or partly for agricultural production and is operated as one technical unit by one person alone or with others without regard to the title, legal form, size or location". The 'technical unit' has been defined as "that unit which is under the same management and has the same means of production such as labour force, machinery, animals, agricultural credit etc." Thus for classifying some land as an operational holding, the basic consideration is whether the land is put to agricultural production and who operates it. Such land may be owned and self-operated, partly or wholly leased-in and/or otherwise operated. If a piece of land is owned by person A but it has been leased to person B for operation, this land would be considered as part of operational holding held by B and not A even though the latter person owns the lands. In Agriculture Census the concept of operational holding and not the ownership holding is to be followed for data collection.

20.2.15 The entire operated land may not necessarily be located within the sample village. It is expected that the parcels in case of part-holdings would normally be located in adjoining villages as these are part of the same management. It is possible that such parcels may be located within the same

Tehsil/District/State. In rare cases, it may be located even outside the State. However, for the purpose of Agriculture Census in Non-Land record States, only the land operated within the State would be taken into account. Parcels located outside the State would not be considered for determining total operated area of the holding.

20.2.16 If the Head of the Household or the informant reports that some land is operated by the household, the Primary Worker should enquire about the number of operational holdings in the household. Normally there would be only one operational holding in one household. However, there may be a few cases where the members are staying together and sharing the common kitchen for the sake of convenience or otherwise also, but they may be operating some land independent of each other. In such cases, land operated by them would form two or more operational holdings. If two or more persons belonging to two different households operate jointly some land, these will not be considered as individual operational holdings. It will be treated as Joint Holding. The number of operational holdings in the household based upon above criterion would be recorded in Col 8. Accordingly the sl. no. of operational holdings & other details will be entered in the subsequent Columns.

# Column 9: Serial Number of Operational Holder

20.2.17 Each Operational Holder would be given a separate running serial number excluding the non-operational holder after considering remarks in Col.23.

# Column 10: Name of the Operational Holder

20.2.18 Full name of the operational holder alongwith the name of his/her father/husband should be indicated.

# Column 11: Individual/Joint Operational Holder

20.2.19 While listing the operational holders, care should be taken to list both individual and joint holdings. For individual holdings, Code 1 should be mentioned in column 11. For a joint holding, write Code 2 in column 11 after the name of the holder. If an operational holder has one holding operated by him alone and another operated jointly with others, separate serial numbers should be given for such joint holdings in Col. 9 and the serial numbers and the name(s) of person(s) with whom he is operating jointly should be indicated within brackets. If there are more such joint holdings, these should be separately numbered in Col.9 and all the serial numbers and the names of the other holders of the respective joint holdings should be mentioned within brackets in Column 10 to identify various joint holdings with Code 2 in Column 11. Care should also be taken to ensure that the joint holdings, if selected in the sample, are canvassed **only once** to avoid duplication and the extent of area operated jointly only be considered for the purpose of Schedule-H.

#### Column 12: SC/ST/Others

- 20.2.20 In view of the increasing demand for detailed information on the operational holders who belong to Scheduled Castes or Scheduled Tribes or Others, it has been decided to collect this information at the listing stage in this Census also. The enumerator will fill this column using code 1 for SC, 2 for ST and 3 for others.
- 20.2.21 Every primary worker will be supplied with a list of Scheduled Castes (SC) and Scheduled Tribes (ST) in the State. The Primary Worker should ascertain from the Head of the household whether he is a member of any Scheduled Caste or Scheduled Tribe. The cases of disputes regarding social status of the operational holder will be decided on the basis of list provided to the enumerator. If the head of the household reports that he belongs to Scheduled Caste, the Primary Worker should enquire his religion. A member of the Scheduled Caste must belong either to Hinduism or Sikhism or Buddhism and to no other religion. However, a member of the Scheduled Tribe may belong to any religion.
- 20.2.22 If the joint holders of the operational holding belong to different social groups, the group of the persons who holds major part of land or who is dominant in taking decisions about the operational management of the holding may be entered in this column.

#### Column 13: Gender

20.2.23 The gender of the operational holder using codes 1 for male, 2 for female will be entered by the enumerator in Col. 13. If the joint holders of the operational holding belong to two different genders, the gender of the person who holds major part of land or who is dominant in taking decisions about the operation/management of the holding, be recorded in Col.13.

## Area Operated

20.2.24 As explained earlier, the land operated may be wholly owned or partly owned and/or partly leased-in or wholly leased-in and/or otherwise operated. The area so operated might be located partly/wholly in the sample village. While recording the area under Cols. 18 to 21, the primary worker has to take into consideration the entire operated area irrespective of its location. Its break-up will also be indicated in Cols. 14 to 17 as desired in para 20.2.30 concerning total operated area (Col.21).

Column 14 to 17: Area Operated Inside and Outside the Sample Village

20.2.25 The area operated in the sample village should be recorded in Col.14. The primary worker has to record village-wise the area operated outside the sample village by the concerned holder. He would write the name of the village

in Col.16 and the area operated in that village in Col.15. The name of the block/tehsil in which the villages in Col.16 are located will be indicated in Col.17. It would be necessary to ensure that the sum total of area recorded in Cols. 14 and 15 tallies with the total area recorded in Col.21.

# Column 18: Owned and Self-Operated

20.2.26 A person is considered to own a piece of land if he has the right of permanent heritable possession over it. Land held under owner-like possession is also considered as owned.

20.2.27 Self-operated and owned include land cultivated by self, land being cultivated through members of the family and land cultivated with the help of hired labour but would exclude land leased out to others. The self-operated land would include cultivated as well as uncultivated land.

#### Column 19: Leased-in Area

20.2.28 Area leased-in is defined as land taken on lease from others without any permanent right of possession for the lessee. Land may be leased in on different terms and conditions such as: (a) fixed amount of money; (b) fixed quantity of produce; (c) share of produce; (d) usufructuary mortgage and (e) other terms. These terms are explained in detail in paras 20.7.15 and 20.7.16.

# Column 20: Area Otherwise Operated

20.2.29 Those areas which cannot be classified either as "area owned" or "area leased in" but are being cultivated by the operational holder, are classified as areas otherwise operated. These lands may be encroached government land or village community land or lands illegally held and/or forcibly occupied. In certain other cases, the land operated may be in dispute and as such cannot be treated as either owned or leased-in. These areas would, therefore, be classified as 'otherwise operated' and these will be recorded under Col.20.

# Column 21: Total Area Operated

20.2.30 This will be the total of areas recorded in Cols. 18, 19 and 20.

#### Column 22: Size Class

20.2.31 The size class of holding based upon total operated area as given in Col.22, will be given/written here using codes 01 to 10. The various size classes and their respective codes are given in the end of this Schedule L1.

#### Column 23: Remarks

20.2.32 This column is to be used for writing remarks for the convenience and reference of the enumerator. One important remark to be noted here could be the cultivation status of the holding in the previous year. If no part of holding

was cultivated in the reference year and in the previous year also, it will not be counted as operational holding for preparation of table T-1 and Schedule-H will not be filled for it. Each enumerator will prepare a Summary Table (based on L1) for sample village as per the format given in the end of the Schedule-L1 as such information will be used to have a cross-check between the data entry error and the Schedule error where L1 is going to be computerized for generation of village T-1 after entering L2 data and combining it will L1 data.

# 20.3 Schedule L2: List of all Institutional Holdings

20.3.1 Institutional holding would include Government farms, farms of sugarcane factories', cooperative farms, temple lands managed by Trust through hired labour, tea gardens/plantations etc. If, however, the temple lands, plantations etc. are leased out to individuals for cultivations, then these will be considered as Individual Holdings. Only such Institutional Holdings as are located in the sample village would be listed in Schedule L-2. For this purpose, the headquarters of the Institution or its location/office should be the deciding factor. In case there is no such office, the place where the manager or the person incharge of a particular Institutional Holding is residing, would be the basis for deciding where the holding is to be listed. Like previous Census, it has been decided not to ascertain SC/ST and gender status of institutional holdings in this Census also. As such no column for collecting information on this aspect has been provided in the Schedule L-2.

Column 1: Serial Number

20.3.2 Running serial number would be given to all the Institutional holdings in the sample village and the last serial number will give the total number of such holdings in the sample village.

Column 2: Identification Particulars

20.3.3 Full particulars including full name of the Institution and the office/manager should be recorded in this column.

Column 3: Area Operated in the Sample Village

20.3.4 The area operated in the sample village should be recorded in this column. In cases where entire area is lying outside the sample village, there would be no entry in Column 3. In other cases, the primary worker would record in this column only such area as is located within the sample village.

Column 4 to 6: Area Operated Outside the Sample Village

20.3.5 These columns would be applicable only in such cases where part of the holding is lying outside the sample village. Primary worker should ascertain the name(s) of the village(s) in which the Institutional Holding might be operating some land and record the same along with the area in each village.

The total of area operated in the sample village (Col.3) and in other villages (Col.4) must tally with the total area operated as given in Col.10. The Block/Tehsil in which the villages in Col.5 are located may be indicated in Col.6.

# Column 7 to 10: Area Operated

20.3.6 The concepts of area owned and self- operated, leased-in and otherwise operated have been explained in detail in paras 20.2.26 to 20.2.29 in the section pertaining to Schedule L-1. These concepts would be equally applicable for Institutional Holdings also. Institutional Holdings may have its own land which may be cultivating through hired labour. It may also take on lease certain areas from others. There is a little possibility of the Institutional holdings operating land which have been classified as otherwise operated but this column has been provided with a view to ensuring that no part of operated area is left out. The sum of Cols. 7, 8 and 9 would be recorded in Col. 10.

#### Column 11: Size Class

20.3.7 The code for appropriate size class is to be decided on the basis of figure in Col.10 and with reference to codes given in the end of this Schedule L2.

#### Column 13: Remarks

20.3.8 This column is to be used for writing remarks for the convenience and reference of the enumerator. One important remark to be noted here could be the cultivation status of the holding in the previous year. If no part of a holding was cultivated in the previous year and in the reference year also it will not be counted as operational holding for preparation of table T-1 and Schedule-H will not be filled for it.

# 20.4 Priority Table T-1

20.4.1 Schedule L-1 and Schedule L-2 should be prepared in duplicate. As soon as the listing work and scrutiny are over, one copy each of these schedules should be sent to Block/Tehsil headquarters for estimating the number and area of operational holdings and preparing table T-1 on a priority basis. The format of table T-1 is given at Annexure VIII. The Schedules L1 and L2 should be preserved at Tehsil/Block level and one copy each of these Schedules along with T-1 be forwarded to district Headquarters for their consolidation and onward transmission to the State Headquarters for further necessary action.

# 20.5 Schedule L3: Village Summary

20.5.1 This schedule was prescribed in earlier censuses also and its use was intended solely as an instrument for area tally at village level to ensure that no part of the operated area in that village is left out. **To ensure quality of data** 

generated through Agriculture Census, it has been decided that this schedule is to be prepared mandatorily in all the States. Besides identification block, this schedule contains one more block of information, which could be filled without much effort after preparation of schedules L1 and L2.

# **Block A: Identification particulars**

20.5.2 It deals with identification particulars of the village. While the State Government will decide the codes of districts, tehsil and villages, the code for the State is necessarily to be used from the list given in Annexure XII. It is advisable to get the State code printed on the form. If there is no change in the boundary of a District/Block since the previous Census, the code assigned to the District/Block in that Census should be retained in the current Census also for comparability.

# Block B: Break-up of Geographical area in the sample village

20.5.3 This block contains part of the information readily available in village records. The information is to be copied in the schedule from village records to ensure that the entire geographical area of the village is accounted for and that no survey number or its area is left out unaccounted. In the light of the experience gained during past Censuses it is felt that it would be advantageous to use a separate sheet for recording details of those areas, which are not covered by the operational holdings. While some information to be given in the schedule is to be obtained from Schedules L1 and L2 of the village, other information is to be filled from personal knowledge of village level functionary or through an enquiry from Panchayat Head or from some other government functionary as far as possible.

20.5.4 Item-wise description of the schedule is given below.

## Item No.1 & 2: Operated Area held by Resident and Non-Resident Holders

20.5.5 These two columns refer to the area operated in the village. Sl.No.1 refers to total operated area in the village by all the resident cultivators including individual, joint and institutional categories. The figure to be reported under this column will be obtained from totals of area operated within the village by all the holdings listed in Schedules L1 and L2. For obtaining this figure totals of Col.14 of Schedule L1 and Col.3 of Schedule L2 will have to be made first. As it is not possible to obtain the area operated by non-residents through household enquiry approach followed in Non-Land Record States, the information to be filled in the Sl.No.2 will be derived indirectly. Hence this column will be filled after filling all other columns of Block B. The following identity would be used to get the figure in sl.no.2 of this Block.

