

AGRICULTURE CENSUS 2010-11

Manual of Schedules and Instructions for Data Collection (Non-Land Record States)



**Government of India
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Schedules and Instructions for Data Collection

1 Introduction

1.1 Agriculture Census forms part of a broader system of collection of Agricultural Statistics. It is a large-scale statistical operation for the collection and derivation of quantitative information about the structure of agriculture 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 the 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 and cropping patterns, irrigation status, tenancy particulars and terms of leasing. 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 the basis for the 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 the 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.

1.3 Agriculture Census in India is conducted following broad guidelines developed for the decennial World Census of Agriculture by Food and Agriculture Organization of the UN. India has been participating in the World Agriculture Census Programme for over four decades. 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 Census with reference years 1976-77, 1980-81, 1985-86, 1990-91, 1995-96, 2000-01 and 2005-06. The next Agriculture Census has been planned to be conducted in the country with 2010-11 (1st July, 2010 to 30th June, 2011) as the reference period. It would be the ninth Agriculture Census in the country.

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. Approach for Data Collection

3.1 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 the entire land operated by the cultivator is to be collected and the State is the outer limit for pooling of all the parcels of an operational holding in the Non-land Record States. As comprehensive land records are not available in the non-land record States, the required data would be collected through sample surveys by adopting enquiry method. The data would be collected from the operational holders in the selected villages as per the prescribed sampling design in the standardized schedules.

3.2 Schedules for data collection for Agriculture Census 2010-11 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.

4. Sampling Design

4.1 A stratified two stage sampling design is adopted for Agriculture Census in the non-land record States. In view of the 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 the 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 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 the 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 the time required for selection procedure, besides ensuring comparability with statistics generated through EARAS.

4.2 In case of holdings other than institutional holdings, the second stage sampling is to be done in the States where the selected villages have a large number of holdings in them. For detailed information, please see para 4.5 for selection of sample villages and sample holdings in the selected villages.

4.3 All the institutional holdings in the selected village are to be included in the sample for filling Schedule-H.

4.4 For adoption of common software for tabulation, it is necessary that all the 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.

4.5 In view of the past experience of census taking, the following three models of sampling are recommended for Agriculture Census 2010-11:-

- i) In Orissa, West Bengal and Kerala the sampling design and sample size described in paras 4.1 to 4.3 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-V and Annexure-XII.

- 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.

4.6 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.

4.7 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.

4.8 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.

4.9 The procedure for selection of sample holdings for filling Schedule-H is described in section 15.6 in details.

5. Item Coverage

5.1 Data on the following eight main aspects would be collected during this Agriculture Census with the agricultural year 2010-11 (July 2010 to June 2011) 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. **During this Phase of Census, data on basic agricultural infrastructure available in**

the villages is also to be collected. In Phase-II, which is the main Census operation, though only for selected holdings in selected villages, the data on following five aspects will be collected.

- i) Dispersal of holdings.
- ii) Tenancy and terms of leasing.
- iii) Land Utilization.
- iv) Irrigation status and source-wise area irrigated.
- v) Cropping pattern.

5.2 All the data will be compiled separately for the operational holdings of the 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 sex-wise also. The detailed instructions on tabulation plan for Phase-II will be separately issued.

6. Primary Fieldwork

6.1 The primary fieldwork, which would consist of collecting information in respect of resident cultivators in the sampled villages, would be done by the statistical staff of the State Governments. The supervision will be done by the senior Statistical staff.

6.2 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.

6.3 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.

6.4 Non-resident cultivators will not be covered in the Survey.

6.5 A separate list of institutional holdings will also have to be prepared for each sampled-village.

7 Training

7.1 It is necessary to impart thorough training, both to the primary workers and the supervisory officers before the fieldwork is undertaken. The training of the 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 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 the training courses, both at supervisory and primary level for which an advance intimation may be sent.

7.2 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.

7.3 The training at different levels is to be oriented towards the responsibilities of the trainees. The following points are to be covered in training for the supervisory and field functionaries.

7.4 *Training at Supervisory Level:*

7.4.1 The main points which are to be covered necessarily in the training of supervisor include:

1. The responsibilities of administrative and statistical supervisors are to be explained.
2. All the concepts and definitions given in Annexure-I 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 L-1 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 VIII) 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:

7.4.2 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-I) 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 the sample survey would be the preparation of the 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 15.6.9 to 15.6.11 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-X). 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 old 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 (L-1 to L-4), 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 must be mentioned while filling up the schedules.

8 Supervision

8.1 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 L-1 and L-2 should be checked by supervisory officer in all the sample villages.

8.2 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 7.4.2(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.
- vi) 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-VIII.
- x) Any other points, which the inspecting officer wants to mention on the quality of data collected or any other problem faced.

8.3 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.

8.4 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.

9 Flow of Schedules

9.1 After preparing schedules L-1 and L-2 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 L-1 and L-2.

9.2 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.

10 Time Calendar

10.1 The time calendar for the conduct of the Agriculture Census and presentation of the 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 indicating the time limit for completion of following items of work is as under:

S.No.	Item of Work	Time Limit
i)	Completion of printing of Schedules and Instructions by States and their distribution to field staff	by April 2011
ii)	Training of primary and supervisory staff for Agriculture Census	by June 2011
iii)	Completion of field work for Phase-I (Schedules L1/L2/L-3) of the Agriculture Census and supervision.	July 2011 – Sept. 2011
iv)	Submission of provisional Table-1 by States/UTs to GOI.	by December 2011
v)	Submission of filled-in village level Schedule L-3 to Data Entry Agency.	January 2012
vi)	Completion of fieldwork of Phase-II (Schedule-H) of Agriculture Census and supervision.	by June 2012
vii)	Finalization of Table T-1 and Table-8 (village directory) by States and their submission to GOI.	by June 2012
viii)	Manual Scrutiny/Coding of Schedule-H and their delivery to data entry center/agency.	by Sept. 2012
ix)	Completion of data entry for Schedule-H.	by March 2013
x)	Generation of trial tables 2 to 7.	by June 2013
xi)	Submission of final Table 2-7 by States/UTs to GOI.	by August 2013
xii)	Submission of State Reports to GOI.	Sept. 2013

11 Constitution of State Co-ordination Committees

11.1 Since different Departments would be involved in the work of Agriculture Census in the States, it would be necessary to have a Coordination Committee at the State level to review the progress from time to time. The Committee should 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 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.

