

Chapter 4

Concepts and Definitions

Introduction

It is important for the data users to familiarize themselves with the concepts and the definitions of the terms used for proper evaluation of the data contained in this publication. At the same time, it is all the more important to understand the implications of the terms used at the Census of India 2001 for making meaningful comparisons of the similar data generated by various other agencies within the country and with the data produced by other countries in the world. The concepts and definitions adopted at the House Numbering and Houselisting Operations and glossary of terms used for sampling are given separately:

Concepts and definitions adopted at the House Numbering and Houselisting Operations of Census of India 2001

01. Rural-Urban Areas

The data in tables on Houses, Household Amenities and Assets are presented separately for rural and urban areas. The unit of classification in this regard is 'town' for urban areas and 'village' for rural areas. In the Census of India 2001, the definition of urban area adopted is as follows:

- a. All places with a municipality, corporation, cantonment board or notified town area committee, etc.
- b. A place satisfying the following three criteria simultaneously:
 - i. a minimum population of 5,000;
 - ii. at least 75 per cent of male working population engaged in non-agricultural pursuits; and
 - iii. a density of population of at least 400 per sq. km. (1,000 per sq. mile).

For identification of places which would qualify to be classified as 'urban' all villages, which, as per the 1991 Census had a population of 4,000 and above, a population density of 400 persons per sq. km. and having at least 75 per cent of male working population engaged in non-agricultural activity were considered. To work out the proportion of male working population referred to above against b)(ii), the data relating to main workers were taken into account.

Apart from these, the outgrowths (OGs) of cities and towns have also been treated as urban under 'Urban Agglomerations': Examples of outgrowths are railway colonies, university campuses, port areas, military camps, etc. that may have come up near a statutory town or city but within the revenue limits of a villages or villages contiguous to the town or city. Each

such individual area by itself may not satisfy the demographic criteria laid down at (b) above to qualify it to be treated as an independent urban unit but may deserve to be clubbed with the towns as a continuous urban spread. Thus, the town level data, wherever presented, also includes the data for outgrowths of such towns.

02. City

Towns with population of 1,00,000 and above are called cities

03. Building

A 'building' is generally a single structure on the ground. Sometimes it is made up of more than one component unit which are used or likely to be used as dwellings (residences) or establishments such as shops, business houses, offices, factories, workshops, worksheds, schools, places of entertainment, places of worship, godowns, stores, etc. It is also possible that buildings which have component units may be used for a combination of purposes such as shop-cum-residence, workshop-cum-residence, office-cum-residence, etc.

Usually a structure will have four walls and a roof. But in some areas the very nature of construction of houses is such that there may not be any wall. Such is the case of conical structures where entrance is also provided but they may not have any walls. Therefore, such of the conical structures are also treated as separate buildings

04. Census House

A 'census house' is a building or part of a building used or recognized as a separate unit because of having a separate main entrance from the road or common courtyard or staircase, etc. It may be occupied or vacant. It may be used for a residential or non-residential purpose or both.

In certain peculiar situations, the manner in which buildings and census houses were identified for numbering in the field by the enumerators is described hereunder:

Sometimes a series of different buildings are found along a street which are joined with one another by common walls on either side looking like a continuous structure. These different units are practically independent of one another and are likely to have been built at different times and owned by different persons. In such cases, though the whole structure with all the adjoining units apparently appears to be one building, each portion was treated as a separate building and its constituent units as separate census houses.

On the other hand, one may come across cases, particularly in large cities of multi-storeyed ownership flats. In these cases while the structure looks like one building, different persons own the flats. In case of such multi-

storeyed structures, having a number of flats owned by different persons, the entire structure was treated as one building and each flat as a separate census house.

If within a large enclosed area, there are separate buildings owned by different persons then each such building is treated as a separate building. There can be a situation where within an enclosed compound there are separate buildings owned by an undertaking or company or even government that are actually in occupation of different persons. For example, Indian Oil Corporation colony where the buildings are owned by the Corporation but these are in occupation of their employees. Each such building was treated as a separate building. But if in any one of these buildings there were flats in occupation of different households, each such flat was reckoned as a separate census house.

