## Chapter One

# Introduction, Concepts, Definitions And Procedures

#### 1.0 Introduction

- 1.0.1 The National Sample Survey (NSS), set up by the Government of India in 1950 to collect socio-economic data employing scientific sampling methods will start its fifty-seventh round from 1<sup>st</sup> July 2001.
- 1.0.2 The fifty- seventh round of NSS is earmarked for collection of data on economic and operational characteristics of unorganized enterprises in service sector (excluding trade and finance), besides consumer expenditure and employment-unemployment. The field operations of the survey will commence on 1<sup>st</sup> July 2001 and will continue up to 30<sup>th</sup> June 2002.
- 1.0.3 During 1977, the first All-India Economic Census was conducted by the Central Statistical Organization (CSO) in collaboration with the State Statistical Bureaus with the objective of collecting some basic information on non-agricultural enterprises employing at least one hired worker on a fairly regular basis (hereinafter referred to as 'establishments'). Following this census, small establishments and enterprises not employing any hired worker on a fairly regular basis [and henceforth called 'own account enterprises' (OAEs)] engaged in the activities of trade, transport, hotels & restaurants and services was conducted by NSSO as part of its 34<sup>th</sup> round (1979-80) while larger establishments of these activities were surveyed by CSO during 1979-80.
- 1.0.4 The second All-India Economic Census was conducted in 1980 along with the house listing operations of the 1981 Population census. This census had a wider coverage than the earlier one since it covered the own-account enterprises also. In presenting the results, the establishments were further split into two categories as (i) Directory Establishments (DEs) and (ii) Non-directory Establishments (NDEs), the difference being that the former employed a total of six or more workers while the latter employed one to five workers. Thus, in all, three categories of enterprises were formed viz., (i) OAEs (ii) NDEs and (iii) DEs in the second Economic Census. As a follow-up to the second Economic Census, OAEs and establishments (NDEs and DEs together) engaged in the activities of transport, hotels & restaurants, storage & warehousing and services were surveyed during October 1983 to September 1984 by special staff of the Field Operations Division (FOD) of NSSO under the technical direction of CSO. This was followed by another survey on hotel, restaurant and transport in 1988 89 also by CSO.
- 1.0.5 The third All-India Economic Census was conducted in 1990 along with the house listing operations of the 1991 Population Census following the same concepts and definitions as in the second all-India Economic Census conducted in 1980 referred to above. However based on EC '90, a follow up survey on OAEs and establishments engaged in the activities of

storage & warehousing was undertaken as a part of Enterprise survey 1992-93 by CSO and similar follow up survey on OAEs and establishments was conducted in 1993-94 also by CSO.

- 1.0.6 Following this, two other surveys were undertaken with Population Census 1991 as sampling frame (i) Special Enterprise Survey on enterprises in the unorganized sector during the period August '98 to June '99 and (ii) Informal sector enterprises as part of NSS 55<sup>th</sup> round during July 1999 to June 2000.
- 1.0.7 The fourth All India Economic Census was conducted in 1998 following the same concepts and definitions as in the third All India Economic Census conducted in 1990. EC '98 provides enterprise wise information at FSU level and as such it will be taken as the sampling frame for this round of survey as was done in the  $56^{th}$  round.

## 1.1 Survey particulars

1.1.1 **Subject Coverage**: The fifty-seventh round of NSS will cover all OAEs and establishments of unorganized service sector (excluding trade and finance). The details of the activities and enterprises to be covered in this round are outlined under Para 1.3.20.

In addition, the annual consumer expenditure enquiry covering some key characteristics of employment-unemployment will also be carried out on a sample of four households in each sample FSU.