11.2 It is necessary to form similar Committees at the district level. These would be headed by the Collector/Dy. Commissioner who will be designated as District Agriculture Census Officer. Members of this Committee should include, representatives from the District authorities of Revenue, Agriculture and Statistics. This would help in better coordination and smooth conduct of Agriculture Census.

12 Publicity

12.1 The importance of publicity for the Agriculture Census cannot be over-emphasized. 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.

13 Schedules

13.1 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.

13.2 These schedules whose specimens are given at Annexure II to VII, are:

Schedule L-1 :	List of Households and Operational Holdings in the sample village.
Schedule L-2 :	List of Institutional Holdings in the sample village.
Schedule L-3 :	Village Summary
Schedule L-4 :	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.

14 Concepts and Definitions

14.1 Concepts and Definitions to be adopted for the Agriculture Census are explained in Annexure-I.

15 Instructions for Filling Schedules

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

15.2 Listing Schedule L-1: List of Households and Operational Holdings in the sample village

15.2.1 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.

15.2.2 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 2010-11 also. This is an important and essential operation in order to ensure that no building or house or household is missed or left uncovered.

15.2.3 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-XI. 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.

15.2.4 Item-wise description of the schedule L-1 is given in subsequent paragraphs.

Column 1: Serial number

15.2.5 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

15.2.6 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

15.2.7 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.

15.2.8 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

15.2.9 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

15.2.10 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

15.2.11 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

15.2.12 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.**

15.2.13 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

15.2.14 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.

15.2.15 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.

15.2.16 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

15.2.17 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

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

Column 11: Individual/Joint Operational Holder

15.2.19 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

15.2.20 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.

15.2.21 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.

15.2.22 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

15.2.23 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

15.2.24 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 15.2.30 concerning total operated area (Col.21).

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

15.2.25 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

15.2.26 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.

15.2.27 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

15.2.28 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 15.7.20 and 15.7.21.

Column 20: Area Otherwise Operated

15.2.29 Those areas which can not 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

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

Column 22: The Size Class

15.2.31 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 below.

Sl. No.	Operated Area (in ha.)	Size Class Code No.
1	Below 0.50 ha.	01
2	0.50 ha. – 0.99 ha.	02
3	1.00 ha. – 1.99 ha.	03
4	2.00 ha. – 2.99 ha.	04
5	3.00 ha. – 3.99 ha.	05
6	4.00 ha. – 4.99 ha.	06
7	5.00 ha. – 7.49 ha.	07
8	7.50 ha. – 9.99 ha.	08
9	10.00 ha. – 19.99 ha.	09
10	20.00 ha. and above	10

Column 23: Remarks

15.2.32 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. This time 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.

15.3 Schedule L-2 : List of Institutional Holdings

15.3.1 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

15.3.2 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

15.3.3 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

15.3.4 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

15.3.5 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

15.3.6 The concepts of area owned and self operated, leased-in and otherwise operated have been explained in detail in paras 15.2.26 to 15.2.29 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

15.3.7 The code for appropriate size class is to be decided on the basis of figure in Col.10 and with reference to table given in para 15.2.31 above.

Column 13: Remarks

15.3.8 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.

15.4 Priority Table T-1

15.4.1 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 IX. 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.

15.5 Schedule L-3

15.5.1 This schedule was prescribed in earlier censuses in Land Record States but its use was intended solely as an instrument for area tally to ensure that no part of the operated area in the village is left out. **To ensure the quality of the data generated through the Agriculture Census, it has been decided that this schedule is to be prepared mandatorily in all the States in this Census also.** Besides, serving as a quality check in Land Record States, this schedule has been amplified for this Census to include some more basic agricultural information for the village as the statistical unit. In non-land records States also, this schedule will serve the same purpose as far as Block C and Block D of this Schedule are concerned.

15.5.2 Besides the identification block, this schedule contains 3 more blocks of information, which could be filled without much effort after preparation of Schedules L-1 and L-2 and Table T-1. **It is proposed to computerize and tabulate the Schedule L-3 in this Census to prepare directory of village infrastructure for each State.** Though in the land records States, this schedule will be filled for all the villages, in non-land records States this schedule will be filled only for the villages which have been selected for Agriculture Census. However, to make the directory complete, it is advisable that the States make an attempt to get this schedule filled up for all the villages in the State. However, for the villages which are not selected for Agriculture Census, the columns of

the Schedule L-3 relating to the aspects on which data are to be collected through Agriculture Census, would be left blank.

Block A: Identification particulars

15.5.3 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 XI. 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

15.5.4 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 L-1 and L-2 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.

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

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

15.5.6 These two columns refer to the area operated in the village. Col.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 L-1 and L-2. For obtaining this figure totals of Col.14 of Schedule L-1 and Col.3 of Schedule L-2 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 this column 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)

As this schedule will be computerized at all India level, it is necessary that only ‘hectares’ is used as the unit for recording area in this schedule and decimal system is followed for expressing fractions.

Item No.3: Area not covered by Operational Holding

15.5.7 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 and also during the previous year 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 Col.1 or Col.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

15.5.8 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.

Block C and D: Number of holdings and agricultural infrastructure in the village

15.5.9 These two blocks would help in preparing a village directory, which gives an agricultural profile of the village based on basic characteristics. Block

C is to be filled after L-1, L-2 and table T-1 for the village have been prepared. The number of holdings in each category, viz., C1, C2, C3, C4 and C5 is to be indicated on the basis of data given in table T-1 for the village.