Area operated by non-resident cultivators (sl.no.2)

= Total geographical area of village (sl.no.4) – Total non-operational area in the village (sl.no.3(vi)) – Total area operated by resident cultivators (sl.no.1)

# Item No.3: Area not covered by Operational Holding

20.5.6 This information is to be obtained from village abstract. The categories, under which survey numbers (plots) are not covered by the operational holders are indicated under item (3). The details under these items basically relate to non-operational holdings. The categories given here are similar to those used for land use statistics and the geographical area against these may be readily available in the Village records. This categorization is broad and even if the State Governments has adopted their own classification, they would be able to give information under these categories. The basic idea here is to collect details of those village areas, which are not covered by the operational holdings. It would suffice to give the total area of all the plots together in each category and plot-wise details of areas are not required here. It should, however be ensured that no part of village area is left out. It is to be kept in view that item (3) refers to area not forming part of any operational holding. As per the definition of the operational holding, if the entire area of the holding is under old fallow, it will not be considered as an operational holding. Such area would, however, not be included under other categories such as forest, pastures, grazing lands etc.. It is thus to be covered under item 3 (v). This column would indicate the extent of the area, which would normally be operated but was not operated during the reference year 2015-16 and also during the previous year 2014-15 for certain reasons. In filling these columns it is to be kept in view that only such areas which are not part of operational holdings are to be included here. For example, if a house of operator or mini-forest is located in the middle of the operational holding, it will be considered as part of operational area and will be indicated in Sl.No.1 or Sl.No.2, as the case may be. The totals of areas under 3(i) to 3(v) is to be given in 3(vi).

### Item No.4: Village Geographical Area

20.5.7 The Geographical Area of the selected village may be obtained from the Revenue Department or any other Department of the State Government having this information.

# 20.6 Schedule L4: Sample selection of holdings in sample village

20.6.1 The purpose of Schedule L4 is to prepare sampling frame for selection of the required number of holdings for collecting detailed information in Schedule-H (Holding Schedule). The primary worker would classify the holdings listed in Col. 9 of Schedules L1 according to ten size classes listed in this schedule. The sample of holdings from each of these size classes is to be selected separately for the three social groups, viz., SC, ST and Others.

20.6.2 The list should be prepared in the Schedule L4 as mentioned above separately for the holdings of Scheduled Castes, Scheduled Tribes and Others, i.e., for each social group, one list is to be prepared in Schedule L4 for each sample village. The same form would be used for all the three categories but the social group of the holdings in the form listed will be indicated by ticking the appropriate box on the top of the Schedule. The operational holders are first to be arranged in ascending order and then 25% of holders from each size class are to be selected circular systematically after taking a random start separately for each size class in a social group. In case, 25% of the number of holdings in any size class comes to a fraction, the size of the sample from this class would be equal to the next higher integer. For example, if the number of holdings in any size class are 1 to 4, one unit will be included in the sample; if the number of units in the size class are 5 to 8, two units will be selected. In the case of last two size-classes viz., 10.00 to < 20.00 ha, and 20 ha and above, all units are to be selected. The above procedure is to be followed separately for each of the size classes in each of the three social groups. But all the institutional holdings in the sample villages are to be included in the sample for filling up Schedule-H.

#### Col. 1: Serial Number

20.6.3 This would be a continuous running number in the selected village and the last serial number would indicate the total number of operational holdings. This should tally with the total number of operational holdings as per Col.9 of Schedule L-1.

Col.2: Serial Number of Operational Holder

20.6.4 This number is to be copied from Col. 9 of Schedule L-1.

#### Col.3: Area Operated

20.6.5 The figure of operated area corresponding to the holding listed in Col.2 of this schedule will be copied from Col.21 of L-1. It is advisable that this column is filled simultaneously with Col.2, i.e., the Sl.No. of holding and the area operated by it should be copied from L-1 in one go.

Col. Nos. 4, 7, 10, 13, 16, 19, 22, 25, 28, 31: Serial Number

20.6.6 These will be the running serial numbers to be given in each column separately for each size class. These serial numbers will, however, be given after classifying the holdings listed in Col.2 in various size classes. For the classification of holdings the fieldworker will go serially by columns 1 & 2.

Col. Nos. 5, 8, 11, 14, 17, 20, 23, 26, 29, 32: Area of the holdings

20.6.7 These columns will be used for classification of area in various size classes. For example, if a holding listed at Sl.No.4 in Col.1 has 5.71 ha of operated area, this area will be rewritten in Col.23 which falls under the size

class 5 to < 7.50 ha. This will be entered in the same row in which the Sl.No. of the operational holder has been entered in Col.2. After posting of area, the Sl.Nos, as referred in para 20.6.6 above, will be given in Col.4, 7, 10 etc. To ensure that all the holdings have been classified, the fieldworker should verify whether the sum of last Sl.Nos in different size classes comes to the last Sl.No. in Col.1. Any mis-match in these figures would indicate omission or duplication of holdings.

Col. Nos. 6, 9, 12, 15, 18, 21, 24, 27, 30, 33: Rank of Holding

20.6.8 These columns would be utilized for giving ranks to the holdings in ascending order of area. For example, if holding with area 5.7 ha ranks 3<sup>rd</sup> in ascending order of area in class of holding between 5 to < 7.50 ha of area, "3" will be entered in Col.24. The last rank given in Col.6, 9, 12 etc. will be same as the last Sl.No. of Col. 4, 7, 10 etc. respectively in each size class.

# Sample Selection

20.6.9 Before starting the procedure for sample selection, the fieldworker should prepare Summary Table-SS in the format given in Annexure-V. This table will be utilized later by tabulation center for preparation of multipliers to be used in estimation procedures. The total number of holdings in different size classes for the three social groups may be filled in this table. The size of the sample from each size class may be decided keeping in view the instructions given in para 20.6.2. But all institutional holdings are to be included in the sample, i.e., no sampling of institutional holdings is to be done. Row – Column total consistency check separately for total holding of each type and holding selected may be applied before this table is to be finalized and canvassing of Schedule-H is taken up. A copy of this table is to be forwarded to tabulation center alongwith the bundles of Schedule-H for the village. The data entry agency may tally the number of schedules indicated in Table-SS with actual number of schedules in the bundle.

20.6.10 For example, if there are 30 units in a size class, 8 units i.e. 25% of holdings are to be included in the sample through Circular Systematic Sampling. For this a random number between 1 and 30 (both inclusive) will be selected using random number table. Suppose 17 is selected then the sample would include every fourth holding with ranks 17<sup>th</sup>, 21<sup>st</sup>, 25<sup>th</sup>, 29<sup>th</sup>, 3<sup>rd</sup>, 7<sup>th</sup>, 11<sup>th</sup> and 15<sup>th</sup>. After selection of the sample holdings, the fieldworker would encircle the rank and corresponding Sl.No. of selected holdings in Col. 4, 7, 10 etc. in red color for easy identification of the sample holdings. The corresponding Sl.Nos in Col.1 may also be marked to indicate the units for which Schedule-H is to be canvassed.

20.6.11 While issuing the instructions to the Primary Workers, it would be necessary to indicate, in clear terms, the procedure they have to follow for

selection of the holdings. It would be advisable to include pages of random numbers and the instructions for its use as, given in Annexure-XIII, of the manual for field staff. Nevertheless, to ensure proper adoption of the sampling procedure, it is advisable that the selection of sample is done in the presence of supervisory officer or by the supervisory staff himself. Before, the fieldworkers initiate collection of data in Schedule-H, the supervisory officer should be satisfied about unbiasedness in selection of the sample.

# 20.7 Holding Schedule-H: Detailed data on selected operational holdings in the sample village

- 20.7.1 A separate Schedule H is to be canvassed for each selected operational holding from the sample village and for each of the Institutional Holdings listed in Schedule L-2. It is important to note that the information in Schedule H should be filled for the operational holding as a whole, i.e., for the entire operated area, including area outside the village. The primary Worker may prepare two copies of Schedule-H for every selected holding. One copy may be forwarded to the higher authorities for the purpose of tabulation. The other copy may be retained as office copy for the use of back references, inspection by supervisory officers etc.
- 20.7.2 For units of area to be used, please follow instructions given in sub-section 14 and also see the instruction given at the end of revised format of Schedule-H.

20.7.2	The Cahadula II has	haan dirridad	into fall	arrina air	11001za.
20.7.3	The Schedule-H has	been aivided	IIIIO IOII	owing six	DIOCKS.

Sl.No.	Name of Block	Details
1.	Block A	Identification Particulars
2.	Block B	Area operated by tenancy
3.	Block C	Land utilization
4.	Block D1	Crop-wise area (for other than Horticulture crops)
5.	Block D2	Crop-wise area (for Horticulture crops)
6.	Block D3	Area under all crops

#### **Block A: Identification Block**

20.7.4 Before the primary worker records survey number-wise (parcel-wise) details of the land use, tenancy, crops etc., he has to fill in the identification particulars in Block A. Against village, the name of the sample village would be recorded. Name of the State, District and Tehsil/Block in which the sample village is located would be indicated against respective items. Also, appropriate codes in the boxes are to be filled-in columns 1 to 7. While it is necessary that States get their codes, as given in Annexure-XII, printed in the schedule, the other codes are to be filled by field/supervisory officers using the list provided by the State Government. Full name of the operational holder would include the name of the father/husband and in case of Institutional Holdings, the name of

person in charge (Manager) along with the office address may be indicated against Column No.8.

- 20.7.5 Instructions regarding the social group of the operational holder have been given earlier for Col.12 of Schedule L1. These instructions would be equally applicable to Schedule H. In this case, the primary worker has to ascertain and record whether the operational holder belongs to Scheduled Caste/Scheduled Tribe or not. It is to be remembered that a member of a Scheduled Caste cannot belong to a religion other than Hinduism or Sikhism or Budhism. It is, therefore, necessary to ascertain for those who report to be members of Scheduled Castes, whether they belong to Hinduism or Sikhism or Budhism. A member of the Scheduled Tribe can belong to any religion.
- 20.7.6 Certain important items such as area operated and size class, have also been listed in this Block to facilitate the sorting of Schedules-H at the time of tabulation. Instructions for filling the same are given in subsequent paragraphs.

Column 9: Serial No.

20.7.7 The Serial Number in Schedule L1 (Col.9) in case of individual/Joint operational holding and serial number in Col.1 of Schedule L2, in case of Institutional Holding, would be recorded here. It is necessary to record the correct serial number so as to facilitate cross-checking of Schedule-H with Schedule L-1/L-2.

# Column 10: Social Group

20.7.8 This column is to be filled using the codes given in Col.12 of L-1 for individual and joint holdings (SC-1, ST-2, Others-3). For institutional holdings code 9 is to be given.

#### Column 11: Area operated

20.7.9 The total area operated by the selected holder would be recorded here. Area operated would include both cultivated and uncultivated area, provided part of this was put to agricultural production during the reference period 2015-16. It would also cover the land occupied by the farm buildings, including the house of the holder, provided such buildings are located within the cultivated area. If the farms buildings are located outside the cultivated area and are covered under abadi area, such buildings would not be included. In this column, total area of all the Survey numbers (parcels) operated by an operational holder whether in the village of residence or elsewhere is to be entered. For use of units for filling area, instructions given in sub-sections 14.1 and 14.2 are to be followed. In practice there is no need for fresh enquiry for filling this column. It is simply to be copied from L1/L2 (Col.21 of L1 and Col.10 of L2).

#### Column 12: Size Class

20.7.10 There would be 10 size classes as indicated in the end of this Schedule. The Primary worker would record the correct code number as applicable.

# Survey Number-wise Details

20.7.11 There are five other blocks in Schedule-H, namely, Operated area by Tenancy Status, Land Utilization, Crop-wise area (other than horticulture crops) and Crop-wise area (for horticulture crops) and area under 'all crops'. The enumerator would record these information separately for each parcel of land identified by a survey/sub-survey number operated by the concerned holder in the sample village as well as those outside the sample village.

#### Column 1

20.7.12 In column 1, the serial number of all the survey/sub-survey numbers constituting the operational holding and the corresponding Survey/sub-survey numbers are to be recorded. Please see para 20.7.11 above.