Sometimes it becomes difficult to apply the definition of census house strictly in certain cases. For example, in an urban area, if a flat has five rooms, each room having direct entrance from the common staircase or courtyard. By definition, this has to be treated as five census houses. If all these five rooms are occupied by a single household it was not realistic to treat them as five census houses. In such a case, 'singleness' of use of these rooms along with the main house should be considered and the entire flat was treated as one census house. On the other hand, if two independent households occupy these five rooms, the first household living in 3 rooms and the second household occupying 2 rooms, then considering the use, the first three rooms together were treated as one census house and the remaining rooms as another census house. But if each room was occupied by an independent household, then each such room was treated as a separate census house.

In case of hostels, hotels, etc., even if the door of each room in which an inmate lives opens to a common verandah, staircase, courtyard or a common room, as it happens almost invariably, the entire hostel / hotel building was treated as one census house. But if such hostels / hotels have out-houses or other structures used for different purposes or the same purpose, then each such structure attached to the main hostel / hotel was treated as a separate census house.

In some parts of the country, in rural areas, the pattern of habitation is such that a group of huts, located in a compound, whether enclosed or unenclosed, is occupied by one household. While the main residence may be located in one hut, other huts may be used for sleeping, as a kitchen, bath room, baithak, etc. Though each of the huts was a separate structure, they form a single housing unit and therefore, have to be treated collectively as one building and one census house. If some of the huts are used by one household and the others by a second household as residence, then the two groups of huts were treated as separate census houses. However, if there were also other huts in the compound used for other purposes and not as part of the household's residence such as, cattle shed, workshed, etc., these

were treated as separate census houses.

On the other hand, in urban areas, where more than one structure within an enclosed or open compound (premises) belonging to the same person, e.g., the main house, the servant's quarter, the garage, etc., only one building number was given for this group and each of the constituent a separate census house number.

Only cases where a structure with roof and pillars has come up was treated as a building.

05. Uses of Census Houses

The actual use of census house was ascertained and recorded in full. The different uses of census houses were standardized and grouped into ten categories, as shown hereunder:

i) **Residence:** This category includes houses that were used exclusively for residential purpose.

ii) **Residence-cum-other use:** If the census house was used for residence in combination with one or more other non-residential purpose(s) such as residence-cum- grocery shop, residence-cum-workshop (book binding), residence-cum-boarding house, etc., the same was indicated together with the detail of non-residential use(s) of the census house.

iii) **Shop/Office:** Census houses exclusively used as shops (where articles are bought / sold on cash or credit) and offices were covered under this category. Instructions were also given to indicate the nature of shop or of the office for which it was being put to use.

iv) **School/College, etc.:** This category included all types of educational institutions and training centers without lodging facilities or any residential use. The nature of school or college or training center was also obtained.

v) **Hotel/lodge /guest house, etc.:** This category covers census houses that were used exclusively for temporary stay or stay in transit and where no person or persons were found living for a period of three months or more. The nature or name of such hotel or lodge or guest house was also provided. If any of such hotel or lodge or guest house was used by the inhabitants as a residence for a period of three months or more then this was considered as an institutional household and covered under the category of houses used as 'residence-cum-other use'. Restaurants and all other eating places not endowed with lodging facilities were covered under the category of 'Shop/Office'.

vi) **Hospital/Dispensary, etc.:** The category includes census houses exclusively used as hospitals, dispensaries, nursing homes and such other health or medical institutes provided they were not eligible to be considered as institutional households. The nature or names of such institutes were also provided under the appropriate column. If in any of above institutes, the inmates were found living for three months or more, treating the inmates of such an institution as an institutional household, the use of the census house

was categorised as 'residence-cum-other use'.

vii) **Factory/workshop/workshed, etc.:** If any census house was exclusively used for running a factory or a workshop or used as a workshed, the same was considered under this category. These are places where manufacturing, production, processing, repairing or services takes place or where goods and articles are made and sold. These can be large scale industries / small workshops / worksheds. This category of houses, however, excludes all eating places such as tea stalls, sweet meat (halwai) shops, restaurants (without lodging facility), dhabhas, etc. which are covered in the category of shop / office.

viii) **Place of worship:** This category includes the places of worship such as temples, gurudwaras, mosques, churches, prayer halls, etc.

ix) **Other non-residential use:** This category covers the census houses used as places of entertainment and community gathering and all other non-residential miscellaneous uses of the census houses not covered under any of the above categories. They include houses used as cattle-shed, godown, garage, petrol pump, power station, pump house, tube well room, cinema house, museum, stadium, etc. In their case also, the actual use was recorded in the Houselist Schedule.

x) **Vacant:** If a census house was found vacant at the time of houselisting i.e., no person was found living in it and also it was not being used for any other non-residential purpose(s), it was shown as vacant and the reason of vacancy such as 'under repair', 'construction incomplete', 'want of tenant', etc. was also indicated.