- 1.1.2 **Geographical coverage**: The survey will cover the whole of the Indian Union *except*
- (i) Leh and Kargil districts of Jammu & Kashmir, (ii) interior villages of Nagaland situated beyond five kilometers of the bus route and (iii) villages in Andaman and Nicobar Islands which remain inaccessible throughout the year.
- 1.1.3 **Period of survey and work programme**: As mentioned earlier, fifty-seventh round will be of one year duration starting on 1<sup>st</sup> July 2001 and ending on 30<sup>th</sup> June 2002. The survey period of this round is divided into four sub-rounds of three months duration each as follows: Table 1: Sub-rounds and period of survey:

| sub-round no. | period of survey      |
|---------------|-----------------------|
| (1)           | (2)                   |
| 1             | July-September 2001   |
| 2             | October-December 2001 |
| 3             | January-March 2002    |
| 4             | April-June 2002       |

Equal number of sample FSUs will be allotted for survey in each of these four subrounds with a view to ensuring uniform spread of sample FSUs over the entire round. However attempt should be made to survey each such FSU duding the sub-round to which it has been allotted. Because of the arduous field conditions, this restriction need not be strictly enforced in Andaman and Nicobar Islands, Lakshadweep, rural areas of Arunachal Pradesh and Nagaland.

1.1.4 **Schedules of enquiry**: The following Table lists the schedules of enquiry for the current round: -

| srl. no. | schedule no. | title of the schedule                               |  |  |  |  |
|----------|--------------|---|--|--|--|--|
| (1)      | (2)          | (3)   |  |  |  |  |
| 1.       | 0.0          | list of households and non-agricultural enterprises |  |  |  |  |
| 2.       | 2.345        | unorganized services (excluding trade and           |  |  |  |  |
|          |              | finance)  |  |  |  |  |
| 3.       | 1.0          | household consumer expenditure                      |  |  |  |  |

Table 2: Schedules to be canvassed in NSS 57th round:

1.1.5 **Participation of States**: In this round all the States and Union Territories except Andaman & Nicobar Islands, Dadra & Nagar Haveli and Lakshadweep are expected to participate at least on an equal matching basis for the samples of general strata only. The following table shows the prevalent matching pattern of the participating States/UTs:

Table 3: Prevalent matching pattern\* of the participating States/UTs

| States / UTs           | matching pattern |  |  |  |
|------------------------|------------------|--|--|--|
| (1)                    | (2)              |  |  |  |
| Nagaland (U), Delhi    | Triple           |  |  |  |
| J & K, Manipur         | Double           |  |  |  |
| Goa, Maharashtra (U)   | One and half     |  |  |  |
| All other States / UTs | Equal            |  |  |  |

<sup>(\*</sup> For samples of general strata only)

It may be noted that Union Territory of Chandigarh is not participating in the rural sector for state sample.

## 1.2 Contents of Volume I

1.2.0 The present volume contains four chapters and four appendices. Chapter one, besides giving an overview of the whole survey operation, discusses the concepts and definitions of certain important technical terms used in the survey. It also describes in detail the procedure of selection of households/enterprises. Instructions for filling in the schedules 0.0, 2.345 and 1.0 are given in chapters two, three and four respectively. Appendix-I and Appendix-II give the list of the FOD <u>sub-regions</u> and the list of NSS regions respectively. Appendix-III gives the list of 66 towns of Karnataka where EC '98 work was done without using UFS blocks. Appendix-IV gives an overview of the sample design of the 57<sup>th</sup> round.

### 1.3. Concepts and Definitions:

1.3.0 Some broad information about the enterprises and households will be collected during listing. These are required mainly to identify and to have a frame of enterprises of different types for sample selection for canvassing schedule 2.345 and also to identify the households for selection of households for schedule 1.0. The definitions of the terms required in this connection are given below.