# Block B: Area operated by tenancy

#### Columns 2 to 5:

20.7.13 The area operated may be owned and self-operated/leased-in/otherwise operated and/or combinations of these three types. The concepts of ownership, tenancy and otherwise operated area explained in Annexure-IX. The total area operated by the holder would be recorded in column 5 which would be the sum of area recorded in columns 2, 3 and 4 and should tally with the operated area as recorded in column 11 of Block A.

### Column 6: Tenancy Status

20.7.14 The area operated by the holder may be entirely owned by him, or it may be partly owned and partly leased-in or it may be entirely leased-in. There is also a category namely, 'area otherwise operated'. Area, which is occupied and operated by an operational holder by encroachment or is forcibly occupied would be accounted as 'otherwise operated', the land operated may or may not be exclusively otherwise operated. Attempts should be made to collect details about exact position of tenancy including 'Oral Tenancy'. This should be done discretely by Patwari by questioning the Head of the household/operator of holding in a suitable manner. While eliciting this information it may be made clear to the informant that this information would be treated as completely confidential and will be utilized for <u>statistical purposes only</u>. It may also be

made know to him that his name will not be divulged to anybody nor can the information be utilized in any court of law. It should be made clear to the respondent that the information supplied for the census would also not be utilized for levying any taxes on him. The enumerator also should note that tenancy particulars should be collected with utmost accuracy, as these are very sensitive yet vital information.

20.7.15 Seven code numbers would be utilized for indicating the tenancy status of the holding as a whole. The land operated might be owned and self operated/leased-in/otherwise operated and or combination of one or more of these three. Seven codes which are suggested for indicating the tenancy status of the selected holding are printed in the end of this Schedule.

#### Block C: Land Utilization

Columns 7 to 13

20.7.16 The Primary Workers are well conversant with nine-fold land use classification adopted by State Governments. However, for the purpose of Agriculture Census, three-fold classification has been introduced which are break-up of the operated area belonging to the operational holder. The details three-fold classification is provided at Annexure-VIII.

20.7.17 For ready reference, the break-up of three-fold classification into nine-fold classification is given below:

S.No.	Six-fold classification	S.No.	Nine-fold classification
1	Net Area Sown	1	Net Area Sown
2	Current Fallow	2	Current Fallow
3	Area not cultivated/cultivable	3	Fallow land other than current fallow
		4	Permanent pastures and other grazing land.
		5	Land under miscellaneous tree crops and groves not included in net area sown.
		6	Culturable waste
		7	Forests
		8	Area put to non-agricultural
			uses
		9	Barren and uncultivable land

20.7.18 It would be thus clear that there is practically no difference between the standard nine-fold classification of the land use adopted by the State Governments and the three-fold classification proposed here for the Agriculture Census which is nothing but an abridgement of nine-fold classification. Please refer Annexure-IX (section 9) for detailed concepts and definitions.

20.7.19 The net area sown shall be reported as the sum of the irrigated and unirrigated portion of the net area. Portion of net sown area which received any irrigation during the reference period, may be indicated as net irrigated area. Else, i.e. if the entire net area sown has not received any irrigation during the year of reference the entire area would be treated as unirrigated. In another case, for example a holding consists of two separate parcels/plots one received irrigation and the other not, then net area of the plot which received irrigation would be net irrigated area and the net area of the other plot which did not receive irrigation would be net unirrigated area.

#### Column 14: Irrigation Status

20.7.20 The Primary worker should indicate the irrigation status of the holding by writing the appropriate code number as given below:-

Irrigation Status	<b>Code Number</b>
Wholly irrigated	1
Partly Irrigated	2
Wholly unirrigated	3
Entirely current fallow holdings	4

20.7.21 The irrigation status of the holding will be decided on the basis of availability of irrigation in the reference year 2015-16 and keeping in view the definition explained in para 8.1 of Annexure-IX. The Primary Worker has to indicate whether the holding is wholly irrigated or partly irrigated or wholly unirrigated. If the entire net area sown is equal to net area irrigated such holding would be treated as wholly irrigated holding. In case part of the net sown area is irrigated, it will be partly irrigated and if the entire sown area has not received any irrigation during the year, such holding would be Wholly Unirrigated. If the entire cropped area is kept fallow during the current year 2015-16 but was cultivated during the previous year 2014-15, Code No.4 would be assigned to such holding as its irrigation status.

#### Block D1, D2 and D3: Crop-wise Area

Columns 15 to 47

20.7.22 Block D1 refers to reporting of irrigated and unirrigated area, as the case may be of crops other than Horticulture crops. The Patwari may report the codes (as in Annexure-XI) in respect of each crop.

20.7.23 Block D2 is intended to report horticulture crops, which were grown by the holder. The crop codes for horticulture crops are 05XX, 06XX, 07XX, 16XX and 17XX.

- 20.7.24 Block D3 is meant to show the sum of all crops grown by operational holders during 2015-16 and will be sum of both non-horticulture crops and horticulture crops.
- 20.7.25 Provision has been made to record separately area irrigated and unirrigated under four crops. However, in case the operator has grown more than four crops, the enumerator should use additional sheet for recording details of those crops in excess of four crops. A provision of twenty crops has been made in the computer programme of data entry. Hence, Blocks D1 and D2 can be stretched to accommodate up to twenty crops which is sufficient to absorb individual crops as well as respective sub-group of crops grown by an operational holder. The name of the crop would be indicated in the blank space provided for "crop". The enumerator must ensure that he will not record the area figures before writing the name of particular crop. Appropriate crop codes with reference to Annexure-XI may also be indicated. The area under mixed crops, like, Bajra-Arhar, Jowar-Arhar, Barley-Chana, Wheat-Mustard, Paddy-Arhar etc. should be divided on the basis of their proportions in seed application at the time of sowing and added in the area of respective crops under irrigated and unirrigated columns. The proportions of seed application in mixed crops could be obtained from the State/District **Agriculture Department.**
- 20.7.26 Total irrigated area of different crops reported in Block D1 shall be stated at column 27 of the block. Similarly, column 28 refers to the total unirrigated area of different crops reported in Block D1.
- 20.7.27 Total irrigated area of different crops reported in Block D2 shall be stated at column 42 of the block. Similarly, column 43 refers to the total unirrigated area of different crops reported in Block D2.
- 20.7.28 The irrigated and unirrigated gross cropped area under each crop would be separately indicated in respective columns of Blocks D1 and D2. The respective irrigated and unirrigated areas under 'all crops' i.e. the sum of corresponding areas in Block D1 and D2 may be indicated in columns 45 and 46 of Block D3.
- 20.7.29 For the sake of uniformity the code numbers for various crops have been standardized by Government of India. These are given in the 'List of crops' at Annexure-XI. The States/UTs are advised to follow the same system of codes for uniformity. The codes follow the following broad categorization of crops:-

Food Crops:- include Foodgrains, Sugarcane, Spices & Condiments, Fruits, Vegetables.

Food grains:- include Cereals and Pulses.

*Non-Food Crops*:- include Oilseeds, Fibres, Dyes and Tanning Materials, Drugs & Narcotics, Plantation Crops, Fodder Crops, Floriculture Crops, Aromatic and Medicinal Plants, Green Manure Crops and other Non-Food Crops.

Total Gross Cropped Area:- includes areas under Food crops and Non-food crops together.

- 20.7.30 In case of any confusion regarding applicability of a crop code for a particular crop, e.g. Peas, which could be considered both as vegetable and pulse crop, the States are advised to go by the practice followed by them in previous Census. In case of a new confusion a reference is to be made to Government of India for clarification.
- 20.7.31 In case the State Government notices that some new crop is coming up in the State, for which a code has not been assigned by Government of India and it is necessary to get the data on this crop separately, a reference is to be made to Government of India for allotting a separate code for the crop. Such crops may not be shown in "Others" category, which is primarily used for miscellaneous minor crops in the respective groups/sub-group of crops.
- 20.7.32 It may be noted that data should be collected for individual crops and for minor crops, like, 0188, 0288, 0488 etc. and need not be merged under 0199, 0299, 0399, 0499, 0599 etc. alone except for 'all crops' (9999).
- 20.7.33 The code 1000 is introduced to report total gross cropped area of crops other than horticulture crops. Similarly, code 2000 will refer to total gross cropped area of horticulture crops, whereas '9999' will indicate the sum of both non-horticulture crops and horticulture crops

#### Total of Survey Number-wise Details in Cols. 2 to 47

20.7.34 After filling the survey number-wise details in Cols. 2 to 47, it is necessary to draw a line below the last survey number. The totals of all the columns are to be made and legibly written below the line using preferably red ink or ink of some other easily distinguishable colour. In case other than decimal system has been used for recording survey number-wise details of areas under various columns, the totals first could be made in the system of units/measurement used for filling survey number-wise details. However, these are to be finally rewritten in red ink using decimal system of expressing fractions. The unit of measurement may vary from Block to Block. But within a Block same unit should be adopted so that conversion of units to hectare through a computer programme is facilitated. Please read para 20.7.11 also in this regard.

# Section - C

Annexure-I

## **Agriculture Census 2015-16**

## <u>Schedule – L-1</u>:List of all households and Operational Holdings in the sample village

Sl.	House	Household	Name of	Name of	Household	Whether	Whether	Sl. No. of	Name of
					area unit t (in 3 decir				
5. Vi	llage	:			10.Conversio				(specify)
4. Blo	ock	:			9. Area Unit	:	Нес	ctare/Acre/C	
3. Te	hsil	:			8. Name of E	numeratoi	::		
2. Dis	strict	:			7. Patwari Ci	rcle :			
1. Sta	ate	:			6. R.I. Circle	:			

Sl. No	House No.	Household No.	Name of head of household	Name of informant with relation to head of household	Household size	Whether owns any land, if yes, extent of land owned	Whether operated any land? If yes, Number of operational holdings in the household	Sl. No. of operational holder	Name of operational holder
1	2	3	4	5	6	7	8	9	10

Sl. No.	Indivi- dual-1/	SC-1 / ST-2 /	Sex Male	Area opera-	_	rea operated outside the Total area operated * mple village*			Size Class	Re- marks@			
	Joint-2	Other-3	-1 / Fem ale-2	ted* in the sample village	Area	Name of Village	Block/ Tehsil/ District in which located.	Owned and self opera- ted	Leased -in	Other -wise opera -ted	Total #     area     operated     (Col.14 +     Col.15)     or Cols     18 to 20	(code : 1- 10)†	
1	11	12	13	14	15	16	17	18	19	20	21	22	23

<sup>#</sup> Col.21=Col.14+Col.15 = Col.18+Col.19+Col.20

<sup>\*</sup> Please note that Cols. 14, 15, 18, 19, 20 and 21 are related to geographical area of all survey / sub-survey numbers of the operational holding added together which would include both cultivated and uncultivated area of the holding during the reference period.

<sup>@</sup> In Remarks column, total survey/sub-survey numbers of the operational holder may be indicated so that no part of the operated area, both cultivated and uncultivated, is left out.

\* Please mention invariably the area unit, like, Gunta, Kanal Malla, Bigha Biswa etc. under this column and its conversion factor to hectare at S.No.10. In case of area unit as hectare at S.No.9 above, please write '1' at S.No.10. Please also note that the conversion factor should be in 3 decimal places, viz., 2.471 acre = 1 hectare or 1 acre = 0.405 hectare, 1 Kanal = 0.051 ha., 1 Malla = 0.002 ha. etc.

Size-class $1 = less than 0.50 ha$ .	Size-class $6 = 4.00 \text{ to} < 5.00 \text{ ha}.$
Size-class $2 = 0.50$ to $< 1.00$ ha.	Size-class $7 = 5.00 \text{ to} < 7.50 \text{ ha}.$
Size-class $3 = 1.00 \text{ to} < 2.00 \text{ ha}.$	Size-class $8 = 7.50$ to $< 10.00$ ha.
Size-class $4 = 2.00 \text{ to} < 3.00 \text{ ha}.$	Size-class $9 = 10.00$ to $< 20.00$ ha.
Size-class $5 = 3.00 \text{ to} < 4.00 \text{ ha}.$	Size-class $10 = 20.00$ ha. and above.

## **Summary Table (Based on L-1) for Sample Village**

Social Group	Number of holdings	Area operated
Schedule Castes		
Scheduled Tribes		
Others		
Total		

**Note**: It is mandatory to provide the summary table on the last page of L1 Schedule to reconcile the data given in this Schedule.