06. Condition of Census House

The enquiry relating to condition of census house was made only if the census house was used for residential or partly residential purposes. Again, the condition of census house was ascertained only if a normal household occupied the census house. Since the local conditions vary from place to place and even in rural and urban areas, it was not considered feasible to give any single comprehensive definition for the terms used to determine the condition of census house. The condition of census houses was recorded as 'good' or 'livable' or 'dilapidated' based on the perception and response of the respondent.

07. Household

A 'household' is usually a group of persons who normally live together and take their meals from a common kitchen unless the exigencies of work prevent any of them from doing so. Persons in a household may be related or unrelated or a mix of both. However, if a group of unrelated persons live in a census house but do not take their meals from the common kitchen, then they are not constituent of a common household. Each such person was to be treated as a separate household. The important link in finding out whether it was a household or not was a common kitchen. There may be one member households, two member households or multi-member households.

08. Institutional Household

A group of unrelated persons who live in an institution and take their meals from a common kitchen is called an Institutional Household. Examples of Institutional Households are boarding houses, messes, hostels, hotels, rescue homes, jails, ashrams, orphanages, etc. To make the definition more clearly perceptible to the enumerators at the Census 2001, it was specifically mentioned that this category of households would cover only those households where a group of unrelated persons live in an institution and share a common kitchen.

09. Head of the Household

The head of household for census purposes is a person who is recognized as such by the household. She or he is generally the person who bears the chief responsibility for managing the affairs of the household and takes decision on behalf of the household. The head of household need not necessarily be the oldest male member or an earning member, but may be a female or a younger member of either sex. In case of an absentee *de jure* 'Head' who is not eligible to be enumerated in the household, the person on whom the responsibility of managing the affairs of household rests was to be regarded as the head irrespective whether the person is male or female.

10. Scheduled Caste and Scheduled Tribe

Article 341 of the Constitution provides that the President may, with respect to any State or Union territory, specify the castes, races or tribes or parts of or groups within castes, races or tribes which shall for the purposes of the Constitution be deemed to be Scheduled Castes in relation to that State or Union territory. Article 342 similarly provides for specification of tribes or tribal communities or parts of or groups within tribes or tribal communities which are to be deemed for the purposes of the Constitution to be Scheduled Tribes in relation to the various States and Union territories. In pursuance of these provisions, the list of Scheduled Castes and / or Scheduled Tribes are notified for each State and Union territory and are valid only within the jurisdiction of that State or Union territory and not outside.

It was ascertained if the head of the household belonged to a Scheduled caste or a Scheduled Tribe. If in reply to this question, the answer was in the affirmative, the name of caste / tribe to which the head of the household belonged was ascertained. Only if the name of caste / tribe returned by the respondent appeared in the list that was made available to the enumerator, she or he was treated as belonging to Scheduled Caste or Scheduled Tribe. If the head of household returns herself / himself as Scheduled Caste, her / his religion was also ascertained. This is mainly because Scheduled Caste can be only from Hindus, Sikhs and Buddhists and not from any other religion. But a member of Scheduled Tribe may belong to any religion. This question was not asked in the case of Institutional Households.

11. Scheduled Caste Household

A household was treated as a Scheduled Caste household when its head belonged to a Scheduled Caste.

12. Scheduled Tribe Household

A household was treated as a Scheduled Tribe household if its head belonged to a Scheduled Tribe.

13. Type of Census Houses

The data on types of Census Houses were not actually collected during the Housing Operations. These have been classified according to the types of material used in the construction of wall and roof of the house entered by enumerator in the House List Schedule. The basis of their classification is described hereunder:

Permanent Houses: Houses, the walls and roof of which are made of permanent materials. The material of walls can be any one from the following, namely, galvanized iron sheets or other metal sheets, asbestos sheets, burnt bricks, stones or concrete. Roof may be made of from any one of the following materials, namely, tiles, slate, galvanized iron sheets, metal sheets, asbestos sheets, bricks, stones or concrete.

Temporary Houses: Houses in which both walls and roof are made of materials, which have to be replaced frequently. Walls may be made from any one of the following temporary materials, namely, grass, thatch, bamboo, plastic, polythene, mud, unburnt bricks or wood. Roof may be made from any one of the following temporary materials, namely, grass, thatch, bamboo, wood, mud, plastic or polythene.