- 1.3.1 **House**: Every structure, tent, shelter etc., is a house irrespective of its use. It may be used for residential or non-residential purpose or both or even may be vacant.
- 1.3.2 **Household**: A group of persons normally living together and taking food from a common kitchen will constitute a household. The members of a household may or may not be related by blood to one another. The following cases are to be noted:
- (i) Each inmate (including residential staff) of a hostel, mess, hotel, boarding and lodging house etc., will constitute a single member household. If, however, a group of persons among them normally pool their income for spending, they together will be treated as forming a single household. For example, a family living in a hotel will be treated as a separate single household by itself.
- (ii) Undertrial prisoners in jails and indoor patients of hospitals, nursing homes etc., are to be excluded but residential staff therein will be listed while listing is done in such institutions. The former persons will be considered as normal members of their parent households and will be counted there. Convicted prisoners undergoing sentence will be outside the coverage of the survey.
- (iii) Floating population i.e. persons without any normal residence will not be listed. But households residing in open space, roadside shelter, under a bridge etc., more or less regularly in the same place will be listed.
- (iv) Foreign nationals will not be listed, nor their domestic servants, if by definition they belong to the foreign national's household. In some cases, however, a foreign national might have become an Indian citizen for all practical purposes. Such persons will be covered.
- (v) Barracks of military and para-military forces (like police, BSF etc.) are outside the survey coverage. However, civilian population residing in their neighbourhood, including the family quarters of service personnel are to be covered, for which, of course, permission may have to be obtained from appropriate authorities.
- (vi) Orphanages, rescue homes, ashrams and vagrant houses are outside the survey coverage. However, the students staying in hostels (if any) and the residential staff (other than monks/nuns) of ashrams may be listed. For orphanages, although orphans are not to be listed, the persons looking after them and staying there may be considered for listing. It may be noted that *enterprises* run by all the above types of institutions are to be listed.
- 1.3.3 **Household size**: The number of normally resident members of a household is its size. It will include temporary stay-aways but exclude temporary visitors and guests. Even though the determination of the actual composition of a household will be left to the judgment of the head of the household, the following procedures will be adopted as guidelines:
- (i) In deciding the composition of a household, more emphasis is to be placed on 'normally living together' than on 'ordinarily taking food from a common kitchen'. In case the place of residence of a person is different from the place of boarding, he or she will be treated as a member of the household with whom he or she resides.

- (ii) A resident employee, or domestic servant, or a paying guest (but not just a tenant in the household) will be considered as a member of the household with whom he or she resides even though he or she is not a member of the same family.
- (iii) When a person sleeps in one place (say, in a shop or in a room in another house because of space shortage) but usually takes food with his or her family, he or she should be treated not as a single member household but as a member of the household in which other members of his or her family stay.
- (iv) If a member of a household (say, a son or a daughter of the head of the household) stays elsewhere (say, in hostel for studies or for any other reason), he/she will not be considered as a member of his/her parent's household. However, he/she will be listed as a single member household if the hostel is listed.
- 1.3.4 Economic activity: Any activity resulting in production of goods and services that adds value to national product is considered as economic activity. Such activities include production of all goods and services for market i.e. production for pay or profit and the production of primary commodities for own consumption and own account production of fixed assets, among the non-market activities. The entire spectrum of human activity falls into two categories viz. economic and non-economic activities. The economic activities have two parts market activities and non-market activities. Market activities are those that involve remuneration to those who perform it i.e., activity performed for pay or profit. These are essentially production of goods and services for the market including those of government services etc. Non-market activities are the production for own consumption of primary products including own account processing of primary products and own account production of fixed assets. However the whole spectrum of economic activities as defined in the UN System of National Accounts (SNA) will not be covered under 'economic activity' for this round. In this round, the term "economic activity" will include:
  - (i) all the market activities described above i.e. the activities performed for pay or profit, and
- (ii) of the non-market activities:
- (a) all the activities relating to agricultural sector which result in production (including gathering of uncultivated crops, forestry, collection of firewood, hunting, fishing etc.) of agricultural produce for own consumption and
- (b) the activities relating to the own-account production of fixed assets. Own account production of fixed assets includes construction of own houses, roads, wells etc., and of machinery, tools etc. for household enterprise and also construction of any private or community facilities free of charge. A person may be engaged in own account construction either in the capacity of a laborer or a supervisor.

It is to be noted that like earlier rounds, the activities like prostitution, begging, smuggling etc. that may result in earnings will not, by convention, be considered as economic activities.

1.3.5 **Self-employed**: Persons who are engaged in their own farm or non-farm enterprises are defined as self-employed. There are different types of self-employed persons. Some may operate their enterprises without hiring any labour. Others normally work on their own but occasionally hire a few labourers. There is also a third category that by and large regularly

runs their enterprises by hiring labour. The first two groups of self-employed are known as 'own account workers' and the third as 'employers'.

