

Main Sources of Demographic Data
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1. Population Census 2. Registration 3. Sample Surveys.

1. Population Census

The most important source of demographic data is the census. The word “census” is derived from the Latin word *censere* which means “to assess”.

The New International Webster’s Dictionary defines it thus – **“An official count of the people of a country or district including age, sex, employment, etc.”**

A United Nations Study defines the population census as the “total process of collecting, compiling and publishing demographic, economic and social data pertaining, at a specified time or times to all persons in a country or delimited territory.”

Thus a population census is an official enumeration of the inhabitants of a country with statistics relating to their location, age, sex, marital status, literacy status, language, educational level, economic activity, number of children, migration, etc.

Population census is a regular feature of all progressive countries, whatever be their size and political set up. It is conducted at regular intervals, usually every 10 years, for fulfilling well-defined objectives.

Salient Features of Census:

A census has the following features:

1. A census is usually conducted after an interval of 10 years.
2. The census covers the entire country or a part of it.
3. The census operations are completed within specified dates.

4. It is organised and conducted by the Government through the Census Commission of the country.
5. For conducting the census a reference period is determined by the Census Commission at that point of time.
6. A household or family is treated as a unit. However in large census operations, migrant individuals and homeless persons are also enumerated at night at their places of rest or sleep.
7. Before starting the census operations, some preliminary steps are taken by the Census Commission such as preparation of schedules, lists of households in each area, training of enumerators, etc.
8. The filled up census schedules are collected, examined and analysed statistically by the Census Commission.
9. The census data are published for circulation.
10. The census operations involve collection of information from households from door to door by enumerators. In some countries, schedules are sent by post and the required information is collected.
11. A census is a process whereby information is collected relating to age, sex, marital status, occupation, education etc. from people residing in a country.
12. Every country is legally bound to undertake a census after an interval of 10 years and people are bound to cooperate and provide the required information.

Uses of Census:

Population census is very useful for researchers, administrators, social organisations, etc.

We highlight its uses as under:

1. It provides primary population data relating to age, sex, marital status, economic activities, occupations, migration, literacy, etc.

2. Population data throw light on the socio-economic problems of the country such as the status of women, male-female sex ratio, population density, literacy level, urbanisation, living standards, etc.
3. These data help researchers, administrators, planners and social organisations to suggest and adopt measures to solve the various problems.
4. Census data are used for constructing life tables by insurance companies.
5. They are highly useful for making population projections.
6. Census data are used for carrying out sample surveys.
7. They are used by the Election Commission of the country for demarcation of constituencies and allocation of seats for municipal corporations, state legislatures and parliament of the country.
8. Population data are one of the bases of allocation of resources between the centre and states in a federal country.
9. They guide the city planners in planning measures for the future growth of cities regarding their future needs relating to housing, transport, flyovers, sanitation, pollution, water, educational institutions, etc.
10. Population projections and age-sex structure of the population help the government in estimating for the future military personnel of the country.

Some Problems of Census:

Census operations are costly in terms of men, materials and money. They require huge manpower, piles of forms containing schedules and lot of money on them and on processing, preparing and publishing population data. The entire census work is also very time consuming.

Besides, there are some other problems listed below:

1. Census is not a continuous process and is usually conducted after 10 years. So this is an ad hoc work which requires the training of census staff before each census. Thus experienced staff is not available.

2. The enumerators often interpret the terms used in the schedules in their own way despite the guidelines supplied to them by the Census Commission.
3. In the census operations, the enumerators are required to go from door to door to collect information. This work is not only time consuming but also monotonous. Some enumerators who shirk work and are dishonest fill up the schedules with cooked up figures sitting at home.
4. Often many persons are reluctant to provide correct information for fear that it may be used for some other purposes. This happens if the household is illiterate or the enumerator is not able to convince the former that the entire information is kept secret by law.
5. The household schedule pertaining to the census does not have any column about the number of family members who might have gone abroad.
6. In many developing countries, the column in the household schedule relating to age is based on age groups 1-5, 6-10, etc. thereby leaving a wide gap of 5 years. This creates a problem for the enumerator to fill up the age column which becomes a mere guess work. This is a defective method because age- specific information cannot be collected. In India and developed countries, age at the last birth in completed years is taken.