Semi-permanent houses: Houses in which either the wall or the roof is made of permanent material and the other is made of temporary material.

Serviceable temporary houses: Temporary houses in which wall is made of mud, unburnt bricks or wood.

Non-serviceable temporary houses: Temporary houses in which wall is made of grass, thatch, bamboo, etc., plastic or polythene.

14. Ownership Status of Census Houses

Owned: If a household is occupying the census house owned by itself and is not making payments in the form of rent to anyone, then the household has been considered as living in owned house. A household living in a flat or a house taken on 'ownership' basis on payment of installments, has also been regarded as owning the house, notwithstanding the fact that all the installments have not been paid.

Rented: A household has been treated as living in rented house if rent is paid or contracted for by the household in cash or even in kind.

Any Other: The households neither living in owned houses nor rented houses have been included in this category. This includes the cases where rent free accommodation is provided to employees by their employers or where the ownership either of the land or of the structure does not belong to the household, i.e., houses constructed on encroached land in unregularised slums or anywhere else.

15. Dwelling Room

A room is treated as a dwelling room if it has walls with a doorway and a roof and should be wide and long enough for a person to sleep in, i.e., it should have a length of not less than 2 metres and a breadth of at least 1.5 metres and a height of 2 metres. A dwelling room would include living room, bedroom, dining room, drawing room, study room, servant's room and other habitable rooms. Kitchen, bathroom, latrine, store room, passageway and verandah which are not normally usable for living are not considered as dwelling rooms. A room, used for multipurpose such as sleeping, sitting, dining, storing, cooking, etc., is regarded as a dwelling room. In a situation where a census house is used as a shop or office, etc. and the household also stays in it then the room is not considered as a dwelling room. But if a garage or servant quarter is used by a servant and if she / he also lives in it as a separate household then this has been considered as a dwelling room available to the servant's household. Tent or conical shaped hut if used for living by any household is also considered as dwelling room.

A dwelling room, which is shared by more than one household, has not been counted for any of them. If two households have a dwelling room each but in addition also share a common dwelling room, then the common room has not been counted for either of the households.

16. Married Couple

A 'married couple' is formed through marriage. All currently married couples living in the household irrespective of their age have been included in the number of married couples. Only those couples that usually live together in the household even if one of the spouses is temporarily absent are counted. The period of absence in such a case should not exceed three months prior to the date of houselisting.

17. Type and Location of Drinking Water Source

Source type of drinking water: The data were collected on eight types of drinking water source. These are: Tap, Handpump, Tubewell, Well, Tank / Pond / Lake, River / Canal, Spring and Any other source. The type of source, which is availed of more during the greater part of the year, has been recorded. Handpump means where the water is taken out manually by operating handpump. Tubewell means where sub-soil water is taken out

through electricity or diesel pump.

Within premises: The type of drinking water source is treated within the premises if the type of drinking water source used is located within the house or within the premises of the census house where the household lives.

Near the premises: The type of drinking water source is considered 'Near the premises' only if the type of source used is located within a range of 100 metres from the premises of the census house in urban areas and within a distance of 500 metres in the case of rural areas.

Away: For the households living in urban areas, the type of drinking water source is considered 'Away' if the type of drinking water source used is located beyond 100 metres from the premises of the census house. For households living in rural areas, the type of drinking water source is considered 'Away', if they have to cover a distance of more than 500 metres to fetch the drinking water.

18. Source of Lighting

The information on the source of lighting in the houses occupied by the households has been collected on six sources. These are: Electricity, Kerosene, Solar, Other oil, Any other and No lighting. The actual source of lighting used for greater part of the year has been collected for each household.

19. Availability of Latrine within the House

A household was treated as a Scheduled Tribe household if its head belonged to a Scheduled Tribe.

20. Connectivity of Waste Water Outlet

i) **Connectivity to Closed drainage:** The house is considered as having connectivity to closed drainage if it has water outlet connected to a closed drainage to carry away the waste water generated by the household(s) living in it.

ii) **Connectivity to Open drainage:** The house is considered as having connectivity to open drainage if it has water outlet connected to an open drainage to carry away the waste water generated by the household(s) living in it.

iii) **No drainage connectivity:** Such of the houses where waste water outlets are not connected to any drainage system to carry away the waste water are included in this category.