1.3.6 **Manual work** is work, which essentially involves physical operations. However, jobs essentially involving physical labour but also requiring a certain level of general, professional, scientific or technical educations are not to be termed as manual work. On the other hand, jobs neither involving much of manual labour nor requiring much educational background are to be treated as manual work. Thus, engineers, doctors, dentists, midwives etc. are not considered as manual workers even though their jobs involve some amount of physical labour. But peons, chowkidars, watchmen etc. are considered as manual workers even though their work may not involve much physical labour. Manual work will cover one or more of the following occupational groups of the National Classification of Occupations (Revised 1968): -

#### **Division 5** - Service workers: -

Group 52: cooks, waiters, bartenders and related workers.

Group 53: maids and other housekeeping service workers.

Group 54: building caretakers, sweepers, cleaners and related workers.

Group 55: launders, dry cleaners and pressers.

Group 56: Hairdressers, barbers, beauticians and related workers.

Family 570: fire fighters.

Family 574: watchmen, gatekeepers

Family 579: protective service workers not elsewhere classified.

#### **Division 6**: Farmers, Fishermen, Hunters, Loggers and related workers: -

Group 63: agricultural labourers.

Group 64: plantation labourers and related workers.

Group 65: other farm workers.

Group 66: forestry workers.

Group 67: hunters and related workers.

Group 68: fishermen and related workers.

**Divisions 7-8-9**: Production & related workers, Transport equipment operators and Labourers: -

All groups excluding Group 85 (electrical fitters and related workers) and Group 86 (broadcasting station and sound equipment operators and cinema projectionists).

- 1.3.7 **Rural labour**: Manual labour (by a person living in rural area) in agricultural and/or non-agricultural occupations in return for wages/salary either in cash or kind (excluding exchange labour) is defined as 'rural labour'.
- 1.3.8 **Means of livelihood**: For the purpose of preparing frame of households for canvassing schedule 1.0, every household is to be placed into one and only one of the following categories of means of livelihood (m.l.):

Rural Households

Urban households

- 1. Self-employed in non-agriculture
- 2. Rural labour
- 3. Others

- 1. Self-employed
- 2. Regular wage/salary earning
- 3. Casual labour
- 4. Others

For a majority of the households, there may be only one source of income and, thus, their placement will be relatively straightforward. In a few cases, where there are two or more sources of income, following procedure is to be adopted for determining m.l. code/category:

**For urban households**, m.l. class to be recorded will be either of 'self employed', 'regular wage/salary earning', 'casual labour' and 'others' depending upon the source which fetched maximum income to the household during the last 365 days preceding the date of survey.

**For rural households** also, the means of livelihood of a household will be decided on the basis of the sources of the household's income during the last 365 days preceding the date of survey. However, the procedure to be adopted will be as follows:

- a) Group the sources of the household's income from economic activities during the last 365 days into the four categories as given below: -
  - (i) self-employment in non-agriculture
  - (ii) self-employment in agriculture
  - (iii) wage-paid manual labour (i.e., rural labour) and
  - (iv) wage-paid non-manual employment.
- b) See if the income from source (iii) is more than (or equal to) the income from sources (i) and (ii) combined and is also more than the income from source (iv). If so, the household will be 'rural labour', as per m.l. criterion.
- c) If not, then see if income from source (i) is more than the income from source (iii) and is also more than (or equal to) the income from sources (ii) and (iv). If so, the household's m.l. class will be 'self-employment in non-agriculture'.
- d) In all other cases, m.l. class will be recorded as 'others'.
- 1.3.9 Please note that for deciding the means of livelihood of a household, the income of servants and paying guests will not be taken into account. Also, only the economic activities are to be taken into account.
- 1.3.10 **Enterprise**: An enterprise is an undertaking which is engaged in the production and/or distribution of some goods and/or services meant mainly for the purpose of sale, whether fully or partly. An enterprise may be owned and operated by a single household, or by several households jointly, or by an institutional body.
- 1.3.11 **Non-agricultural enterprise**: All enterprises covered under Tabulation Categories 'A' and 'B' of NIC '98 are "agricultural enterprises" while the others covered under Tabulation Categories 'C' to 'Q' are "non-agricultural enterprises". The NIC '98 booklets may be used for recording NIC codes in various schedules. *For the present round, non-agricultural*