We may conclude with Barclay:

“In practice, some people are always missing. It is impracticable to include all cases which belong to the universe. Some cases which ought to be covered according to rule are always omitted. On the other hand, some may be recorded more than once.”

2. Registration:

Another source of population data is the registration of life or vital statistics. Every person is required by law to register with a specified authority such demographic events as birth, death, marriage, divorce, etc. Unlike the census, registration of vital events is a continuous process throughout the year.

It is an important source of information about citizenship, marital status, succession rights and settlement of disputes regarding birth and death.

Registration is a secondary source of demographic data which is available from four sources:

- (1) Vital Registration;
- (2) Population Register;
- (3) Other Records, and
- (4) International Publications.

They are explained as under:

1. Vital Registration:

Recording of vital events (or vital statistics) like births, deaths, marriages, divorces, etc. is obligatory on the part of every citizen in a country. For instance, the birth of a child has got to be registered with the municipal corporation of the town where the child is born in India.

Similarly, the occurrence of a death is required to be registered.

Such registration involves the filling up of a proforma with the following columns in each case:

Birth Certificate:

Name, Father's Name, Mother's Name, Age of Father, Age of Mother and Legitimacy.

Death Certificate:

Name of the deceased, date of death, sex, race/caste, age of the deceased, place of death, cause of death, occupation, marital status, permanent residence, etc.

In developed countries and in many developing countries, registration of marriage is also compulsory. But it is not so in India. Very few people want to register marriages with the Registrar of Marriages in developing countries like India, Bangladesh, Pakistan and Sri Lanka.

Similarly, in almost all the developing countries where the majority of people are illiterate and reside in rural areas, births and deaths are not reported to the registration authorities. Thus the registration records remain incomplete and are imperfect source of demographic data.

But this is not the case in developed countries where people are educated and record births, deaths, marriages, divorces, etc. with the appropriate authorities.

2. Population Register:

This is another secondary source of collecting population data. A number of European and Asian countries like Belgium, Sweden, Korea, Israel, etc. maintain permanent population register for administrative and legal purposes.

It contains the names, addresses, age, sex, etc. of every citizen, of those who migrate to other countries and who enter the country. The population registers helps in verifying the correctness of the census figures for that year.

3. Other Records:

Besides the population register, there are other records which are secondary sources of demographic data in developed countries. They maintain population records to meet social security schemes like unemployment insurance and allowance, old age pension, maternity allowance, etc.

In some countries, insurance companies maintain life tables relating to births and deaths and population trends. Selective demographic data are also available from electoral lists, income tax payers' lists, telephone subscribers' lists, etc. Though such administrative data are limited, they are helpful in providing for carrying out sample surveys.

4. International Publications:

Other sources of demographic data for the world and different countries are the United Nations Demographic Year Book and Statistical Year Book. The World Health Organisation (WHO) publishes a monthly journal Epidemiological and Vital Records which gives data on public health and mortality of different countries.

The United Nations Development Programme (UNDP) in its Human Development Report and the World Bank in its World Development Report publish annually demographic data relating to population growth, projections, fertility, mortality, health, etc. for countries of the world.

3. Sample Surveys:

Sample survey is another source of collecting population data. In a sample survey, information is collected from a sample of individuals rather than from the entire population. A sample consists of only a fraction of the total population. Several different population samples can be drawn on the basis of sample surveys such as the number of abortions, contraceptives used, etc. for the study of fertility.

Some countries conduct national sample surveys based on Random Sampling or Stratified Random Sampling. Whatever method is adopted, care should be taken to select a representative sample of the total population. The survey of the sample requires a small trained staff and small questionnaires relating to one aspect of the population. The data so collected are tabulated, analysed and published.

So this method takes less time and is less costly. Sample survey can be used to supplement the census data and to carry out further the trends in population growth in between two census operations. Sampling is also used to check the accuracy of the census data where there is doubt in census results. This method yields good results if the sample is properly chosen.

Limitations:

The sampling method has certain limitations.

1. It is highly subjective and it is possible to arrive at different data with different samples of the same population.
2. There are bound to be errors in coverage, classification and sampling of population data.
3. As the survey requires many surveyors who may not be efficient and sincere, it is subject to large errors.

4. If the informants in the sample do not cooperate with the surveyors, the survey will not give accurate results.

To conclude with Stephen, “Samples are like medicines. They can be harmful when they are taken carelessly or without adequate knowledge of their effects.”