21. Bathroom within the House

The information was collected whether or not bathroom was available to the household within the house. The bathroom was considered as available if the household had an exclusive room used as a bathroom within

the house. In cases where more than one household in any census house was sharing a common bathroom, the bathroom was considered as available to all the households living in that census house.

22. Kitchen within the House

Meals could be cooked in a kitchen available as an exclusive and separate enclosure within the house or in a room used for other purposes also or this could be cooked outside the house in the open. If available kitchen was independent of any other use within the house, it was recorded as 'available' and if not as an exclusive room for cooking, then 'not available' was entered. If the available kitchen was shared by two or more than two households living in a common census house, this was considered as available to all the households in the house. If cooking was done in an unenclosed space within the house or its premises, the space used for cooking was not treated as a kitchen and in this case 'cooking in open' was entered. In case due to exigencies of work or any other reason the household was not cooking in the census house, 'no cooking' was recorded.

23. Fuel used for Cooking

The type of fuel used for cooking by the household was ascertained and the one used mostly, was duly recorded. If the household was using more than one fuel for cooking, the predominant fuel used for cooking was recorded. In case, if no cooking was done in the household, the answer was recorded accordingly. The data are available for the following types of fuels:

1. Firewood; 2. Crop residue; 3. Cowdung cake; 4. Coal / Lignite / Charcoal; 5. Kerosene; 6. LPG; 7. Electricity; 8. Bio-gas; and 9. Any other.

Firewood includes woods of different types such as timber, branches and trunk of trees and shrubs, etc.

Typical examples of crop residue are crop produce such as cotton or pulse stems, paddy or wheat straw, etc.

24. Availability of Assets

The availability of following assets in the household was ascertained and the particular item, if available in the household, 'Yes' was entered and if not available, 'No' was recorded:

1. Radio / Transistor
2. Television
3. Telephone
4. Bicycle
5. Scooter / Motor Cycle / Moped
6. Car / Jeep / Van

The enquiry was limited to their availability and not their number. The above assets were treated as available only if these were in reasonable working order.

Regarding availability of telephone, the concern of the enquiry was limited to its availability and not the source. Therefore, if the telephone was provided to any member of the user household by the government, corporate office, company, etc., this was treated as available. This facility was also considered available if the household was using a cellular mobile telephone.

A car or a jeep or a van was treated as available to the household if this was put to use by the members of the household for their own use.

25. Availing Banking Services

The household was considered availing banking services if its head and / or any other member in the household was availing banking services provided by the bank or post office bank as a holder of any type of bank account. This covers all types of commercial banks such as nationalised banks, private banks, foreign banks and the co-operative banks. The credit and thrift societies did not form part of the banking system and as such these services were not covered under banking services.

Glossary of terms used for Sampling

Accuracy: Quality of survey result as measured by the closeness of the survey estimate to the exact or true value being estimated, estimated by the mean square error. The accuracy is affected by both sampling error and bias.

Allocation of sample: The method used in determining how the sample should be distributed. In stratified sampling, it usually refers to the determination of the number of units selected from each stratum. In cluster sampling, it refers to the decision as to the number of clusters to be selected and the size of sample in each cluster.

Census: Data collection program through which attempts are made to collect information about every element (person, household, farm etc.) in the population.

Characteristic: A variable having different possible values for different individual units of Sampling or Analysis. In a sample survey, we observe or measure the values of one or more characteristic for the units in the sample. For example, we observe(or ask about) the area of land in rice, or the number of cattle on a farm.

Cluster sample: A system of sampling in which the units of analysis of the population are considered as grouped in to clusters and a sample of clusters is selected. The selected clusters then determine the units to be included in the sample. The sample may include all units in the selected clusters or a sub-sample of units in each selected cluster.

Cluster: Small group into which a population is divided to facilitate the data collection. The groups generally are defined so as to help break a large survey area into a workload-sized chunks and/or to reduce travel and administrative costs. Ideally, the units in a cluster should be as heterogeneous as possible.

Coefficient of variation: The relative standard error; that is, the standard error as a proportion of the magnitude of the estimate.

Confidence interval: A range above and below the estimated value, which may be expected to, enclosed the true value with a known probability, assuming no bias.

Design effect: The design effect defined as the ratio of the variance of an estimate based on the actual sample design to the corresponding variance from a simple random sample of the same size and is a measure of the relative efficiency of the design.

Efficiency: A comparative measures of one sample design relative to another with respect to amount of precision produced per unit of cost for a given sample size.