enterprises under Tabulation Category 'L', 'P' & 'Q' will be kept out of the purview of listing in sch. 0.0. All other non-agricultural enterprises will be henceforth referred to as NAEs for the purpose of listing in sch.0.0 of this survey. Reference may also be made to paragraph 1.3.20 of this chapter for further details regarding listing of various activities, under coverage of this round.

- 1.3.12 **Own account enterprise (OAE)**: An own account enterprise is an undertaking run by household labour, usually without any hired worker employed on a 'fairly regular basis'. By 'fairly regular basis' it is meant the major part of the period of operation(s) of the enterprise during the last 365 days.
- 1.3.13 **Establishment**: Enterprises that have got at least one hired worker on a 'fairly regular basis' are called establishments. Paid or unpaid apprentices, paid household member/servant/resident worker in an enterprise are considered as hired workers. Establishments have been further sub-divided into two classes: (i) Non-directory establishment (NDE) and (ii) Directory establishment (DE).
- 1.3.13.1 **Non-directory establishment (NDE)**: An establishment having one to five workers (household and hired taken together) is termed as a non-directory establishment.
- 1.3.13.2 **Directory establishment (DE)**: A directory establishment is an establishment that has got six or more workers (household and hired taken together).
- 1.3.14 **Seasonal enterprise**: Enterprises that are usually run in a particular season or fixed months of a year are called seasonal enterprises.
- 1.3.15 **Perennial enterprise**: Enterprises that are run more or less regularly throughout the year are called perennial enterprises.
- 1.3.16 **Casual enterprise**: Enterprises that are run occasionally, for at least 30 days *in total* in the last 365 days are called casual enterprises.
- 1.3.17 **Household enterprise**: A household enterprise is one which is run by one or more members of a household or run jointly by two or more households on partnership basis irrespective of whether the enterprise is located in the premises of the household(s) or not. In other words, all proprietary and partnership enterprises are household enterprises.
- 1.3.18 **Non-household enterprise**: Non-household enterprises are those, which are institutional i.e., owned and run by the public sector (Central or State Government, local self-governments, local bodies, government undertakings, etc.), corporate sector, co-operative societies, other types of societies, institutions, associations, trusts, etc.
- 1.3.19 **Unorganized sector enterprise**: The unorganized sector comprises the following types of enterprises:
  - (i)All the enterprises except units registered under section 2m(i) and 2m(ii) of factories act, 1948 and Bidi and Cigar workers (condition of employment) act 1966.

- (ii)All enterprises except those run by Government (Central, State, Local bodies) / Public Sector Enterprises.
- 1.3.20 **Activity coverage**: This survey will cover the activities classifiable under different tabulation categories viz. H, I, K, M, N and O of NIC '98. Further details giving the coverage of various activities are summarized below in a tabular form in a manner that may facilitate in making correspondences with the second stage strata (SSS) formation (for detail see Para 1.4.8).

It may be noted that only NAEs belonging to unorganized sector (as defined in pera 1.3.9) pursuing these activities will be listed for this round.

| Activity /<br>NIC'98 code                | Coverage  |
|--|---|
| 1. Storage & warehousing (NIC code 6302) | The operation of storage and hiring out of warehouses to the farm producer, dealer, trader, processor and manufacturing enterprises, as an independent business is covered in this survey. Warehousing services may be provided to the private individuals/households also.   |
|  | Storage and warehousing services in respect of grains, other food articles, oil seeds and other agricultural commodities like cotton, jute and tobacco are included. Also included are the refrigerated storage facilities on hire to other enterprises for potato, fruits, dairy products, fish and other food products and also refrigerated food locker on rental services chiefly delivered to individual household. Storage of all manufactured products including textiles, machine tools, apparatus and equipment are to be included. Space for lumber, waste and scrap materials is to be included. |
|  | But farm produce stored by the owner of the farm in his own godown or a dealer or a manufacturer storing his commodities in his own godown or warehouse are excluded from the scope of this survey. Also excluded are the establishments of Central Warehousing Corporation, State Warehousing Corporations and the warehouses of the Central and State Governments. Lockers in commercial banks and in other type of enterprises for safe storage of precious belongings are also excluded   |