15.5.10 The information in Block D which has been enlarged this time, is to be provided by the Primary Worker out of his personal knowledge if he resides in the village. Otherwise this block is to be filled by enquiry from the head of the Panchayat or any other government functionary. In filling this block, he has to confine to the geographical boundary of the village. For the infrastructure such as godown, cold storage, market, mandi etc. which spread to more than one village or whose sphere of activity spreads to several villages, their counting will be done only in the villages where their office is located. In case the office is located on the boundary of two villages, it will be counted in the village whose name is used by the office in its address (Please refer Annexure-XII for 'explanatory notes' on items of Block D above).

15.6 Schedule L-4: Sample selection of holdings in sample village

15.6.1 The purpose of Schedule L-4 is to prepare the sampling frame for the 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 L-1 according to ten size classes listed in para 15.2.31. 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.

15.6.2 The list should be prepared in the Schedule L-4 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 L-4 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 to 20 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

15.6.3 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

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

Col.3: Area Operated

15.6.5 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

15.6.6 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

15.6.7 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 7.49 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 15.6.6 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

15.6.8 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 3rd in ascending order of area in class of holding between 5 to 7.49 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

15.6.9 Before starting the procedure for sample selection, the fieldworker should prepare Summary Table-SS in the format given in Annexure VI. 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 15.6.2. 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.

15.6.10 For example, if there are 30 units in a size class, 8 units are to be included in the sample. 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 of the holdings with ranks 17th, 21st, 25th, 29th, 3rd, 7th, 11th and 15th. 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 colour for easy indendification 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.

15.6.11 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-XII, 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.

15.7 Schedule H: Detailed data on selected operational holdings in the sample village

15.7.1 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.

15.7.2 For units of area and script numerals to be used for filling Schedule-H, the instructions given in sub-section 16.1 and 16.2 should be followed.

15.7.3 The Schedule-H for Agriculture Census 2010-11 is same as that of earlier censuses except some minor changes. This schedule has been divided into seven blocks, which relate to aspects indicated below:

Block A:	Identification Particulars
Block B:	Dispersal of Operated Area
Block C:	Area Operated by Tenancy Status and terms of leasing
Block D:	Land Utilization
Block E:	Number of Wells & Tube-wells
Block F:	Net Area Irrigated by Source
Block G:	Crop-wise Area

Block A: Identification Block

15.7.4 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-XI, 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) alongwith the office address may be indicated against Column No.8.

15.7.5 Instructions regarding the social group of the operational holder have been given earlier for Col.12 of Schedule L-1. 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.

15.7.6 Certain important items such as area operated, size class, tenancy, irrigation, etc. have also been listed to facilitate the sorting of the Schedules-H at the time of tabulation. Instructions for filling the same are given in subsequent paragraphs.

Col.9: Serial No.

15.7.7 The Serial Number in Schedule L-1 (Col.9) in case of individual/Joint operational holding and serial number in Col.1 of Schedule L-2, 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.

Col.10: Social Group

15.7.8 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.

Col.11: Area operated

15.7.9 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. It would also cover the land occupied by the farm buildings, including the house of the holder, provided such buildings are 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 16.1 and 16.2 are to be followed. In practice there is no need for fresh enquiry for filling this column. It is simply to be copied from L-1/L-2 (Col.21 of L1 and Col10 of L2).

Co.12: Size Classes

15.7.10 There would be 10 size classes as indicated in para 15.2.31 for presentation of data. The Primary worker would record the correct code number as applicable.

Col.13: Tenancy Status

15.7.11 Tenancy is a sensitive subject and the primary worker has to be very tactful in obtaining the correct position about the land leased-in, and the terms on which it has been leased-in. Informant may not be aware of the terms mentioned in the schedule but the primary worker may be familiar with their

equivalent in local language. Primary worker should be conversant with the local terms in use.

15.7.12 This column is filled on the basis of information given in Col.18 to 21 of Schedule L-1 and Col.7 to 10 of L-2. 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 the 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. The primary worker would record the correct code number according to the tenancy status. Attempts should be made to collect the details about the exact position of tenancy including 'Oral Tenancy'. This should be done discretely by the primary worker 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 *statistical purposes only*. It may also be made clear 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.

15.7.13 Following 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 are suggested for indicating the tenancy status of the selected holding. These are:

Tenancy Status	Code No.
Wholly owned and self operated	1
Partly owned and partly leased in	2
Wholly leased in	3
Wholly otherwise operated	4
Partly owned and partly otherwise operated	5
Partly leased in and partly otherwise operated	6
Partly owned, partly leased in and partly otherwise operated	7

Irrigation Status

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

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

15.7.15 The irrigation status of the holding will be decided on the basis of availability of irrigation in the reference year 2010-11 and keeping in view the definition explained in para 8.1 of Annexure-I. It is also advisable to read instruction for Col. 30 to 35 of this schedule given in paras 15.7.33 to 15.7.35 before filling this item.

Survey Number-wise Details

15.7.16 There are six other blocks of Schedule H, namely, Dispersal of operated area, Operated area by tenancy status, Land utilization, Number of wells & tubewells, Sourcewise irrigation and Cropwise area. The enumerator would record these informations 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.

Columns 1 and 2

15.7.17 In column 1, the serial number of all the survey/sub-survey numbers constituting the operational holding are to be indicated and the corresponding Survey/sub-survey numbers are to be recorded in column 2. Please see para 15.7.16 above.

Block B: Dispersal of Operated Area

15.7.18 This is intended to obtain information on the extent of dispersal of the area of operational holding.

Columns 3 to 5

15.7.19 The area of each Survey/sub-survey number of the operational holding may be located in the village of residence or in another village but within the same block/tehsil, or area outside block/tehsil but within the State. The primary worker will record the area under the appropriate column. In case of States where both land record and non-land record States approach of Agriculture Census is followed, for filling Col.5 attention will be confined to only non-land record portion of the State and hence the part of the operated area located in land record portion of the State will not be included here as it has already been treated as a separate holding there. The total of operated area under various

Columns, viz., 3, 4, 5 will show the extent of dispersal of various parcels of the operational holding.