Annexure-II

## **Agriculture Census 2015-16**

## <u>Schedule – L2</u>: List of all Institutional Holdings in the sample village

1. State	:	6. R.I. Circle	:	
2. District	:	7. Patwari Circle	:	
3. Tehsil	:	8. Name of Enumerator	or:	
4. Block	:	9. Area Unit	:	Hectare/Acre/Others* (specify)
5. Village	:	10.Conversion factor of area unit to hectare (in 3 decimal place	e:	(speelly)

		Area*	Area ope	Area operated outside sample village*					Size		
Sl.No.	Identi- fication parti- culars	operated in sample village	Area	Name of village	Block/ Tehsil / District in which located	Owned and self operated	Leased- in	Other- wise operated	Total area# (Col.3+4 or Cols 7 to 9)	Class (Code: 1-10)	Remarks@
1	2	3	4	5	6	7	8	9	10	11	12
	Total:										

 $<sup>\# \</sup>text{Col.} 10 = \text{Col.} 3 + \text{Col.} 4 = \text{Col.} 7 + \text{Col.} 8 + \text{Col.} 9$ 

- @ In Remarks column, total survey/sub-survey numbers of the Institutional holding may be indicated so that no part of operated area, both cultivated and uncultivated is left out.
- \* Please mention invariably the area unit, like, Gunta, Kanal Malla, Bigha Biswa etc. under this column and its conversion factor to hectare at S.No.10. In case of area unit as hectare at S.No.9 above, please write '1' at S.No.10. Please also note that the conversion factor should be in 3 decimal

<sup>\*</sup> Please note that columns 3, 4, 7, 8, 9, 10 relate to the geographical area of survey number / subsurvey numbers of the Institutional holding added together which would include both cultivated and uncultivated area of the holding during the reference year.

places, viz., 2.471 acre = 1 hectare or 1 acre = 0.405 hectare, 1 Kanal = 0.051 ha., 1 Malla = 0.002 ha. etc.

Size-class $1 = less than 0.50 ha$ .	Size-class $6 = 4.00 \text{ to} < 5.00 \text{ ha}.$
Size-class $2 = 0.50$ to $< 1.00$ ha.	Size-class $7 = 5.00 \text{ to} < 7.50 \text{ ha}.$
Size-class $3 = 1.00 \text{ to} < 2.00 \text{ ha}.$	Size-class $8 = 7.50$ to $< 10.00$ ha.
Size-class $4 = 2.00 \text{ to} < 3.00 \text{ ha}.$	Size-class $9 = 10.00$ to $< 20.00$ ha.
Size-class $5 = 3.00 \text{ to} < 4.00 \text{ ha}.$	Size-class $10 = 20.00$ ha. and above.

Annexure-III

## **Agriculture Census 2015-16**

## **Schedule L3: Village Summary**

#### A. Identification Particulars

1.	State/UT	:			7.	Patwari Circle:	
2.	District	:		8	8.	Name of Enumerator	:
3.	Tehsil	:		9	9.	Area Unit :	Hectare/Acre/Others* (specify)
4.	Block	:			10.	Conversion factor of area unit to hectare:	(in 3 decimal places)
5.	Village	:			11		` '
6.	R.I. Circle	:		-	11.	Total geographical ar of the village <sup>\$</sup>	ea:
	_		_			·	

#### B. Break-up of Geographical area of the Village

Sl.No.	Category	Geographical area
1	2	3
1.	Total Area Operated by Resident Operational Holders including institutional holdings in the sample village (on the basis of Col.14 of Schedule L-1 plus Col.3 of Schedule L-2)	
2**.	Total Area Operated by Non-resident Operational Holders in the village (estimate)	
3.	Area under other uses not forming part of an operational holding, i.e. area excluding Sl.No.1 and Sl.No.2 above	
	i. Forests	
	ii. Area not available for cultivation, like land occupied by buildings, roads and railways or under water, e.g., rivers and canals and other land put to uses other than agriculture.	
	iii. Barren and unculturable land like mountains, deserts, etc.	
	iv. Other uncultivated land, i.e., permanent pastures; grazing lands, misc. tree crops, groves for fuel not included in net sown area and culturable waste.	
	v. Fallows other than current fallows (old fallows)	
	vi. Sub-total (i) to (v)	
4.	Village Geographical Area <sup>\$</sup>	

<sup>\*\*</sup> To be worked out i.e. S1.No.2 = S1.No.4 - S1.No.1 - S1.No.3(vi)

<sup>\$</sup> If available in Government record, otherwise, it would not be possible to work out figure for S.No.2.

<sup>\*</sup> Please mention invariably the area unit, like, Gunta, Kanal Malla, Bigha Biswa etc. under this column and its conversion factor to hectare at S.No.10. In case of area unit as hectare at S.No.9 above, please write '1' at S.No.10. Please also note that the conversion factor should be in 3 decimal places, viz., 2.471 acre = 1 hectare or 1 acre = 0.405 hectare, 1 Kanal = 0.051 ha., 1 Malla = 0.002 ha. etc.

Annexure-IV

## **Agriculture Census 2015-16**

## <u>Schedule – L4</u>: List of Operational Holdings in the Sample Village and Sample Selection of Holdings

		SC 🗆	ST	☐ Others ☐
1. State	:	6. R.I. Circle	:	
2. District	:	7. Patwari Circle	:	
3. Tehsil	:	8. Name of Enumerate	or:	
4. Block	:	9. Area Unit	:	Hectare/Acre/Others*
5. Village	:	10.Conversion factor area unit to hectar		(specify) (in 3 decimal places)

	S.No. of	Area		Area Operated										
	Operation	Operated	Below 0.50 ha				0.50 to < 1.00	) ha	1.00 to < 2.00 ha					
Sl. No.	il.   al Holder   (as per	(as per col.21 of	S. No.	Area Operated	Rank of holding	S. No.	Area Operated	Rank of holding	S. No.	Area Operated	Rank of holding			
1	2	3	4	5	6	7	8	9	10	11	12			

	Area Operated										
2.00 to < 3.00 ha 3.00 to < 4.00 ha 4.00 to < 5.00 ha 5.00 to < 7.00 ha							50 ha				
S. No.	Area Operated	Rank of holding	S. No.	Area Operated	Rank of holding	S. No.	Area Operated	Rank of holding	S. No.	Area Operated	Rank of holding
13	14	15	16	17	18	19	20	21	22	23	24

	Area Operated									
	7.50 to < 10.0	00 ha		10.00 to < 20.00 ha <sup>@</sup>			20.00 ha and above <sup>@</sup>			
S. No.	Area Operated	Rank of holding	S. No.	Area Operated	Rank of holding	S. No.	Area Operated	Rank of holding		
25	26	27	28	29	30	31	32	33		

- **Note**:- i) The above list should be prepared separately for operational holdings of SC, ST and Others categories and sample be drawn separately from each list.
  - ii) @ In the case of last two size-classes, viz., 10.00 to < 20.00 ha. and 20.00 ha & above, all the holdings are to be selected for canvassing Schedule-H.
  - iii) Sample will not be drawn from Institutional holdings as all such holdings are being covered in sample villages for canvassing Schedule-H.
- \* Please mention invariably the area unit, like, Gunta, Kanal Malla, Bigha Biswa etc. under this column and its conversion factor to hectare at S.No.10. In case of area unit as hectare at S.No.9 above, please write '1' at S.No.10. Please also note that the conversion factor should be in 3 decimal places, viz., 2.471 acre = 1 hectare or 1 acre = 0.405 hectare, 1 Kanal = 0.051 ha., 1 Malla = 0.002 ha. etc.

Annexure-V

## **Agriculture Census 2015-16**

## <u>Table SS:</u> Sample Selection Summary in the sample village for canvassing of Schedule-H

1. State	:	6. R.I. Circle :	
2. District	:	7. Patwari Circle :	
3. Tehsil	:	8. Name of Enumerator:	
4. Block	:	9. Area Unit :	Hectare/Acre/Others* (specify)
5. Village	:	10.Conversion factor of area unit to hectare:	` ± ' '

		Type of Holding									
		Schedul	e Castes	Schedule	e Tribes	Otl	hers	Institutional#		Total	
Sl. No.	Size Class (in ha.)	Total holdings	Selected for SchH	Total holdings	Selecte d for SchH	Total holdings	Selected for SchH	Total holdings	Selected for SchH	Total holdings	Selected for SchH
1	2	3	4	5	6	7	8	9	10	11	12
1	Below 0.50										
2	0.50 - < 1.00		·								
3	1.00 - < 2.00		·								
4	2.00 - < 3.00										
5	3.00 - < 4.00										
6	4.00 - < 5.00										
7	5.00 - < 7.50										
8	7.50 - < 10.00		_								
9	10.00 - < 20.00 <sup>@</sup>		·								
10	20.00 ha and above@										
	Total:										

**Note**: 1. # As all the Institutional Holdings in the sample village are to be selected for canvassing Schedule-H, the figures in Col.9 and Col.10 will be same in each size-class.

- 2. @ In the case of last two size-classes, viz., 10.00 < 20.00 hectare and 20.00 ha. & above, all the holdings in the sample village for SC, ST and 'Others' categories are to be selected for filling up of Schedule-H.
- \* Please mention invariably the area unit, like, Gunta, Kanal Malla, Bigha Biswa etc. under this column and its conversion factor to hectare at S.No.10. In case of area unit as hectare at S.No.9 above, please write '1' at S.No.10. Please also note that the conversion factor should be in 3 decimal places, viz., 2.471 acre = 1 hectare or 1 acre = 0.405 hectare, 1 Kanal = 0.051 ha., 1 Malla = 0.002 ha. etc.

(Signature of Primary Worker)

(Signature of Supervisory Officer)

Annexure-VI

## **Agriculture Census 2015-16**

## <u>Holding Schedule 'H'</u>: Detailed data on Selected Operational Holdings in the Sample Village.

<b>A.</b>	Identification Block:	
1.	State\U.T. :	
2.	District :	
3.	Tehsil :	
4.	Block :	
5.	Village :	
6.	R.I. Circle :	
7.	Patwari Circle & Name of Patwari :	
8.	Full name of the operational holder/ Institutional holding	
9.	S.No. of operational holder as per : Col.9 of L1 (SNPL) or Col.1 of L2 in Case of Institutional holdings	
10.	Social Group(SC-1, ST-2, Others-3, Institutional-9) :	
11.	Area Operated (Col.21 of Sch. L1 or: Col.10 of Sch.L2 in case of Institutional holdings)	[ [ Hectare/Acre/Others* (specify))
12.	Size Class (Code: 1 – 10) † :	
13.	Conversion factor of area unit to hectare (in 3 decimal places)	

S.No./	B. Area operated by Tena	ancy			
Survey No.	Owned and self- operated area	Leased-in area	Otherwise operated area	Total operated area (Cols. 2+3+4)	Tenancy Status (Code: 1-7)^
1	2	3	4	5	6
Total					

	C. Land Utiliz	zation							
S.No./ Survey		Net Area Sown		Current	Net cultivated	Area not	Total	Irrigation Status (Codes: 1 – 4)#	
No.	Net Irrigated Area	Net Un- irrigated Area	Total (Col.7+8)	fallow	area (Col. 9+10)	cultivated/ cultivable	operated area (Col.11+12)		
1	7	8	9	10	11	12	13	14	
Total									

D1. Cro	D1. Cropwise Area (Other than Horticulture)														
S.No./		Crop-I:		Crop-II:		Crop-III:			Crop-IV:			Total D1 Block (Code:1000)**			
S.No./ Survey No.	Crop Code	Irri- gated	Unirr- igated	Crop Code	Irri- gated	Unirr- igated	Crop Code	Irri- gated	Unirr- igated	Crop Code	Irri- gated	Unirr- igated	Irri- gated	Unirr- igated	Total (Col. 27 +28)
1	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
Total															

D2. Cro	D2. Cropwise Area (Horticulture)														
CN-/		Crop-I:		Crop-II:		Crop-III:			Crop-IV:			Total D1 Block (Code:2000)**			
S.No./ Survey No.	Crop Code	Irri- gated	Unirr- igated	Crop Code	Irri- gated	Unirr- igated	Crop Code	Irri- gated	Unirr- igated	Crop Code	Irri- gated	Unirr- igated	Irri- gated	Unirr- igated	Total (Col. 42 +43)
1	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44
Total															

D3. Tot	D3. Total Area under all Crops									
S.No./		All Crops (Code: 9999)								
Survey	Irrigated (Block D1 Col.27 + Block D2 Col.42)	Total (Block D1 Col.29 + Block D2								
No.	Hilligated (Block DI Col.27 + Block D2 Col.42)	Unirrigated (Block D1 Col.28 + Block D2 Col.43)	Col.44)							
1	45	46	47							
Total										

- N.B.:- a) Area under a crop in a season/sub-season/any stage of sowing should not be more than net area sown, likewise, irrigated area under a crop should not be more than net irrigated area.
  - b) Gross cropped area  $\geq$  Net sown area if Net sown area>0.
  - c) If Gross cropped area > 0, then Net sown area > 0.
  - d) If Net area sown > 0, then Gross cropped area > 0.
  - e) Mixed crops area will be divided under different crops in proportionate to their seed applications at the time of sowing.
- \* Please mention invariably the area unit, like, Gunta, Kanal Malla, Bigha Biswa etc. under this column and its conversion factor to hectare at S.No.13. In case of area unit as hectare at S.No.11 above, please write '1' at S.No.13. Please also note that the conversion factor should be in 3 decimal places, viz., 2.471 acre = 1 hectare or 1 acre = 0.405 hectare, 1 Kanal = 0.051 ha., 1 Malla = 0.002 ha. etc.
- \*\* Under these columns, please indicate sum of all the crops grown by the operational holder during the reference year 2015-16. It is to be noted that only 4 crops have been indicated for recording of data in the schedule which is only illustrative and not exhaustive. However, the same Block-D may be stretched to accommodate up to 20 crops.

