## URBAN FRAME SURVEY

## 1: OVERVIEW

**1.1 Sampling Frame:** A sampling frame is an essential pre-requisite for conducting any sample survey. A useful sampling frame, among other things, should have certain basic features; viz updatedness, completeness and fairly accurate information of sampling units leading to their easy identifiability. In addition, information on ancillary characteristics associated with each sampling unit enhances the utility of the frame.

In practice, however, it is difficult to get a fairly satisfactory frame. On such occasions, it is customary to make special efforts to build up a sampling frame to meet the specific requirements. Urban Frame Survey (UFS) conducted by Field Operations Division (FOD) of National Sample Survey Office (NSSO) is a case in point.

1.2 Genesis of UFS: A household approach is adopted for collecting data through most socio-economic inquiries. Since the frame for ultimate sampling units (households) is neither available nor feasible to be prepared afresh every time on account of time and cost factors, the sampling methods are so designed as to select the households in successive stages. For the rural areas, list of census villages comes in handy as an operationally convenient and readily accessible frame of first stage units. In the urban sector, however, the population census does not provide an analogous list of geographical units that may be conveniently adopted as a sampling frame. The UFS was conceived and formulated to obviate this particular situation.

**1.3 History:** The first UFS was carried out during 1959-63. The coverage was extended to over 90% of the urban population. The survey was carried out by utilizing the basic material obtained from the census authorities. All the urban areas were divided into UFS blocks, each block having a population of about 600-800 or 120-160 households. In each town, the whole area within the geographical boundary including vacant lands was covered.

The first exercise provided very useful material that could be used for organizing sample surveys in the urban sector. Therefore, the UFS was included as a regular programme of the NSSO in 1972. Each process of updation (called a phase) is carried out over a five-year period – the last phase 2012-17 related to July 2013 to June 2017.

**1.4 Salient Features of UFS:** The UFS provides a sampling frame of first stage units in the urban sector. For the purpose of the enquiry, the very same connotation of urban area as adopted in the Population Census is taken. For instance, the current phase i.e. 2012-17 phase is being carried out using the same definition of urban area as adopted for the 2001 Population Census. Within this framework, an UFS updation exercise aims at updating the existing frame or to build a new frame in case of newly declared towns.

The unit of inquiry in the urban frame prepared by NSSO is an urban block, called UFS block. Traditionally, each UFS block has been envisaged to be a compact area unit, with a population content of 600-800 (or 120-160 households) in general and the block is bounded by well-defined, clear-cut and natural boundaries to the extent possible. The blocks are mutually exclusive and exhaustive so that the blocks carved out in any given town add up to the total area of the town. The blocks are so formed that they depict permanent landmarks and corner points; they are distinguishable from one another; and, are identifiable over time. While town is a big areal entity, UFS block is a small area unit. Striking a compromise between the two, the concept of Investigator Unit was evolved in the UFS. Investigator Unit (IV Unit) is a well-defined and clearly demarcated geographical area with a population content of about 20,000. In terms of number of blocks, an IV Unit generally consists of about 25 to 30 blocks. IV Unit maps are drawn in standard-sized map sheets. Efforts are made to provide adequate identification particulars leading to one to one correspondence amongst the towns, IV Units and the blocks.

Another essential feature of UFS is the preparation of notional maps. Prepared for each IV Unit, the maps depict the lanes & by-lanes more or less in the same manner as they actually occur. They also depict corner points and permanent land marks wherever feasible. Emphasis is to provide as much information as possible in the notional maps leading to identification of the blocks over a period of time.

Specified symbols are prescribed for drawing the maps. This enables clarity and standardization. Also, the notional maps take into account vacant area and accommodate the same within the area units of the urban block. This provision has been specifically made for taking into account the possibilities of absorbing the growth of habitation and population.

Each of the blocks is normally classified as residential area, *bazaar* area, industrial area, military area, hospital area, slum area, factory area, etc. depending on the pre-dominance of habitation and allied features.

## 2: DEFINITIONS

**2.1 Rural and Urban Areas** / **Towns:** The concept of rural and urban areas followed in UFS/socio-economic surveys of NSSO is same as followed in the decennial population censuses. At the time of conduct of the decennial census operations the state Directors of Census Operations in consultation with the Registrar General of India prepare list of urban areas in accordance with the definition adopted for the purpose. This list constitutes the basis for the conduct of population census.

A process of exclusion earmarks rural sector. All areas, which are not identified as urban, are **rural**. Urban areas have been specifically defined for census purposes. In the Census of India 2011, the definition of **urban area** adopted is as follows:

- (i) All places with a municipality, corporation, cantonment board or notified town area committee, etc.
- (ii) A place satisfying the following three criteria simultaneously:
  - (a) A minimum population of 5,000;
  - (b) At least 75% of male working population engaged in non-agricultural pursuits; and
  - (c) A population density of at least 400 per sq. km. (or 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 (ii)(b), the data relating to 'main workers' were taken into account.