Block C: Tenancy Status

Columns 6 to 14: Area Operated by Tenancy Status

15.7.20 The area operated may be owned and self-operated/leased in/otherwise operated and/or combination of these three types. The concepts of ownership, tenancy and otherwise operated area are explained in section 4 of Annexure-I. The terms on which the land has been leased-in would vary from holder to holder. The land might have been leased-in for fixed money, fixed produce, share of produce, usufructuary mortgage, oral tenancy etc. The Primary worker would record the area under one or more of these terms as applicable. The total area operated by the holder would be recorded in column 14 which would be the sum of area recorded in Cols. 6, 12 and 13. Figures in Col.14 would also be equal to total of figures in Cols.3, 4 and 5 of Block B.

15.7.21 Tenancy is a sensitive subject and the primary worker has to be very tactful in obtaining the correct position about the land leased-in, and the terms on which it has been leased-in. Informant may not be aware of the terms mentioned above but he may be familiar with their equivalent in local language. Primary worker should be conversant with the local terms in use. Under the usufructuary mortgage, the ownership of property is with the mortgager but the possession is with the mortgagee, i.e., 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. States may, if necessary, use the local terms and conditions which are more prevalent to facilitate the collection of correct information. Correspondence with the terms given in previous para should be maintained while adopting such local names. Ultimately the final tables would have to be in accordance with the terms indicated above. In case the land has been leased-in for combination of two or more terms such cases may be treated as land leased-in for 'others' terms. 'Others' would include areas for which lessee has been paid in cash and partly on credit on the conditions of rendering service either to the village community or the Government and/or held free of lease etc. It would also include cases where labourers are given some land for cultivation without permanent right.

Block D: Land Use

Columns 15 to 23: Land Utilization

15.7.22 The Primary Worker are well conversant with the nine-fold land use classification adopted by many State Governments. However, for the purpose of Agriculture Census, a six-fold classification has been adopted. Permanent

pastures and other grazing lands and land under miscellaneous tree crops etc. have been clubbed together and are to be recorded against 'uncultivated area other than fallow land'. Similarly, 'area not available for cultivation' would include 'forests, area under non-agricultural uses and barren and uncultivable land'. 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 six-fold classification proposed here for the Agriculture Census which is nothing but re-grouping of nine-fold classification.

15.7.23 For ready reference, the break-up of six-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	Fallow land other than current fallow	3	Fallow land other than current fallow
4	Uncultivated land other than fallow	4	Permanent pastures and other grazing land.
		5	Land under miscellaneous tree crops and groves not included in net area sown.
5	Culturable waste	6	Culturable waste
6	Not available for cultivation	7	Forests
		8	Area put to non-agricultural uses
		9	Barren and uncultivable land

15.7.24 The primary worker would give the break-up of operated area into six fold classification spread over from Columns 15 to 23 of this Block.

Column 15: Net Area Sown

15.7.25 The primary worker would first ascertain whether the entire area or part of the survey/sub-survey number was under cultivation during the agricultural year 2010-11. If so, area sown would be indicated in Col.15. If two or more times crops were taken in the same area during the agricultural year, the area sown more than once in the same year would be counted only once. In other words, the primary worker has to record the net area sown and not gross cropped area.

Columns 16-17: Current Fallow

15.7.26 Area, which is normally cropped but was kept fallow during the entire agricultural year 2010-11 would be treated as current fallow and such area

would be recorded against Col.16. The total of Cols.15 and 16 would be net cultivated area and it would be indicated against Col.17.

Column 18: Other Fallow

15.7.27 Fallow lands other than current fallow would include all such lands, which are taken up for cultivation but area temporarily out of cultivation for a period of not less than one year and not more than five years. Such area would be recorded in Col.18.

Column 19: Other Uncultivated Area

15.7.28 Uncultivated land other than fallow land would include permanent pastures and other grazing lands provided these are part of the operational holding. Village common grazing lands would not, therefore, be included. This would also include land under miscellaneous tree crops, i.e., cultivable land, which is not included in the net area sown but is put to some agricultural use such as grasses, bamboo, bushes, groves etc.

Column 20: Culturable Waste

15.7.29 Culturable waste would include all land available for cultivation, whether or not 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. Such lands may be either wholly or partly covered with shrubs or jungles, which are not put to any use. Land once cultivated but not cultivated for five years in succession would also be included.

Column 21: Total Area not Cultivated

15.7.30 The sum total of Columns 18 to 20 would be shown against Col.21.

Column 22: Not available for cultivation

15.7.31 This would include Forest and areas under non-agricultural use, barren and uncultivable land which are part of the operated area.

- i) *Forest:* The primary worker would include any such forest areas, which are included in the operated area of the selected operational holding. The reserved and protected forest under the control of Forest Department would not, therefore, be included.
- ii) *Area under Non-Agricultural Use:* This will include all such lands/occupied by buildings or ponds and other lands put to uses other than agriculture, provided these are part of the operational holding.

- iii) *Barren and Uncultivable Land*: This would include land which is too inferior to be brought under plough i.e. hard rock, nullah, old quarry, provided such land forms part of the operational holding.

Column 23: Total Operated Area

15.7.32 The sum of the net cultivated area recorded in column 17 and area not cultivated in column 21 and area not available for cultivation in column 22 would be recorded in column 23. The operated area so recorded must tally with the operated area of the survey/sub-survey numbers as recorded in column 14 and also tally with the areas recorded in Cols 3, 4 and 5 together and should also tally with the area recorded in Sl.No. 11 of Block A.

Block E: Number of Wells & Tubewells

Columns 24 to 29

15.7.33 The primary worker would indicate the number of wells including borewells in use in columns 24 to 26. In Col. 24, he would indicate the number of wells with electric pumpsets while in Col. 25, the number of wells with diesel pumpsets. In Col.26, he would indicate the number of wells without pump-sets. In Col.27, the number of wells not in use will be recorded. Similarly he would record the number of tubewells run on electricity and diesel in columns 28 and 29 respectively. It is necessary to clarify that while recording the number of wells/tubewells, the Primary worker would take into consideration the survey number in which the well/tubewell is located and not the survey numbers irrigated by these wells/tubewells. It is also clarified that for Census purpose only those wells and tubewells will be considered which are primarily used for irrigation purposes only.