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Size-class $1 = less than 0.50 ha$ .	Size-class $6 = 4.00 \text{ to} < 5.00 \text{ ha}.$
Size-class $2 = 0.50$ to $< 1.00$ ha.	Size-class $7 = 5.00$ to $< 7.50$ ha.
Size-class $3 = 1.00 \text{ to} < 2.00 \text{ ha}.$	Size-class $8 = 7.50$ to $< 10.00$ ha.
Size-class $4 = 2.00 \text{ to} < 3.00 \text{ ha}.$	Size-class $9 = 10.00$ to $< 20.00$ ha.
Size-class $5 = 3.00 \text{ to} < 4.00 \text{ ha}.$	Size-class $10 = 20.00$ ha. and above.

<sup>^</sup> Tenancy Status: Enter 1 if (Wholly owned and self-operated), 2 if (Partly owned and partly leased-in), 3 if (Wholly leased-in), 4 if (Wholly otherwise operated), 5 if (Partly owned and partly otherwise operated), 6 if (Partly leased-in and partly otherwise operated), 7 if (Partly owned, partly leased-in and partly otherwise operated)

<sup>#</sup> Irrigation Status: Enter 1 if (Wholly irrigated), 2 if (Partly Irrigated), 3 if (Wholly unirrigated), 4 if (Entirely current fallow holdings).

Annexure-VII

## **Consistency Checks for Scrutiny of Schedules**

### 1. Schedule L1

Total area operated Col.21 = Col.14 + Col.15 = Col.18 + 19 + 20.

#### 2. Schedule L2:

Total Area Operated (Col.10) = Area owned and self-operated (Col.7)

- + Area leased-in (Col.8) + Area otherwise operated (Col.9)
- = Area operated in sample Village (Col.3)
- + Area Operated Outside the Sample Village (Col.4)

(Col.10 = Cols.7 + 8 + 9 = Cols.3 + 4).

## 3. Schedule L3:

Area operated by resident cultivators in the village (Sl.No.1)

- + Area operated by non-resident cultivators in the village (Sl.No.2)
- + Area under non-operational use (Sl.No.3-vi)
- = Village Geographical Area (Sl.No.4).

## 4. Schedule H:

#### Block - A:

Total Operated Area of Holding (Sl.No.11)

= Col.21 of Sch.L1 or Col.10 of Sch. L2 (in case of Institutional Holdings).

#### Block - B:

Col.2 + Col.3 + Col.4 = Col.5 = Sl.No.11 of Block A.

#### Block - C:

- i) Net cultivated area (Col.11) = Cols.9+10
  - $\leq$  Total operated area (Col.5).
- ii) Area not cultivated (Col.12) < Total operated area (Col.13).
- iii) Total operated area (Col.13) = Cols. 9+10+12 = Col.5.

#### Block - D1:

i) Total irrigated area for other than horticulture crops (Col.27)

- = The sum of irrigated areas under different crops other than horticulture crops.
- ii) Total unirrigated area for other than horticulture crops (Col.28) = The sum of unirrigated areas under different crops other than horticulture crops.

#### Block - D2

- i) Total irrigated area for horticulture crops (Col.42) = The sum of irrigated areas under different horticulture crops.
- ii) Total unirrigated area for horticulture crops (Col.43) = The sum of unirrigated areas under different horticulture crops.

#### Block - D3

- i) Gross irrigated area (Col.45) = (Col.27+Col.42)  $\geq$  Net irrigated area = Col.7.
- ii) Gross unirrigated area (Col.46) = (Col.28+Col.43)  $\geq$  Net unirrigated area = Col.8.
- iii) Gross cropped area (Col.47) = (Col.27+Col.28+Col.42+Col.43)  $\geq$  Net sown area = Col.9.
- iv) Gross cropped area (Col.47) = Col.45 + Col.46.
- v) Area under a crop in a season/sub-season/any stage of sowing should not be more than net area sown.
- vi) If Gross cropped area > 0, then Net area sown > 0.
- vii) If Net area sown > 0, then Gross cropped area > 0.

#### Annexure-VIII

## **Agriculture Census 2015-16**

## **Table 1: Number and Area of Holdings**

1. State	:	6. R.I. Circle	:	
2. District	:	7. Patwari Circle	:	
3. Tehsil	:	8. Name of Enumerator	or:	
4. Block	:	9.Area Unit	:	Hectare/Acre/Others**
5. Village	:	10.Conversion factor	of	(specify)
		Area unit to hectar	e:	(in 3 decimal places)

Social Groups: SC/ST/Others/Institutional/Total

	ai Groups: SC	C/ST/Others/Institutional/Total								
Sl.	Size of holdi	ng	No. of operational holdings					operated		
No.	(ha)		Individual	Joint*	Institutional@	Total	Individual	Joint*	Institutional@	Total
1	2		3	4	5	6	7	8	9	10
1	Below 0.50	M								
		F								
		T								
2	0.50 - < 1.00	M								
		F								
		T								
	Marginal	M								
	(1+2)	F								
		T								
3	1.00 - <2.00	M								
		F								
		T					İ			
	Small (3)	M								
	, ,	F					İ			
		T								
4	2.00 - < 3.00	M								
		F								
		T								
5	3.00 - <4.00	M								
		F								
		T								
	Semi-	M								
	Medium	F								
	(4+5)	T								
6	4.00 - < 5.00	M								
		F								
		T								
7	5.00 - <7.50	M								
		F								
							†			
8	7.50-<10.00	M								
	10.00	F			<del> </del>		<del> </del>		<del> </del>	<b></b>
		T								<b></b>
		1					1		l .	

Sl.	Size of holding		No. of operational holdings			Area operated				
No.	(ha)		Individual	Joint*	Institutional@	Total	Individual	Joint*	Institutional@	Total
1	2		3	4	5	6	7	8	9	10
	Medium	M								
	(6+7+8)	F								
		T								
9	10.00 -	M								
	<20.00	F								
		Т								
10	20.0 ha and	M								
	above	F								
		Т								
	Large	M								
	(9+10)	F								
		Т								
	All Sizes	M								
		F								
		Т								

**Note**: This summary should be prepared separately for each social group, viz., Scheduled Caste, Scheduled Tribe, Others, Institutional and Total for each village under Male/Female/Institutional/Total categories of operational holdings.

Checked by:	
Name:	(Signature of Primary Worker)
Designation:	Date:

Date:

M - Male

F – Female

I – Institutional holdings

T – Total of Male, Female and Institutional holdings

- \* Joint holdings gender-wise, should be classified as per the guidelines issued by the Agriculture Census Division, Government of India.
- @ Institutional holdings need not be categorized gender wise and social group wise.
- \*\* Please mention invariably the area unit, like, Gunta, Kanal, Malla, Bigha Biswa etc. under this column and its conversion factor to hectare at S.No.10. In case of area unit as hectare at S.No.9 above, please write '1' at S.No.10. Please also note that the conversion factor should be in 3 decimal places, viz., 2.471 acre = 1 hectare or 1 acre = 0.405 hectare, 1 Kanal = 0.051 ha., 1 Malla = 0.002 ha. etc.

Annexure-IX

## **Concepts and Definitions**

### 1. Operational Holding

1.1 All land which is used wholly or partly for agricultural production and is operated as one technical unit by one person alone or with others without regard to the title, legal form, size or location.

#### 2. Technical Unit

2.1 A technical unit has been defined as that unit which is under the same management and has the same means of production such as labour force, machinery and animals.

#### 3. Agricultural Production

- 3.1 Agricultural production includes growing of field crops, fruits, grapes, seeds, tree nurseries (except those of forest trees), vegetables and flowers, production of coffee, tea, cocoa, rubber, jute, oilseeds, fodder grass, etc.
- 3.2 Grass would be treated as a crop if special efforts are made to raise it.

## 4. Operated area

- 4.1 Operated area would include both cultivated and uncultivated area, provided part of it is put to agricultural production during the reference period. It, for instance, an operational holding consists of four survey numbers out of which one survey number is put to non-agricultural uses, the total area of the operational holding will be equal to the total geographical area of all the four survey numbers.
- 4.2 It would also cover the land occupied by the farm buildings, including the house of the holder, provided such buildings are located within the operated area. If the farms buildings are located outside the cultivated area and are covered under abadi area, such buildings would not be included.
- 4.3 Operated area would exclude government forest land, government waste land, village common grazing land, abadi area etc. If Government wasteland is allotted to an individual then it will be included in the holding.
- 4.4 If the entire area of the holding (the area of all the survey numbers of an operational holding) is put to non-agricultural use and/or it is under old fallow, it will not be considered as operational holding. If, however, the entire area of operational

holding is under current fallow during the reference year but was cultivated in the preceding year, this would still be considered as an operational holding. An operational holding would include both the cultivated and uncultivated land. If both net area sown and current fallow are zero, such holding will not be considered as an operational holding although some area may exist in other part(s) of the classification of land use.

- 4.5 In some cases, land is divided amongst all the members of the family. Where it is divided between the husband, wife and minor children and the cultivation is being done by the husband as the head of the family, the land may appropriately be treated as one operational holding. Also, if the entire operated area is partly under current fallow and partly under non-agricultural use during the reference year and was not fallow in the previous year, such holdings will also be covered in the Agriculture Census treating it as an operational holding.
- 4.6 There might be cases where in the records, a holding is shown jointly in the name of more than one co-sharer while in fact the land may have been privately divided and the co-sharers are independently cultivating. In such cases where there is no dispute, they should be treated as many operational holdings as the number of independent cultivators. This is necessary because in Agriculture Census the data is to be collected on the basis of *de facto* position rather then *de jure* position
- 4.7 In some States, in the Zamabandi register against a Khata, name of three or four persons are shown. While from the records it would appear that there is only one holding, in practice, all the three or four brothers are actually cultivating the land independently of each other although there is no legal partition of land. From the Census point of view, this would constitute three or four operational holdings.
- 4.8 For cultivated areas in the State Forests, no detailed land records are prepared. In the absence of revenue records and revenue agency such areas are excluded for Census purposes.
- 4.9 The operated area may comprise of:
  - i) Land owned and self operated.
  - ii) Land leased in
  - iii) Land otherwise operated.
- 4.9.1 *Land owned and self-operated:* Land for which the cultivator has the right to permanent heritable possession would be considered as owned. This would include:
  - i) Land held from Government or others under grant or lease or assignment with right of permanent heritable possession with or without right of transfer
  - ii) Land operated under perpetual lease.

Self-operated land would include:

- i) Self cultivation
- ii) Land cultivated through members of the family
- iii) Land cultivated with the help of hired labour. Land owned and self operated should not; include land leased out to others.
- 4.9.2 *Leased in:* Area leased in is defined as land taken on lease from others without any permanent right of possession for the lessee. Land may be leased in for:
  - i) Fixed money
  - ii) Fixed produce
  - iii) Share of produce
  - iv) Usufructuary mortgage: Ownership of the property remains with the mortgager but the possession is with the mortgagee (i.e. the person to whom the mortgage is made or given). Income from the property accrues to the mortgagee and the mortgage is terminated as soon as the full amount is realized.
  - v) Other terms: It may be the combination of two or more of the above mentioned terms.
- 4.9.3 Area otherwise operated: This would include encroachment, land forcibly occupied, unauthorized or land in dispute etc., which cannot be treated as owned or leased in, as per the definitions given above.