| Activity /<br>NIC'98 code   | Coverage  |
|---|---|
| 2. Hotels<br>(NIC code 551)                                       | A hotel is an enterprise that provides lodging services with or without arrangements for meals, other prepared food and refreshments. Dharamshala type lodging places, Private Guest/rest houses, hostels, mess, hostels attached to educational institutions, students homes, hostel for working girls, tourist lodges etc. are also to be covered under hotels provided they are run by private organizations.  Similar facilities provided through workers employed exclusively for these specific activities by religious organization like YMCA, R K Mission etc. and also by other membership organizations like Lions club, Rotary club etc. will also be covered under hotels.  However similar facilities if provided by Govt./PSU/Local body/Statutory bodies (a.g. ISL HT, Universities etc.) are avaluated from the previous of |
| 3. Post & Tele-<br>communication<br>(NIC code 64)                 | bodies (e.g. ISI, IIT, Universities etc.) are excluded from the preview of the coverage of this survey.  All enterprises providing communication services, not owned by government, Public Sector undertakings and local bodies will be covered.  |
|   | This will include courier services, ISD/STD/ PCO booths, Voice Mail Services through computer networking, Video/fax services, phone plus services, voiced and non-voiced leased circuits, telex/FAX/data services through computer network, radio paging, audio services and activity of cable operators etc. However activities of the cellular service operators are outside the coverage of this survey.   |
| 4. Mechanized road transport, (NIC codes 6021, 60221, 60231)      | Transport means rendering transport service to others as a business proposition.  Transport activity relates to the act of carrying passenger and/or goods from one place to another. They may be passenger transport by bus (including tramways), passenger transport by other motor vehicles, freight transport by motor vehicles or any other road transport by mechanized vehicle.  |
| 5. Real estate, renting and business activities (NIC codes 70-74) | Real estate activities are covered under NIC code 70. They include activities like: (i) purchase, sale, letting and operating of real estate i.e. residential/non-residential buildings, (ii) developing and sub-dividing real estate into lots, (iii) lessors of real property and (iv) real estate agents, brokers and managers engaged in renting, buying and selling, managing and appraising real estate on a contract or fee basis. Letting out of an accommodation will not be included except in case of real estate agents running such a business.  |
|   | Renting of machinery and equipment will be covered under NIC code 71.  Note that a household hiring out machinery & equipment or household  |

| Activity /                                   | Coverage   |
|--|--|
| Real estate, renting and business activities | durables will also be treated as an enterprise. All business activities classifiable under NIC codes 72 to 74 are to be covered in this survey.  |
| 6. Health and social work (NIC code 85)      | All enterprises engaged in health and medical services other than those owned by government, public sector undertakings, local bodies will be covered, irrespective of the system of medicine.   |
|  | All dispensaries, clinics and consultation chambers run by doctors will be covered. The survey will also cover activities of veterinary services including bird hospitals. An employed doctor and para-medical person (such as midwife, dai etc.) doing private practice will be covered and his/her private practice alone will be considered as an enterprise. All kinds of health clubs are included in this activity.                            |
|  | Similar facilities provided through workers employed exclusively for these specific activities by religious organization like YMCA, R K Mission etc. and also by other membership organizations like Lions club, Rotary club etc. will also be covered under health and social work.   |
| 7. Restaurants (NIC code 552)                | A restaurant generally provides eating and drinking services where prepared meals, food and refreshments and other snacks are sold for immediate consumption without any provision for lodging.  |
|  | Such establishments are variously known as restaurants, cafes, cafeteria, snack bars, lunch counters, refreshment stands, milk bar canteens, etc. Bars and other drinking places will also be treated as restaurants. Canteens located in offices, factories, etc. will be treated as restaurants if they are operated by private contractors. But departmental canteens run by government will be excluded.   |
| 8. Education<br>(NIC code 80)                | All educational institutions not recognized by Central/State/Local Govts./autonomous bodies like AICTE, IIT, University etc. are to be covered. Research and scientific services rendered by institutions and laboratories are also covered provided they satisfy the above criterion. These may be engaged in research in biological, physical and social sciences. Meteorological institutes and medical research organizations are also included. |
|  | Management training institutes, computer training centers, nursing schools, schools of music, drama, dance, fine arts, modeling, fashion designing, yoga and physical education and general coaching centers (e.g. for various competitive examinations) etc. are to be covered.   |
|  | Similar facilities provided through workers employed exclusively for these specific activities by religious organization like YMCA, R K -  |