Block F: Net Area Irrigated by Source

Columns 30 to 35

15.7.34 Provision has been made to record separately area irrigated by four sources of irrigation. A parcel operated by a holder would normally be irrigated by one of these four sources. In exceptional cases, where any other source is utilized, the primary worker can record the area under “others” column specifying the source of irrigation, which includes surface lift irrigaiton.

15.7.35 In columns 30 to 34, the Survey number-wise area irrigated by the corresponding source will be recorded. The area irrigated would be net area irrigated by each source. In case some area is irrigated during the year by more than one source of irrigation such area would be recorded only against that source which is the major source of irrigation. The net area irrigated by one or more sources of irrigation, as recorded in columns 30 to 34 would be added up

and shown in column 35. Totals below each column are also to be written legibly using red ink and using decimal system for expressing fractions.

15.7.36 In identification block 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.

Block G: Crop-wise Area

Columns 36 to 53

15.7.37 Provision has been made to record separately area irrigated and unirrigated under five crops. It is normally expected that one operational holder may not have taken more than five crops during the agricultural year. However, in case the operator has grown more than five crops, the primary worker should use additional sheet for recording details of those crops in excess of five crops. The name of the crop would be indicated in the blank space provided for “crop”. The Primary Worker must ensure that he will not record the area before writing the name of the particular crops. Appropriate crops codes with reference to Annexure-X may be written under columns 36, 39, 42, 45 and 48. **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. This District Agriculture Department of the State Government would provide the proportions of seed in such crops.**

15.7.38 The irrigated and unirrigated gross cropped area under each crop would be separately indicated in columns 37-38, 40-41, 43-44, 46-47 and 49-50.

15.7.39 Total irrigated area in column 51 would be the total of columns 37, 40, 43, 46 and 49. Similarly, the total unirrigated area indicated in column 52 would be the sum total of columns 38, 41, 44, 47 and 50. The sum total of column 51 and column 53 to reflect gross cropped area.

15.7.40 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-X. The States/UTs are advised to follow the same system of codes for uniformity. The codes follow the following broad categorization of crop :-

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

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.

15.7.41 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.

15.7.42 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.

Total of Survey Number-wise Details in Col.3 to Col.53

15.7.43 After filling the survey number-wise details in Cols. 3 to 53, 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 Tehsil to Tehsil. But within a tehsil same unit should be adopted so that conversion of units to hectare through a computer programme is facilitated. Please read para 15.7.16 also in this regard.

16 Miscellaneous Instructions

16.1 Units for Measurement of Area

16.1.1 It has been experienced that a large number of 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 and unit of area will be hectare. In the States where it is difficult to adopt hectare as unit throughout, it is suggested that for filling survey number-wise details local units and system of measurement may be used, but final total are to be expressed only in decimal system. In such cases conversion of units could be made using the computer programme. **But it is to be ensured that within each Tehsil (Stratum) only one unit is used for accounting of area.**

16.1.2 In case where table T-1 at Tehsil 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.

16.1.3 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 –by- 12 feet 6 inch” 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.

16.2 Script of Numerals

16.2.1 To the extent possible only Arabic numerals (1,2,3,4,5 etc) should be used for filling schedule. In case it is not possible due to limitation of field manpower, final column total in Schedule-H are to be rewritten in red ink using the numerals. For Schedule L-3 and Table-1 also only these numerals are to be used.

16.3 Manual Scrutiny

16.3.1 All the Schedule-H and L-3 are to be manually scrutinized by statistical staff before they 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 unit and system for expressing fractions have been followed.
- iii) Whether the column total in Schedule-H have been provided.

- iv) Whether the data given in the schedule is consistent. All the consistency checks given in Annexure-VIII are to be applied at the manual scrutiny stage.
- v) Whether correct codes have been used.

16.4 Seeking Clarifications

16.4.1 Any issue regarding Concept, Definition and Procedures regarding the Agriculture Census 2010-11, which could not be clarified at the State level should be referred to Government of India at the following addresses.

- i) Dr. Vidya Dhar, Deputy Director General-cum-Agriculture Census Commissioner, Department of Agriculture & Cooperation, Government of India, Krishi Bhawan, New Delhi. Tele Fax No.: 011-23382523.
- ii) Other Phones connected with Agriculture Census Division
 - 011-23383948 (Sh. A.K. Ojha, Senior Consultant)
 - 011-23070788 (Sh. Cyriac George, Assistant Director)
- iii) E-mails:
 - agcensus.krishi@nic.in

16.5 Printing of Schedule

16.5.1 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.

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 than *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 to be specified

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 and Non-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. Wholly Irrigated, Partly Irrigated and Wholly Unirrigated Holdings

8.1 If the entire net area sown in an operational holding is equal to net area irrigated, such holdings are considered 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 of reference, such holding would be wholly unirrigated.

9. Land Utilisation

9.1 Operated area would be classified into six broad categories:

- i) Net area sown
- ii) Current fallow
- iii) Fallow land other than current fallow
- iv) Other uncultivated land excluding fallow land
- v) Culturable waste; and
- vi) 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 seeding 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 not less than one year and not more than five years, i.e., equal or 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) Malarial climate
- 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 category, 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.

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.3 + Col.4 + Col.5 = Total operated area (Sl.No.11 of Block-A).