## 5. Operational holder

- 5.1 An Operational holder is the person who has the responsibility for the operation of the agricultural holding and who exercises the technical initiative and is responsible for its operation. He may have full economic responsibility or may share it with others. The operational holder may be Individual/Joint/ Institutional.
  - i) *Individual:* If the holding is being operated either by one person alone or by group of persons who are the members of the same household it will be considered as an individual holding.
  - ii) *Joint:* If two or more persons belonging to different households, share jointly as partners in the economic and technical responsibility for the operation of an agricultural holding, such holding would be considered as joint.
  - iii) *Institutional:* Holdings such as government farms, sugarcane factories farms, cooperative farms, lands managed by trust would be treated as institutional.

#### 6. Resident, Non-resident and deemed resident operational holder

- 6.1 All the cultivators residing in a particular village and cultivating some land within the same tehsil are resident cultivators of that village irrespective of the fact whether they are cultivating land in that village or not. A resident cultivator may, therefore, have: either (i) entire area of the holding located in the village of his residence; or (ii) partly within the village of residence and partly outside; or (iii) entirely outside the village of residence.
- 6.2 An operational holder operating area outside the tehsil in which his village of residence falls, will not be treated as a resident cultivator of the village of his residence in this Tehsil for Agriculture Census purposes, rather he will be treated as a resident cultivator of that village of that tehsil where the area falls.
- 6.3 If the area in a particular village is operated by a cultivator who resides outside that village but within the same tehsil, he is a non-resident operational holder for that area. However, if this operational holder is resident of a village lying outside the tehsil in which the area is located, he will be treated as a resident operational holder (*deemed resident*) of the village where the area is located in the Tehsil.

## 7. Complete/Part-Holding

- 7.1 A holding is said to be complete holding if the entire operated area of that holding is located in one village. If the operated area is spread over more than one village, it would be considered as part-holding.
- 7.2 Tehsil would be taken as the outer limit for consolidation of part holdings.

## 8. Net Irrigated and Net Unirrigated Area

- 8.1 Portion of net sown area which received any irrigation (partly or wholly) during the reference period, may be indicated as net irrigated area. Else, if the entire net area sown has not received any irrigation during the year of reference, the entire area would be treated as unirrigated. In another case, for example, a holding consists of two separate parcels/plots one received irrigation and the other not, then net area of the plot which received irrigation would be net irrigated area and the net area of the other plot which did not receive irrigation would be net unirrigated area.
- 8.2 If the entire sown area has not received any irrigation during the year of reference, such holding would be wholly unirrigated and the entire area shall be reported as unirrigated.
- 8.3 The irrigation status would be decided after assessing the efforts made for irrigation. For example, if a plot is irrigated only through natural sources like streams,

rain etc and no effort were made to place irrigation system, the plot will be treated as unirrigated. Whereas, interventions (like use of pump-set, labour, creation of pond/tank etc) were made then it shall be treated as irrigated.

#### 9. Land Utilization

- 9.1 Operated area would be classified into three broad categories:
  - i) Net area sown
  - ii) Current fallow
  - iii) Area uncultivated.

The area uncultivated, include the following:

- i) Fallow land other than current fallow
- ii) Other uncultivated land excluding fallow land
- iii) Culturable waste; and
- iv) Land not available for cultivation.
- 9.2 *Net area sown:* Total area sown with crops and orchards, counting area sown more than once in the same year, only once.
- 9.3 *Current fallow:* Cropped area, which are kept fallow during the current year but was cultivated in the previous year. For example with any seedling area is not cropped in the same year, it may be treated as current fallow.
- 9.4 Fallow land other than current fallow: All lands, which are taken up for cultivation but are temporarily out of cultivation for a period of greater than one year but not more than five years, i.e., greater than one year but less than or equal to five years. The reasons for keeping such lands fallow may be one or more of the following:
  - i) Poverty of the cultivator
  - ii) Inadequate supply of water
  - iii) Adverse climatic conditions
  - iv) Silting of canals and rivers and
  - v) Unremunerative nature of farming
- 9.5 Other uncultivated land excluding fallow: This will include:
  - i) Permanent pastures and other grazing lands: All grazing lands, whether they are permanent pastures and meadows or not. Village common grazing lands would, however, be excluded.

- ii) Land under Miscellaneous Tree Crops: Cultivable land, which is not included in the net area sown but is put to some agricultural use. Land under casuarina trees, thatching grasses, bamboo bushes and other groves for fuel which are not included under 'Orchards' would be covered under this category.
- 9.6 Culturable Waste: 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 the last five years or more in succession for one reason or the other, i.e., > 5 years in succession. Such lands may be either wholly or partly covered with shrubs and jungles, which are not put to any use. Land once cultivated but not cultivated for five years in succession would also be included in this.
- 9.7 *Not available for cultivation:* This would include Forest, area under non-agricultural use, barren and uncultivable land belonging to the operational holder.
  - i) Forest: All lands classed as `Forests' under any legal enactment dealing with forests or administered as forests whether State owned or private and whether wooded or maintained as potential forest land. The area of crops raised in the forest and grazing land or areas open for grazing within the forests would be included under the forest area. Only private forest belonging to the operational holder would be covered for the purpose of Agriculture Census.
  - ii) Area under Non-Agricultural Use: All lands occupied by buildings or ponds or lands put to use other than agriculture will be included in this category. Only such lands within the cultivated holding of the operational holder should be covered in the Census.
  - iii) Barren and Uncultivable Land: All barren and uncultivable land within the cultivated holding of the operational holder should be covered in the Census.

## Annexure-X

## Frequently asked questions and other clarifications

Q.1	Is operated area the same as geographical area?
Ans.	<ul> <li>Yes, Operated area includes both cultivated and uncultivated area, provided part of it is put to agricultural production during the reference year (July 2015-June 2016).</li> <li>For example, if an operational holding consists of four survey numbers out of which one survey number is put to non-agricultural uses, the total operated area will be equal to the total geographical area of all the four survey numbers.</li> </ul>
Q.2	The land owned by an institution (like Temple, school/college) was given on lease to a person, whether the leased out portion would still be institutional?
Ans.	<ul> <li>No, for the portion of the land leased out, the person who is operating the land will be the operational holder.</li> <li>Only the portion of the area operated by the institution will be recorded as institutional holding.</li> </ul>
Q.3	Can there be a holder with no agricultural activity in the reference period?
Ans.	<ul> <li>If the entire area of an operational holding is under current fallow during the reference year but was cultivated in the preceding year, that holding would still be considered as an operational holding.</li> <li>If the net sown area and current fallow of a particular holder during the reference period is zero and area of all survey numbers is put to non-agricultural uses and/or is under fallow other than current fallow (old fallow), such a holder would not be counted as an Operational holder.</li> </ul>
Q.4	If the entire area of the holding is under current fallow during the reference year but was cultivated in the preceding year, would it still be counted as operational holding?
Ans.	Yes; in such cases, the operated area would consist entirely of current fallow.
Q.5	If the entire area was leased-out during the reference year, will the owner be counted as Operational holder?
Ans.	No; in such cases, the <b>actual cultivator</b> , <b>NOT OWNER</b> , will be the Operational holder.
Q.6	What is area otherwise operated?
Ans.	The area otherwise operated includes encroached land, land forcibly occupied, unauthorized or land in dispute etc., which cannot be treated as owned, under ownership like possession or leased in.
Q.7	Whether area operated illegally in the forest should be counted for the purposes of Agriculture Census?
Ans.	<ul> <li>For cultivated areas in the State Forests, no detailed land records are prepared.</li> <li>In the absence of revenue records such areas are <i>excluded</i> for Agriculture Census purposes.</li> </ul>
Q.8	Do we count Government land as operated area?

Ans.	<ul> <li>Operated area would exclude government forest land, government waste land, village common grazing land, abadi area etc.</li> <li>However, if Government wasteland is allotted to an individual then it will be included in the holding.</li> </ul>
Q.9	If the entire/portion of land has been acquired by the Government but is still being cultivated by the holder during the reference period, should it still be counted as part of holding?
Ans.	Though the land has been acquired by the Government but the land continues to be agriculturally operational during the reference period, it should be counted as part of operational holding and the area should be recorded as otherwise operated.
Q.10	A person has no owned or leased-in land. He is, however, cultivating land adjacent to Railway Track/Station. Will he be regarded as an operational holder?
Ans.	Yes, such cultivators should be counted as operational holders and the area will be recorded as land otherwise operated.
Q.11	If the entire area during reference year is under current fallow, shall we count this holding for Agriculture Census?
Ans.	If the entire area during reference year is under current fallow but all or some of it was cultivated during immediately preceding year, the holding will be considered as operational holding. However, if there was no agricultural activity during the preceding year also then the holding will not be counted.
Q.12	Whether owner of the land is necessarily the operational holder?
Ans.	<ul> <li>If the person who owns the land cultivates the land directly or indirectly (through his/her relatives etc and he is the decision making person) then the person who owns the land will be operational holder.</li> <li>If the owner is NOT the cultivator. The land is cultivated by (including decision making) somebody else. The person cultivating the land will be counted as operational holder and NOT the OWNER.</li> </ul>
Q.13	If the land is in the name of the Father but is informally partitioned among children who are cultivating independently, who will be operational holder in such cases?
Ans.	<ul> <li>In such cases, there will be as many operational holders as the number of children.</li> <li>If the father/mother is also operating some portion of the land he/she may also be treated as an independent holder.</li> </ul>
Q.14	The owner of the land is not making any decision on the agriculture activity on the land, which is independently operated by his/her brother but receives a share of income. Who will be the operational holder in this case?
Ans.	<ul> <li>In such a case, brother will be operational holder.</li> <li>The operated area would be recorded as area leased-in for share of produce.</li> </ul>
Q.15	The land is operated by husband and wife together. Is it a male holding or female holding?
Ans.	If the decision making person is the husband then it will be a holding operated by male. Otherwise it will be a holding operated by female.
Q.16	If father is cultivating the land (for eg. all children are employed elsewhere / living

	abroad) though the land is formally partitioned among the children, who will be operational holder?				
Ans.	In such cases, Father will be regarded as operational holder.				
Q.17	Is it necessary that an operational holder must be a full time agriculturalist?				
Ans.	An operational holder need not be a full time agriculturalist, he/she can be a govt. employee, businessman, etc. only requirement is that he/she must be engaged in some agricultural activity during the reference period including decision making.				
Q.18	Can there be an operational holder who is individual and joint holder simultaneously?				
Ans.	<ul> <li>A holder can be both individual and joint simultaneously.</li> <li>For example, a holder may have some land operated by himself and in some other village (same block/tehsil), may have some land operated jointly with somebody else who is not the member of the same household.</li> <li>In this case the operational holder will be counted as an individual and also a joint holder.</li> </ul>				
Q.19	If a holder is operating some land individually (owned land) and some land with two or more holders jointly then how the respective holdings will be classified?				
Ans.	Owned land will be counted as individual, and the rest will be treated as joint.				
Q.20	In a State, different units are used to record area operated in different villages /tehsils (like kanal-marlla, cents etc.). Is it necessary to have same unit of measurement throughout the State?				
	<ul> <li>Table-1 MUST be prepared for each Village. If the village T-1 is prepared in some unit other than hectare, it should be converted to hectares before submission to Tehsil /District. All further aggregation of T-1 will be done in hectares only.</li> <li>It must be ensured that within each Tehsil only one unit is used for reporting of area.</li> <li>In States, where it is difficult to adopt hectare as unit of area throughout the State, local units and system of measurement may be used for recording the area but final totals from Tehsil onwards should be expressed only in decimal system.</li> <li>Area under a holding could be filled in local unit but decimal system is to be used for expressing fractional parts, e.g. the area of plot with dimensions "12 feet 3 inch x 12 feet 6 inch" should be given as "153.125 square feet".</li> </ul>				

#### **IMPORTANT**

- o The unit of area and conversion factor of area unit to hectare must be indicated in the schedule at the time of filling-up.
- o The conversion factor of area unit to hectare MUST be given in 3 decimal places.