Apart from these, the outgrowths (OGs) of cities (a city means a town with population of 100,000 and above) and towns have also been treated as urban under 'Urban Agglomerations'. Examples of out-growths 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 village or villages continuous to the town or city. Each such individual area by itself may not satisfy the demographic criteria laid down at (ii) 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.

- **2.2 Block:** This is the ultimate unit of enumeration in UFS. In short, it is defined as a compact area unit bounded by natural or permanent boundaries depicting distinct identification landmarks.
- **2.4 Investigator Unit:** The term 'Investigator Unit (IV Unit)' adopted in UFS is simply a connotation used for an intermediate unit between town and blocks within the town. By convention it is a geographically compact and distinct area with a population of about 20,000 with exceptions in certain cases as described below:
  - If a town is having a population of less than 20,000, the entire town could be one IV Unit, irrespective of population and number of blocks formed.
  - For outgrowths of a town in an urban agglomeration, separate IV Units could be formed. Obviously, in such cases, the population criterion shall have to be waived.
- **2.5 House:** Every structure, tent, shelter irrespective of its use is a house. It may be used for residential or non-residential purposes or both. There is a possibility that it may be vacant.
- **2.6 Household:** A group of persons normally living together and taking food from a common kitchen constitutes a household. A household may contain one or more members. Members of the household may or may not be related by blood. The definition of a household for the purpose of UFS is exactly same as adopted in the socio-economic enquiries of NSS.
- **2.7 Type of Area:** It has been the practice to collect information on type of area for each UFS block. Depending upon the subjects of enquiry in the NSS, the information on type of area is utilized for stratifying the UFS blocks before sampling. The definitions to be used for classifying a given block into the predominant type are given in the succeeding paragraphs.
- 2.7.1 **Affluent Area** (*being newly introduced since UFS 2007-12*): Each town will consist of a number of blocks. Among all such blocks, if there are blocks, relatively few in number, with concentration of (or pre-dominantly inhabited by) 'relatively affluent households' of the town, each such block will be classified under this category. In this regard, the field official will apply his judgments or may take into account the views of his colleagues or other knowledgeable persons. This information will be useful for stratification of blocks before sampling, particularly in the surveys on household consumer expenditure.
- 2.7.2 **Residential Area other than Affluent Area:** The area other than affluent area used predominantly for residential purposes will be termed as residential area (other than affluent area).

- 2.7.3 **Business/Bazaar Area:** The area consisting primarily of markets/shops will be termed as business/bazaar area. The office area will also be treated as a business/bazaar area.
- 2.7.4 **Slum Area:** A slum area refers to an agglomeration of densely inhabited poorly built and/or dilapidated structures predominantly made of kutcha or semi-kutcha building materials, often irregularly or asymmetrically constructed in unhygienic surroundings on a patch of land having an area not less than 0.15 acre with poor accessibility and with no or grossly inadequate basic amenities like ventilation, natural light, sanitation, drainage, water and power supply. It is characterized by unsatisfactory conditions of habitation of a group of people hustled together in a small patch of land. In other words, the principal features of a slum area will include (i) overcrowding; (ii) haphazard growth of structures; (iii) improper roads and narrow lanes with poor accessibility; (iv) inadequate power, sanitation and drainage facilities; (v) improper ventilation and inadequate area for living; (vi) inadequate arrangements for water supply; and (vii) general unhygienic conditions. Sometimes, a particular area is declared to be a slum area by the appropriate authority (State Government and/or Local Bodies). Such slums are designated as 'Declared Slums'. Slums that are not declared are categorized as 'Other Slums' / 'Undeclared Slums'.

## 2.7.5 Industrial Area: The area with concentration of factories/ manufacturing enterprises will be treated as the industrial area.

- 2.7.6 **Hospital Area**: In case any hospital (public or private) is located within the boundaries of the block, it will be categorized as a hospital area. Nursing homes having both in-patient facilities and operation theatre should also be treated as a hospital for the purpose of UFS.
- 2.7.7 **Educational/Institutional Area:** In various towns areas are classified as institutional areas and such area to be taken as Institutional area. Further, some areas which are having big institutions like, academic institution etc. are also to be taken as Educational/institutional area.
- 2.7.8 **Prohibited Area:** Area occupied by Army, Air Force, Navy etc having restrictions for public from the point of view of internal security will be treated as prohibited area. UFS is to be carried out in such restricted areas by taking necessary permission from competent authority. Within the prohibited area, civilian households, if any, are to be considered while having count of total number of households within the block.
- 2.7.9 Other Area Not Elsewhere Classified: Whenever it is not possible to distinguish an area not falling into any one of the above-mentioned types, it may be treated as "other area not elsewhere classified".