Block – C:

- | | | |
|----------------------------------|---|------------------------------|
| i) Total leased in area (Col.12) | = | Cols. 7+8+9+10+11 |
| | ≤ | Total operated area (Col.14) |
| ii) Total operated area(Col.14) | = | Cols. 6+12+13 |
| | = | S.No.11 of Block A. |

Block – D:

- | | | | |
|------|---|---|------------------------------|
| i) | Net cultivated area (Col.17) | = | Cols. 15+16 |
| | | ≤ | Total operated area (Col.14) |
| ii) | Area not cultivated (Col.21) | = | Cols. 18+19+20 |
| | | < | Total operated area (Col.14) |
| iii) | Area not available for cultivation (Col.22) | < | Total operated area (Col.14) |
| iv) | Col.21+Col.22 | < | Total operated area (Col.14) |
| v) | Total operated area (Col.23) | = | Cols. 17+21+22=Col.14 |

Block – F:

- | | | | |
|----|---------------------------|---|------------------------|
| i) | Net area irrigated Col.35 | = | Cols.30+31+32+33+34 |
| | | ≤ | Net area sown (Col.15) |

Block – G:

- | | | | |
|------|---|--------|--|
| i) | Gross irrigated area (Col.51) | = | The sum of irrigated areas under different crops |
| | | > or = | Net irrigated area (Col.35) |
| ii) | Gross unirrigated area (Col.52) | = | The sum of unirrigated areas under different crops |
| | | > or = | Net unirrigated area (Col.15 – Col.35) |
| iii) | Gross irrigated area + Gross unirrigated area (Col.51 + Col.52) = Gross cropped area (Col.53) | | |
| iv) | Gross cropped area ≥ net sown area. | | |

CODE LIST OF CROPS

SL. NO.	CROP CODE	CROPS
1.	9999	ALL CROPS
2.	0101	PADDY
3.	0102	JOWAR
4.	0103	BAJRA
5.	0104	MAIZE
6.	0105	RAGI
7.	0106	WHEAT
8.	0107	BARLEY
9.	0108	SMALL MILLETS
10.	0109	JOBSTEARS
11.	0110	GRIM
12.	0111	PRE KHARIF PADDY
13.	0121	SUMMER PADDY
14.	0131	KHARIF PADDY
15.	0188	OTHER CEREALS
16.	0199	TOTAL CEREALS
17.	0201	GRAM
18.	0202	TUR (ARHAR)
19.	0203	URAD
20.	0204	MOONG
21.	0205	MASUR
22.	0206	HORSEGRAM
23.	0207	BEANS (PULSES)
24.	0208	PEAS (PULSES)
25.	0209	MOTH
26.	0288	OTHER PULSES
27.	0299	TOTAL PULSES
28.	0399	TOTAL FOODGRAINS
29.	0401	SUGARCANE
30.	0402	PALMVRIAH
31.	0488	OTHER SUGAR CROPS
32.	0499	TOTAL SUGAR CROPS
33.	0501	PEPPER (BLACK)
34.	0502	CHILLIES
35.	0503	GINGER
36.	0504	TURMERIC
37.	0505	CARDAMUM (SMALL)
38.	0506	CARDAMUM (LARGE)

SL. NO.	CROP CODE	CROPS
39.	0507	BETELNUTS (ARECANUTS)
40.	0508	GARLIC
41.	0509	CORIANDER
42.	0510	TAMARIND
43.	0511	CUMIN SEED
44.	0512	FENNEL / ANISE SEED
45.	0513	NUTMEG
46.	0514	FENUGREEK
47.	0515	CLOVES
48.	0516	CINNAMON
49.	0517	COCOA
50.	0518	KACHOLAM
51.	0519	BEETLVINE
52.	0520	AJAWINE
53.	0521	SAFFRON
54.	0588	OTHER CONDI. & SPICES
55.	0599	TOTAL SPICES & CONDIMENTS
56.	0601	MANGOES
57.	0602	ORANGE AND KINU
58.	0603	MOSAMBI
59.	0604	LEMON / ACID LIME
60.	0605	OTHER CITROUS FRUITS
61.	0606	BANANA
62.	0607	TABLE GRAPES
63.	0608	WINE GRAPES (BLACK)
64.	0609	APPLE
65.	0610	PEAR
66.	0611	PEACHES
67.	0612	PLUM
68.	0613	KIWI FRUIT
69.	0614	CHIKU
70.	0615	PAPAYA
71.	0616	GUAVA
72.	0617	ALMOND
73.	0618	WALNUT
74.	0619	CASHEWNUTS
75.	0620	APRICOT
76.	0621	JACK FRUIT
77.	0622	LICHI
78.	0623	PINEAPPLE
79.	0624	WATERMELON
80.	0625	MUSK MELON

SL. NO.	CROP CODE	CROPS
81.	0626	BREAD FRUITS
82.	0627	BER
83.	0628	BEL
84.	0629	SAHATOOT
85.	0630	AONLA (AMLA)
86.	0631	POMOGRANATE
87.	0632	CUSTARD APPLE
88.	0633	PASSION
89.	0688	OTHER FRUITS
90.	0699	TOTAL FRUITS
91.	0701	POTATO
92.	0702	TAPIOCA (CASSAVA)
93.	0703	SWEET POTATO
94.	0704	YAM
95.	0705	ELEPHANT FOOT YAM
96.	0706	COLOCASIA/ARUM
97.	0707	OTHER TUBER CROP
98.	0708	ONION
99.	0709	CARROT
100.	0710	RADDISH
101.	0711	BEETROOT
102.	0712	TURNIP (SHALGAM)
103.	0713	TOMATO
104.	0714	SPINACH
105.	0715	AMARANTHS (CHAULAI)
106.	0716	CABBAGE
107.	0717	OTHER LEAFY VEGETABLE
108.	0718	BRINJAL
109.	0719	PEAS (VEGETABLE) (Green)
110.	0720	LADY'S FINGER (BHINDI)
111.	0721	CAULIFLOWER
112.	0722	CUCUMBER
113.	0723	BOTTLE GUARD (LAUKI)
114.	0724	PUMPKIN
115.	0725	BITTER GUARD
116.	0726	OTHER GUARDS
117.	0727	VENCH (GUAR)
118.	0728	BEANS (GREEN)
119.	0729	DRUMSTICK
120.	0730	GREEN CHILLIES
121.	0731	RIDGE GOURD
122.	0732	TINDA