### Annexure-XI

## **CODE LIST OF CROPS**

SL. NO.	CROP CODE	CROPS
1.	9999	All Crops
2.	0101	All Paddy (Total Of 0111, 0121, 0131)
3.	0111	Pre Kharif Paddy
4.	0121	Summer Paddy
5.	0131	Kharif Paddy
6.	0102	Jowar
7.	0103	Bajra
8.	0104	Maize
9.	0105	Ragi
10.	0106	Wheat
11.	0107	Barley
12.	0108	Small Millets
13.	0109	Jobstears
14.	0110	Grim
15.	0186	Sawan
16.	0187	Ramdana
17.	0188	Other Cereals
18.	0199	Total Cereals
19.	0201	Gram
20.	0202	Tur (Arhar)
21.	0203	Urad
22.	0204	Moong
23.	0205	Masur
24.	0206	Horsegram
25.	0207	Beans (Pulses)
26.	0208	Peas (Pulses)
27.	0209	Moth
28.	0288	Other Pulses
29.	0299	Total Pulses
30.	0399	Total Foodgrains
31.	0401	Sugarcane
32.	0402	Palmvriah
33.	0488	Other Sugar Crops
34.	0499	Total Sugar Crops
35.	0501	Pepper (Black)
36.	0502	Chillies
37.	0503	Ginger

SL. NO.	CROP CODE	CROPS
38.	0504	Turmeric
39.	0505	Cardamom (Small)
40.	0506	Cardamom (Large)
41.	0507	Betelnuts (Arecanuts)
42.	0508	Garlic
43.	0509	Coriander
44.	0510	Tamarind
45.	0511	Cumin Seed
46.	0512	Fennel / Anise Seed
47.	0513	Nutmeg
48.	0514	Fenugreek
49.	0515	Cloves
50.	0516	Cinnamon
51.	0517	Cocoa
52.	0518	Kacholam
53.	0519	Beetlvine
54.	0520	Ajwain
55.	0521	Saffron
56.	0522	Bayleafs (Tejpatta)
57.	0588	Other Condi. & Spices
58.	0599	Total Spices & Condiments
59.	0601	Mangoes
60.	0602	Orange
61.	0603	Mosambi
62.	0604	Lemon / Acid Lime
63.	0605	Other Citrus Fruits
64.	0606	Banana
65.	0607	Table Grapes
66.	0608	Wine Grapes (Black)
67.	0609	Apple
68.	0610	Pear
69.	0611	Peaches
70.	0612	Plum
71.	0613	Kiwi Fruit
72.	0614	Chiku
73.	0615	Papaya
74.	0616	Guava
75.	0617	Almond
76.	0618	Walnut
77.	0619	Cashewnuts

SL. NO.	CROP CODE	CROPS
78.	0620	Apricot
79.	0621	Jack Fruit
80.	0622	Litchi
81.	0623	Pineapple
82.	0624	Watermelon
83.	0625	Musk Melon
84.	0626	Bread Fruits
85.	0627	Ber
86.	0628	Bel
87.	0629	Sahatoot
88.	0630	Aonla (Amla)
89.	0631	Pomegranate
90.	0632	Custard Apple
91.	0633	Passion
92.	0634	Remputan
93.	0635	Jamun
94.	0636	Plantain
95.	0637	Kinnoo
96.	0638	Strawberry
97.	0688	Other Fruits
98.	0699	Total Fruits
99.	0701	Potato
100.	0702	Tapioca (Cassava)
101.	0703	Sweet Potato
102.	0704	Yam
103.	0705	Elephant Foot Yam
104.	0706	Colocasia/Arum
105.	0707	Other Tuber Crop
106.	0708	Onion
107.	0709	Carrot
108.	0710	Radish
109.	0711	Beetroot
110.	0712	Turnip (Shalgam)
111.	0713	Tomato
112.	0714	Spinach
113.	0715	Amaranths (Chaulai)
114.	0716	Cabbage
115.	0717	Other Leafy Vegetable
116.	0718	Brinjal
117.	0719	Peas (Vegetable) (Green)

SL. NO.	CROP CODE	CROPS
118.	0720	Lady's Finger (Bhindi)
119.	0721	Cauliflower
120.	0722	Cucumber
121.	0723	Bottle Gourd (Lauki)
122.	0724	Pumpkin
123.	0725	Bitter Gourd
124.	0726	Other Gourd
125.	0727	Vench (Guar)
126.	0728	Beans (Green)
127.	0729	Drumstick
128.	0730	Green Chillies
129.	0731	Ridge Gourd
130.	0732	Tinda
131.	0733	Snake Gourd
132.	0734	Koval (Little Gourd)
133.	0788	Other Vegetables
134.	0799	All Vegetables
135.	0899	Total Food Crops
136.	1001	Groundnut
137.	1002	Castorseed
138.	1003	Sesamum (Til)
139.	1004	Rapeseed & Mustard (Toria/ Taramira)
140.	1005	Linseed
141.	1006	Coconut
142.	1007	Sunflower
143.	1008	Safflower
144.	1009	Soyabean
145.	1010	Nigerseed
146.	1011	Oil Palm
147.	1088	Other Oilseeds
148.	1099	Total Oilseeds
149.	1101	Cotton
150.	1102	Jute
151.	1103	Mesta
152.	1104	Sunhemp
153.	1188	Other Fibres
154.	1199	Total Fibres
155.	1201	Indigo
156.	1288	Other Dyes & Tanning Materials
157.	1299	Total Dyes & Tanning Materials

SL. NO.	CROP CODE	CROPS
158.	1301	Opium
159.	1302	Tobacco
160.	1388	Other Drugs & Narcotics
161.	1399	Total Drugs & Narcotics
162.	1401	Guar
163.	1402	Oats
164.	1403	Green Manures
165.	1488	Other Fodder Crops
166.	1499	Fodder & Green Manures
167.	1501	Tea
168.	1502	Coffee
169.	1503	Rubber
170.	1588	Other Plantation Crops
171.	1599	Total Plantation Crops
172.	1601	Orchids
173.	1602	Rose
174.	1603	Gladiolus
175.	1604	Carnation
176.	1605	Merigold
177.	1606	Jasmine
178.	1607	Chrysanthemum
179.	1608	Tuberose
180.	1609	Gerbera
181.	1610	Gaillardia
182.	1611	Anthurium (Flower)
183.	1688	Other Flowers
184.	1699	Total Floriculture Crops
185.	1701	Asgandh
186.	1702	Isabgol
187.	1703	Sena
188.	1704	Moosli
189.	1705	Other Medicinal Plant
190.	1706	Mehandi
191.	1707	Allovera
192.	1708	Bacopamonnieri
193.	1711	Lemon Grass
194.	1712	Mint
195.	1713	Menthol
196.	1714	Eucalyptus
197.	1715	Other Aromatic Plant

SL. NO.	CROP CODE	CROPS
198.	1716	Sandalwood
199.	1717	Vanilla
200.	1799	Total Aromatic And Medicinal Plants
201.	1801	Canes
202.	1802	Bamboos
203.	1803	Mulberry Crop
204.	1804	Thespesia
205.	1805	Teak
206.	1806	Subabul
207.	1807	Casuarina
208.	1888	Other Non-Food Crops
209.	1899	Total Other Non-Food Crops
210.	1999	Total Non-Food Crops

#### Annexure-XII

## STATE/UT CODE LIST

S.NO.	STATES/UTs	STATE/UT CODE
1.	Andhra Pradesh	01
2.	Arunachal Pradesh	02
3.	Assam	03
4.	Bihar	04
5.	Chhattisgarh	05
6.	Goa	06
7.	Gujarat	07
8.	Haryana	08
9.	Himachal Pradesh	09
10.	Jammu & Kashmir	10
11.	Jharkhand	11
12.	Karnataka	12
13.	Kerala	13
14.	Madhya Pradesh	14
15.	Maharashtra	15
16.	Manipur	16
17.	Meghalaya	17
18.	Mizoram	18
19.	Nagaland	19
20.	Odisha	20
21.	Punjab	21
22.	Rajasthan	22
23.	Sikkim	23
24.	Tamil Nadu	24
25.	Telangana	25
26.	Tripura	26
27.	Uttar Pradesh	27
28.	Uttarakhand	28
29.	West Bengal	29
30.	Andaman & Nicobar Islands	30
31.	Chandigarh	31
32.	Dadra & Nagar Haveli	32
33.	Daman & Diu	33
34.	Delhi	34
35.	Lakshadweep	35
36.	Puducherry	36
37.	All India	37

### Sample Selection using Random Number Tables

To illustrate the use of a table of random numbers, consider the problem of obtaining a sample of n = 5 holdings from a list of N = 19 holdings in a size class (sample size = 25%). First, rank the 19 holdings in ascending order of size (operated area). Second, refer to a table of random numbers and proceed through the following steps.

- 1. Select by any method one of the four pages of tabled values.
- 2. Without a sense of direction, bring a pencil point down anywhere on the printed page so as to hit a random digit which is printed in a block of five numbers.
- 3. Since the available number of holdings (19) is in two digits, select either the first two or last two columns in block. Suppose, we had selected the random number 09517 (given in row 15 and cols 20 to 24 of the table) and we decided to select only the first two digits of the number i.e. 09 which will be the random start and corresponding sample would be the holdings with rank {09, 13, 17, 02, 06}. The ranks of units after 9<sup>th</sup> will be obtained by adding four in a sequential manner as 25% of the operational holding i.e. every fourth holding after the random start have to be including in the sample.
- 4. In case in steps 1 to 3, a number greater than 19 is found, move downward till a number between 1 and 19 is found.

The above exercise is to be repeated separately for each size class.

## **RANDOM NUMBERS**

	8 2	98	10	15	20 24	25	30	35	3 4	45
00	39591	66082	48626	95780	55228	87189	75717	97042	19696	4861
01	46304	97377	43462	21739	14566	72533	60171	29024	77581	7276
02	99547	60779	22734	23678	44895	89767	18249	41702	35850	4054
03	06743	63537	24553	77225	94743	79448	12753	95986	78088	4801
04	69568	65496	49033	88577	98606	92156	08846	54912	12691	1317
05	68198	69571	34349	73141	42640	44721	30462	35075	33475	4740
06	27974	12609	77428	64441	49008	60489	66780	55499	80842	5770
07 08	50552 74687	20688 02033	02769	63037	15494	71784	70559	58158	53437	4621
09	49303	76629	98290 71897	62635 30990	88877 62923	28599 36686	63682 96167	35566 11492	03271 90333	0565 8450
10	89734	39183	52026	14997	15140	18250				
11	74042	40747	02617	11346	01884	82066	62831 55913	51236	61236	0917
12	84706	31375	67053	73367	95349	31074	36908	72422	13971	6420
13	83664	21365	28882	48926	45435	60577	85270	42782 02777	89690 06878	4800 2756
14	47813	74854	73388	11385	99108	97878	32858	17473	07682	2016
15	00371	56525	38880	53702	09517	47281	15995	98350	25233	7971
16	81182	48434	27431	55806	25389	40774	72978	16835	65066	2873
17	75242	35904	73077	24537	81354	48902	03478	42867	04552	6603
18	96239	80246	07000	09555	55051	49596	44629	88225	28195	4459
19	82988	17440	85311	03360	38176	51462	86070	03924	84413	9236
,20	77599	29143	89088	57593	60036	17297	30923	36224	46327	9626
J21	61433	33118	53488	82981	44709	63655	64388	00498	14135	5751
22	76008	15045	45440	84062	52363	18079	33726	44301	86246	9972
23	26494	76598	85834	10844	56300	02244	72118	96510	98388	8016
11	46570	88558	77533	33359	07830	84752	53260	46755	36881	9853
25	73995	41532	87933	79930	14310	64833	49020	70067	99726	9700
26	93901	38276	75544	19679	82899	11365	22896	42118	77165	0873
27	41925	28215	40966	93501	45446	27913	21708	01788	81404	1511
28	80720	02782	24326	41328	10357	86883	80086	77138	57072	1210
29	92596	39416	50362	04423	04561	58179	54188	44978	14322	9705
30	39693	58559	45839	47278	38548	38885	19875	26829	86711	5700
31 32	86923 99700	37863 79237	14340	30929	04079	65274	03030	15106	09362	8297
33	60248	21953	18172 52321	58879 16984	56221 03252	65644	33331	87502	32961	4099
34	29136		03992	67025		90433 78348	97304 47823	50181	71026 13037	0194 4773
35	57471	42913	85212							
36	57471	93847	03269	42319 56096	92901 95028	97727 14039	04775 76128	94396	38154	2523
37	56768	71694	63361	80836	30841	71875	40944	63747 54827	27301 01887	6552 5482
38	70400	81534	02148	41441	26582	27481	84262	14084	42409	6295
39	05454	88418	48646	99565	36635	85496	18894	77271	26894	0088
40	80934	56136	47063	96311	19067	59790	08752	68040	85685	8307
'41	06919	46237	50676	11238	75637	43086	95323	52867	06891	3208
42	00152	23997	41751	74756	50975	75365	70158	67663	51431	4637
43	88505	74625	71783	82511	13661	63178	39291	76796	74736	1098
44	64514	80967	33545	09582	86329	58152	05931	35961	70069	1214
45	25280	53007		96366	49378	80971	10419	12981	70572	1157
46	71292	63716	93210	59312	39493	24252	54849	29754	41497	7922
47	49734	50498	08974	05904	68172	02864	10994	22482	12912	1792
48	43075	09754	71880	92614	99928	94424	86353	87549	94499	1145
49	15116	16643	03981	06566	14050	33671	03814	48856	41267	7625