Estimates: A numerical quantity calculated from sample data and intended to provide information about an unknown population value.

Non-Sampling Error: The errors mainly arising at the stages of ascertainment and processing of data is termed as non-sampling error. This type of error is common both to complete enumeration and sample survey.

Population: Any clearly defined set of units (or elements) for which estimates are to be made. The elements can be persons, farms, households, blocks, counties, businesses and so on. Most of our discussion deals with sampling from a finite population, containing a finite number of elements.

Precision: Difference between the sample estimates and a complete count value collected under the sample conditions. This is measured by the sampling error or relative sampling error.

Primary Sampling Unit (PSU): The units making up the sampling frame for the first stage of a multistage sample.

Probability of selection: The chance each unit has of being included in the sample.

Proportionate stratified sampling: A system of selecting a stratified sample in which the same probability of selection is used in each stratum.

Sample: A subset of a population. As used in these chapters, it always refers to a probability sample; i.e., a sample in which each element in the population has a known probability of selection.

Sample design: The sampling plan and estimation procedures.

Sample Survey: A data collection program through which information is collected from a probability selected subset of the population.

Sampling Distribution: The distribution of values of a statistic calculated from all possible samples of the same size from the same population.

Sampling Error: The error arising due to drawing inferences about the population on the basis of observations on a part (sample) of it is termed as sampling error. This error is inherent and unavoidable in any and every sampling scheme.

Sampling frame: The totality of sampling units from which a sample is to be selected. The frame may be a listing of persons or housing units; a file of records; a subdivided map.

Sampling unit: The units to be selected. These may or may not be the same as the same as the units of analysis. For example, to obtain information on persons, one might use a complete listing in a census or a register and select a sample person directly. However, one could also select a sample of households and include in the survey all persons in the selected households. Similarly, one could select complete buildings and include all persons. The choice of the most efficient sampling unit is an important consideration in the design of a survey.

Self-Weighting Sample: In a self-weighting sample, every individual observation has the same probability of selection, and consequently, the same weight.

Simple Random Sampling (also called unrestricted random sampling): This is the simplest type of sampling system. Simple Random Sampling is the procedure of drawing samples from the population in which the sample is drawn one by one in such a way that the probability of selection of the units from the population in the sample is same at each time. For a sample of size n , each of the possible combinations of n elementary units that may be formed from the population of N units has the same chance of selection as every other combination of n units. Moreover, every element will have the same chance of selection as every other element.

Standard Deviation: The standard error of a simple random sample of size one.

Standard Error: A measure of the extent to which estimates from various samples differ from their expected value. With a reasonable large sample, the distribution of sample results for all possible samples is approximately the normal distribution, and probability statements can be made about how close the sample can be expected to the expected value- the probabilities being expressed in the standard error. The standard error usually is expressed by the Greek letter σ or S.

Statistic: A quantity computed from sample observations of a observations of a characteristic, usually for the purpose of making an inference about the population. The characteristic may be any variable associated with a member of the population; such as age, income, employment status etc. The quantity may be total, an average, a median or other percentile; it may also be a rate of change, a percentage, a standard deviation or any other quantity whose value we wish to estimate for the population.

Stratification: The process of dividing a population into groups for the purpose of selecting a separate sample from each group. Each group is usually made as internally homogeneous as possible. The groups are called strata, with each one referred to as a stratum.

Stratified Sampling: The method of sampling from a universe which has been stratified. At least one sample unit must be selected from each stratum. Probabilities of selection can be different from stratum to stratum.

Stratifying Factor: The criterion, which enables us to classify various sampling units into different strata.

Stratification variables: Variables used for stratification.

Systematic Sampling: A sampling technique in which only the first unit is selected with the help of random numbers and the rest get selected automatically according to some pre-designed pattern. In this method of sample selection, the population is listed in some order and every k^{th} element is selected for the sample.

Non-Sampling Error: The errors mainly arising at the stages of ascertainment and processing of data is termed as non-sampling error. This type of error is common to complete enumeration and sample survey. In practice, the census survey results may suffer from non-sampling errors although these may be free from sampling error. This error can occur at any one or more of the stages of a survey, i.e., planning, field work and tabulation of survey data.

Variance: The square of the standard error, usually, written as S^2 with a subscript to indicate the statistic to which it refers. The term is also used without a subscript for the square of the standard deviation. Where there is any possibility of confusion, sampling variance is used for the square of the standard error, and population variance for the square of the standard deviation.