SL. NO.	CROP CODE	CROPS
123.	0788	OTHER VEGETABLES
124.	0799	ALL VEGETABLES
125.	0801	OTHER FOOD CROP*
126.	0899	TOTAL OTHER FOOD CROPS
127.	0999	TOTAL FOOD CROPS
128.	1001	GROUNDNUT
129.	1002	CASTORSEED
130.	1003	SESAMUM (TIL)
131.	1004	RAPESEED & MUSTARD (TORIA/ TARAMIRA)
132.	1005	LINSEED
133.	1006	COCONUT
134.	1007	SUNFLOWER
135.	1008	SAFFLOWER
136.	1009	SOYABEAN
137.	1010	NIGERSEED
138.	1011	OIL PALM
139.	1088	OTHER OILSEEDS
140.	1099	TOTAL OILSEEDS
141.	1101	COTTON
142.	1102	JUTE
143.	1103	MESTA
144.	1104	SUNHEMP
145.	1188	OTHER FIBRES
146.	1199	TOTAL FIBRES
147.	1201	INDIGO
148.	1288	OTHER DYES & TAN. MATRLS
149.	1299	TOTAL DYES & TAN. MATRLS
150.	1301	OPIUM
151.	1302	TOBACCO
152.	1388	OTHER DRUGS & NARCOTICS
153.	1399	TOTAL DRUGS & NARCOTICS
154.	1401	GUAR
155.	1402	OATS
156.	1403	GREEN MANURES
157.	1488	OTHER FODDER CROPS
158.	1499	FODDER & GREEN MANURES
159.	1501	TEA
160.	1502	COFFEE
161.	1503	RUBBER
162.	1588	OTHER PLANTATION CROPS
163.	1599	TOTAL PLANTATION CROPS

SL. NO.	CROP CODE	CROPS
164.	1601	ORCHIDS
165.	1602	ROSE
166.	1603	GLADIOLUS
167.	1604	CARNATION
168.	1605	MERIGOLD
169.	1606	JASMINE
170.	1607	CRYSANTHEMUM
171.	1608	TUBROSE
172.	1609	GARBERA
173.	1610	GALARDIYA
174.	1688	OTHER FLOWERS
175.	1699	TOTAL FLORICULTURE CROPS
176.	1701	ASGANDH
177.	1702	ISABGOL
178.	1703	SENA
179.	1704	MOOSLI
180.	1705	OTHER MEDICINAL PLANT
181.	1706	MEHANDI
182.	1707	ALLOVERA
183.	1708	BACOPAMONNIERI
184.	1711	LEMON GRASS
185.	1712	MINT
186.	1713	MENTHOL
187.	1714	EUCALYPTUS
188.	1715	OTHER AROMATIC PLANT
189.	1717	VANILA
190.	1799	TOTAL AROMATIC AND MEDICINAL PLANTS
191.	1801	CANES
192.	1802	BAMBOOS
193.	1803	MULLBERRY CROP
194.	1804	THESPESIA
195.	1805	TEAK
196.	1899	TOTAL OTHER NON-FOOD CROPS
197.	1999	TOTAL NON-FOOD CROPS

STATE/UT CODE LIST

SL. 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.	Tripura	25
26.	Uttarakhand	26
27.	Uttar Pradesh	27
28.	West Bengal	28
29.	Andaman & Nicobar Islands	29
30.	Chandigarh	30
31.	Dadra & Nagar Haveli	31
32.	Daman & Diu	32
33.	Delhi	33
34.	Lakshadweep	34
35.	Puducherry	35
36.	All India	36

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 9th 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

	00	04	05	09	10	14	15	19	20	24	25	29	30	34	35	39	40	44	45	49
00	39591	66082	48626	95780	55228	87189	75717	97042	19696	48613										
01	46304	97377	43462	21739	14566	72533	60171	29024	77581	72760										
02	99547	60779	22734	23678	44895	89767	18249	41702	35850	40543										
03	06743	63537	24553	77225	94743	79448	12753	95986	78088	48019										
04	69568	65496	49033	88577	98606	92156	08846	54912	12691	13170										
05	68198	69571	34349	73141	42640	44721	30462	35075	33475	47407										
06	27974	12609	77428	64441	49008	60489	66780	55499	80842	57706										
07	50552	20688	02769	63037	15494	71784	70559	58158	53437	46216										
08	74687	02033	98290	62635	88877	28599	63682	35566	03271	05651										
09	49303	76629	71897	30990	62923	36686	96167	11492	90333	84501										
10	89734	39183	52026	14997	15140	18250	62831	51236	61236	09179										
11	74042	40747	02617	11346	01884	82066	55913	72422	13971	64209										
12	84706	31375	67053	73367	95349	31074	36908	42782	89690	48002										
13	83664	21365	28882	48926	45435	60577	85270	02777	06878	27561										
14	47813	74854	73388	11385	99108	97878	32858	17473	07682	20166										
15	00371	56525	38880	53702	09517	47281	15995	98350	25233	79718										
16	81182	48434	27431	55806	25389	40774	72978	16835	65066	28732										
17	75242	35904	73077	24537	81354	48902	03478	42867	04552	66034										
18	96239	80246	07000	09555	55051	49596	44629	88225	28195	44598										
19	82988	17440	85311	03360	38176	51462	86070	03924	84413	92363										
20	77599	29143	89088	57593	60036	17297	30923	36224	46327	96266										
21	61433	33118	53488	82981	44709	63655	64388	00498	14135	57514										
22	76008	15045	45440	84062	52363	18079	33726	44301	86246	99727										
23	26494	76598	85834	10844	56300	02244	72118	96510	98388	80161										
24	46570	88558	77533	33359	07830	84752	53260	46755	36881	98535										
25	73995	41532	87933	79930	14310	64833	49020	70067	99726	97007										
26	93901	38276	75544	19679	82899	11365	22896	42118	77165	08734										
27	41925	28215	40966	93501	45446	27913	21708	01788	81404	15119										
28	80720	02782	24326	41328	10357	86883	80086	77138	57072	12100										
29	92596	39416	50362	04423	04561	58179	54188	44978	14322	97056										
30	39693	58559	45839	47278	38548	38885	19875	26829	86711	57005										
31	86923	37863	14340	30929	04079	65274	03030	15106	09362	82972										
32	99700	79237	18172	58879	56221	65644	33331	87502	32961	40996										
33	60248	21953	52321	16984	03252	90433	97304	50181	71026	01946										
34	29136	71987	03992	67025	31070	78348	47823	11033	13037	47732										
35	57471	42913	85212	42319	92901	97727	04775	94396	38154	25238										
36	57424	93847	03269	56096	95028	14039	76128	63747	27301	65529										
37	56768	71694	63361	80836	30841	71875	40944	54827	01887	54822										
38	70400	81534	02148	41441	26582	27481	84262	14084	42409	62950										
39	05454	88418	48646	99565	36635	85496	18894	77271	26894	00889										
40	80934	56136	47063	96311	19067	59790	08752	68040	85685	83076										
41	06919	46237	50676	11238	75637	43086	95323	52867	06891	32089										
42	00152	23997	41751	74756	50975	75365	70158	67663	51431	46375										
43	88505	74625	71783	82511	13661	63178	39291	76796	74736	10980										
44	64514	80967	33545	09582	86329	58152	05931	35961	70069	12142										
45	25280	53007	99651	96366	49378	80971	10419	12981	70572	11575										
46	71292	63716	93210	59312	39493	24252	54849	29754	41497	79228										
47	49734	50498	08974	05904	68172	02864	10994	22482	12912	17920										
48	43075	09754	71880	92614	99928	94424	86353	87549	94499	11459										
49	15116	16643	03981	06566	14050	33671	03814	48856	41267	76252										