54	55	8 2	65	70 74	75	84	85	8 4	95	Ī
25178	77518	41773	39926							-
45803	95106	85816	33366	09843 37383	29694 76832	43801 37024	69276 06581	44707	23455	00
15532	30898	14922	13923	44987	45122	86515	55836	22587 96165	24827 19650	01
99068	35453	42152	12078	04913	06083	06645	93310	40016	85421	02
70983	88359	95583	79848	24101	67502	25692	42496	77732	19278	03
71181	48289	03153	18779	65702	03612	64608	84071	47588	09982	05
44052	59163	74033	86112	27731	46135	63092	59171	44816	12354	06
91555	87708	70964	43346	56811	08725	75139	77674	82467	41899	07
54307	12188	58089	73745	35569	97352	77301	37684	36823	69218	08
63631	23919	06785	13891	89918	76211	09362	34292	17640	65907	09
46832	30801	98898	28954	97793	20825	36775	71974	15574	09184	10
05944	82632	39310	74857	61725	50569	81937	16820	85446	51168	11
28199	90116	59501	49025	73005	84954	11587	97691	90415	84685	12
08391	05600	00624	95068	33776	44985	01505	76911	45539	32181	13
29634	13021	96568	15124	55092	44043	31073	92371	51288	33378	14
61509	18842	79201	46451	68594	98120	68110	91062	42095	61839	15
87888	23033	69837	65661	15130	44649	42515	83861	50721	36110	16
94585 82033	15218 93915	74838 34898	61809	92293	85400	46934	08531	70107	65707	17
79131	10022	82199	79913 78976	70013	27573	39256	35167	35070	47095	18
				22702	37936	10445	96846	84927	69745	19
79344 15384	39236 44585	41333	11473 89733-	15049 40779	47930	99029	97150	82275	55149	20
38802	90957	32910	97485	10358	59664 88588	83328 95310	25162	58758	17761	21
85874	18400	28151	29541	63706	43197	65726	22252 94117	19143	69011	22
26200	72680	12364	46010	92208	59103	60417	45389	22169 56122	91806 85353	23 24
13772	75282	81418	42188	66529	47981	92548	10079	68179	40915	1
91876	07434	96946	98382	97374	34444	17992	42811	01579	48741	25 26
31721	21713	83632	40605	24227	53219	05482	86768	53239	24812	27
92570	53242	98133	84706	78048	29645	79336	66091	05793	25922	28
02880	29307	73734	66448	64739	74645	29562	13999	17492	49891	29
80982	14684	31038	85302	98349	57313	86371	33938	10768	60837	30
38000	43364	94825	32413	46781	09685	69058	56644	85531	55173	31
14218	94289	79484	61868	40034	22546	68726	14736	89844	13466	32
74358 39049	21940 14986	40280	22233	09123	49375	55094	46113	54046	51771	33
	14980	94000	26649	13037	34609	45186	89515	63214	66886	34
18727	06300	91486	67316	84576	11100	37580	49629	83224	46321	35
22719	29784	40682	96715	40745	57458	70048	48306	50270	87424	36
33980 23885	36769 66721	51977 16542	03689	79071	20279	64787	48877	44063	93733	37
35190	44068	78477	12648 69133	65986 58983	43104 96504	45583	75729	35118	58742	38
						44232	74809	25266	73872	,39
33453 98236	36333 11489	45814 97240	78128 01678	55914 30779	89829 75214	43251	41634	48488	49153	40
21295	53563	43609	48439	87427	88065	80039 09892	68895 58524	95271	19654	41
28335	79849	69842	71669	38770	54445	48736	03242	43815 83181	31340 85403	42
5449	35273	62581	85522	35813	34475	97514	72839	10387	31649	43
88167	03878	89405	55461	73248	48620	31732	47317	06252	54652	45
36131	62596	98785	02360	54271	26242	93735	20752	17146	18315	45
71134	90264	30126	08586	97497	61678	81940	00907	39096	02082	47
02664	53438	76839	52290	77999	05799	93744	16634	84924	31344	48
20664	96876	16663	25608	67140	84619	67167	13192	81774	58619	49

	8 %	8 8	10	15	20	25	30	35	94 44	45
50	93873	86558	72524	02542	73184	37905	05882	15596	73646	50798
51	08761	47547	02216	48086	56490	89959	69975	04500	23779	76697
52	61270	98773	40298	26077	80396	08166	35723	61933	13985	19102
53	73758	15578	95748	02967/	35122	36539	72822	68241	34803	42457
54	17132	32196	60523	00544	73700	70122	27962	85597	36011	79971
55	26175	29794	44838	84414	82748	22246	70694	57953	39780	17791
56	06004	04516	06210	03536	84451	30767	37928	26986	07396	64611
57	34687	73753	36327	73704	61564	99434	90938	03967	97420	19913
58	27865	08255	57859	04746	79700	68823	16002	58115	07589	12675
59	89423	51114	90820	26786	77404	05795	49036	34686	98767	32284
60	99030	80312	69745	87636	10058	84834	89485	08775	19041	61375
61	02852	54339	45496	20587	85921	06763	68873	35367	42627	54973
62	10850	42788	94737	74549	74296	13053	46816	32141	02533	25648
63	38301	18507	33151	69434	80103	02603	61110	89395	67621	67025
64	48181	95478	62739	90148	00156	09338	44558	53271	87549	45974
65	23098	23720	76508	69083	56584	90423	21634	35999	09234	95116
66	25104	82019	21120	06165	44324	77577	15774	44091	69687	67576
67	22205	40198	86884	28103	57306	54915	03426	66700	45993	36668
68	64975	05064	29617	40622	20330	18518	45312	57921	23188	82361
69	58710	75278	47730	26093	16436	38868	76861	85914	14162	21984
70	12140	72905	26022	07675	16362	34504	47740	39923	04081	03162
71	73226	39840	47958	97249	14146	34543	76162	74158	59739	67447
72	12320	86217	66162	70941	58940	58006	80731	66680	02183	94678
73	41364	64156	23000	23188	64945	33815	32884	76955	56574	61666
74	97881	80867	70117	72041	03554	29087	19767	71838	80545	61402
75	88295	87271	82812	97588	09960	06312	03050	77332	25977	18385
76	95321	89836	78230	46037	72483	87533	74571	88859	26908	55626
77	24337	14264	30185	36753	22343	81737	62926	76494	93536	75502
78	00718	66303	75009	91431	64245	61863	16738	23127	89435	45109
79	38093	10328	96998	91386	34967	40407	48380	09115	59367	49596
80	87661	31701	29974	56777	66751	35181	91453	95094	20056	84990
81	87142	91818	51857	85061	17890	39057		00969	32942	54794
82	60634	27142	21199	50437	04685	70252		75952	66753	50664
83	73356	64431	05068	56334	34487	78253		69916	63885	88491
84	29889	11378	65915	66776	95034	81447		16815	68432	63020
85	48257	36438	48479	72173	31418	14035	84239	02032	40409	11715
86	38425	29462	79880	45713	90049	01136	72426	25077	64361	94284
87	48226	31868	38620	12135	28346	17552	03293	42618	44151	78438
88	80189	30031	15435	76730	58565	29817	36775	64007	47912	16754
89	33208	33475	95219	29832	74569	50667	90569	66717	46958	04820
90 91 92 93 94	19750 62820 95737 64642 77636	23174 34362 62961	49690 71124 81520 37566 14915	43352 36040 79481 41064 50744	53884 34873 26442 69372 95611	80125 95650 37826 84369 99346	47795 79059 76866 92823 39741	99701 23894 01580 91391 04407	06800 58534 83713 61056 72940	22794 78296 94272 44495 87936
95 96 97 98 99	43633 93686 23775 91325 58129	64698	28647 58868	31010 96529 42314 63107 73586	11299 52924 51213 08993 24422	52661 87371 29116 96000 92799	79014 34855 26243 66854 28963	17910 67125 40243 11567 36444	40279 32137 80604	60753 10186 25177 72299 10226

8 2	55	8 2	\$ 69	74	75	8 8	89	8 %	95	
37686	78520	31209	83677	99115	94024	09286	58927	24078	16770	50
58108	29344	11825	51955	50618	99753	02200	50503	32466	50055	51
71545	42326	66429	93607	55276	85482	24449.	41764	19884	46443	52
93303 36731	90557 37929	79166 13079	90097	01627 31525	96690	77434	06402	05379	59549	53
			83036		35811	59131	65257	03731	86703	54
49781 65995	31581 94208	80391 68785	84608 04370	23390 44192	30433 91852	08240 01129	85136 28739	80060	43651	55
19663	09309	02836	10223	90814	92786	96747	46014	08705 54765	54538	56
88479	24307	63812	47615	17220	27942	11785	49933	03923	76001	58
95407	95006	95421	20811	76761	47475	58865	06204	36543	81002	59
22789	87011	61926	97996	10604	80855	48714	52754	98279	96467	60
96783	18403	36729	18760	30810	73087	94565	68682	15792	60020	61
68933	05665	12264	23954	01583	75411	.04460	83939	66528	22576	62
68794	13000	20066	98963	93483	51165	63358	12373	13877	37580	63
40537	31604	60323	51235	65546	85117	40117	. 09617	73520	48525	64
41249	42504	91773	81579	02882	74657	73765	10932	74607	83825	6.5
08813	84525	30329	33144	76884	89996	07834	67266	96820	15128	66
46609	30917	29996	10848	39555	09233	58988	82131	69232	76762	67
68543	69424	92072	57937	05563	80727	67053	35431	00881	56541	68
09926	84219	30089	08843	24998	27105	18397	79071	40738	73876	69
30515 21611	76316 26346	49597	37900	98604	05857	51729	19006	15239	27129	70
47410	83767	04877 56454	71584 96768	55724 27001	39616 83712	64648	36811	60915	34108	7
18572	31214	41015	64110	61807	72472	01245 78059	27256 69701	57991 78681	75758 17356	73
28078	02819	02459	33308	96540	15817	78694	81476	87856	99737	7
56644	50430	34562	75842	67724	02918	55603	55195	88219	39676	7.
27331	48055	18928	47763	61966	64507	06559	81329	29481	03660	76
32080	21524	32929	07739	00836	39497	94476	27433	96857	52987	7
27027	69762	65362	90214	89572	52054	43067	73017	87664	03293	7
56471	68839	09969	45853	72627	71793	49920	64544	71874	74053	79
22689	19799	18870	49272	74783	38777	76176	40961	18089	32499	80
71263	82247	66684	90239	67686	48963	30842	59354	33551	87966	8
64084	57386	89278	27187	52142	96305	87393	80164	95518	82742	8
23121 78906	10194	09911	37062	43446	09107	47156	70179	00858	92326	8.
	48080	76745	65814	51167	87755	66884	12718	14951	47937	8
87257	26005	21544	37223	53288	72056	96396	67099	49416	91891	8
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89632	11606	87159	89408	06295	31055	15530	46432	49871	37982	8
23708	98919	14407	53722	58779	92849	04176	24870	56688	25405	.8
51445	46758	42024	27940	64237	10086	95601	53923	85209	79385	8
23849	65272	24743	39960	27313	99925	29743	87270	05773	21797	9
78613 90694	15441 27996	34568 94181	57398	25872	61792	94599	60944	90908	38948	9
96772	86829	36403	87428 40087	41135 67456	29461 21071	72716 39039	68956	67871	72459	9
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31596	70876	46807	06741	29352	23829	52465	00336	24155	61871	9
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02484	74068	04671	19646	41951	05111	34013	57443	87481	48994	9
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