50	54	55	59	60	64	65	69	70	74	75	79	80	84	85	89	90	94	95	99	
25178	77518	41773	39926	09843	29694	43801	69276	44707	23455											00
45803	95106	85816	33366	37383	76832	37024	06581	22587	24827											01
15532	30898	14922	13923	44987	45122	86515	55836	96165	19650											02
99068	35453	42152	12078	04913	06083	06645	93310	40016	85421											03
70983	88359	95583	79848	24101	67502	25692	42496	77732	19278											04
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	15218	74838	61809	92293	85400	46934	08531	70107	65707											17
82033	93915	34898	79913	70013	27573	39256	35167	35070	47095											18
79131	10022	82199	78976	22702	37936	10445	96846	84927	69745											19
79344	39236	41333	11473	15049	47930	99029	97150	82275	55149											20
15384	44585	18773	89733	40779	59664	83328	25162	58758	17761											21
38802	90957	32910	97485	10358	88588	95310	22252	19143	69011											22
85874	18400	28151	29541	63706	43197	65726	94117	22169	91806											23
26200	72680	12364	46010	92208	59103	60417	45389	56122	85353											24
13772	75282	81418	42188	66529	47981	92548	10079	68179	40915											25
91876	07434	96946	98382	97374	34444	17992	42811	01579	48741											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	21940	40280	22233	09123	49375	55094	46113	54046	51771											33
39049	14986	94000	26649	13037	34609	45186	89515	63214	66886											34
48727	06300	91486	67316	84576	11100	37580	49629	83224	46321											35
22719	29784	40682	96715	40745	57458	70048	48306	50270	87424											36
33980	36769	51977	03689	79071	20279	64787	48877	44063	93733											37
23885	66721	16542	12648	65986	43104	45583	75729	35118	58742											38
85190	44068	78477	69133	58983	96504	44232	74809	25266	73872											39
33453	36333	45814	78128	55914	89829	43251	41634	48488	49153											40
98236	11489	97240	01678	30779	75214	80039	68895	95271	19654											41
21295	53563	43609	48439	87427	88065	09892	58524	43815	31340											42
28335	79849	69842	71669	38770	54445	48736	03242	83181	85403											43
95449	35273	62581	85522	35813	34475	97514	72839	10387	31649											44
88167	03878	89405	55461	73248	48620	31732	47317	06252	54652											45
86131	62596	98785	02360	54271	26242	93735	20752	17146	18315											46
71134	90264	30126	08586	97497	61678	81940	00907	39096	02082											47
02664	53438	76839	52290	77999	05799	93744	16634	84924	31344											48
90664	96876	16663	25608	67140	84619	67167	13192	81774	58619											49

	00	04	05	09	10	14	15	19	20	24	25	29	30	34	35	39	40	44	45	49
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	63887	95094	20056	84990										
81	87142	91818	51857	85061	17890	39057	44506	00969	32942	54794										
82	60634	27142	21199	50437	04685	70252	91453	75952	66753	50664										
83	73356	64431	05068	56334	34487	78253	67684	69916	63885	88491										
84	29889	11378	65915	66776	95034	81447	98035	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	19750	48564	49690	43352	53884	80125	47795	99701	06800	22794										
91	62820	23174	71124	36040	34873	95650	79059	23894	58534	78296										
92	95737	34362	81520	79481	26442	37826	76866	01580	83713	94272										
93	64642	62961	37566	41064	69372	84369	92823	91391	61056	44495										
94	77636	60163	14915	50744	95611	99346	39741	04407	72940	87936										
95	43633	52102	93561	31010	11299	52661	79014	17910	88492	60753										
96	93686	41960	61280	96529	52924	87371	34855	67125	40279	10186										
97	23775	33402	28647	42314	51213	29116	26243	40243	32137	25177										
98	91325	64698	58868	63107	08993	96000	66854	11567	80604	72299										
99	58129	44367	31924	73586	24422	92799	28963	36444	01315	10226										

50 54	55 59	60 64	65 69	70 74	75 79	80 84	85 89	90 94	95 99	
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96772	86829	36403	40087	67456	21071	39039	91937	45280	00066	93
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