| Activity /  | Coverage  |
|---|---|
| NIC'98 code Education   | Mission etc. and also by other membership organizations like Lions club,  |
| (contd.)  | Rotary club etc. will also be covered under education.  |
| 9. Other community, social and personal service   | Transport of passengers and/or goods in land, other than by mechanized road transport will be covered in this activity group. Activity of travel agency and tour operators, activities of other transport agency, supporting services incidental to transport such as packing, freighting,  |
| activities & other transport (NIC codes 601, 60222, 60232, 61,6301, 6303, 6304, 6309, 90, 911,9191, 92, 93) | travel agency etc. will also be covered under other transport. The following activities are also to be covered: (i) hackney carriages, carriage by bullock-carts/ekka/tonga etc. (ii) transport by animals like horses, elephants, mules, camels, etc., (iii) transport by man including rickshaw-pullers, cart-operators, etc., (iv)All kinds of water transport, (v) supporting services to land transport like operation of highway bridges, toll roads, parking lots, etc. and (vi) supporting services to water transport like operation and maintenance of piers, docks, light house, loading and discharging vessels, etc. All these activities are broadly covered under NIC codes 601, 60222, 60232, 61,6301, 6303, 6304 & 6309. However transport via pipeline and air transport are beyond the   |
|   | This survey will also cover the activities like sewage and refuse disposal, other service activities like washing and cleaning of textile products, hair dressing, beauty parlors, funeral and related activities, massage saloons, sauna baths, activities of shoe shiners, porters, car parkers etc; activities such as portrait and commercial photographic studios etc. classified under NIC code 93. Palmists and astrologers will also be covered here.  It may be noted that individuals serving as housemaids, cooks, gardeners, governess, baby sitters, chowkidars, night watchmen, etc. will in general be outside the coverage of the present survey. However, if such activities are provided by some agencies against prescribed fees, those agencies will be treated as enterprises under respective NIC codes. For example, an agency, which supplies baby sitters or nurses or night watchmen with some profit margin, will be covered in this survey. |

It may be noted that if any service sector enterprises under coverage in this round is run by religious/political/other membership organizations with at least one worker hired for the services it provides then it will be covered with respective NIC code of that activity.

### 1.4 Sample Design

**1.4.1** A stratified multi-stage design will be followed for this survey. The first stage units (FSUs) will be villages (Panchayat words for Kerala) / UFS blocks (words for 66 towns of Karnataka where UFS blocks were not used during EC'98 work) [hereinafter referred to as 66 towns of Karnataka] and the ultimate stage units (USUs) will be enterprises under coverage and households. However, in the case of larger FSUs requiring hg / sb formation, one intermediate stage will be the selection of hg's / sb's.

- 1.4.2 *Sampling of strata*: List of Economic Census 1998 (EC'98) villages (Panchayat words for Kerala) / UFS blocks (words for 66 towns of Karnataka) will be taken as the sampling frame for FSUs.
- 1.4.3 *formation of strata*: Stratification is to be made on the basis of number of workers in unorganized sector enterprises engaged in the activities under coverage of NSS 57<sup>th</sup> round as per EC'98. (Hereafter, "workers" will mean workers in unorganized sector enterprises engaged in the activities under coverage of NSS 57th round as per EC '98).
  - a) **Special stratum**: One *special* stratum for Rural and Urban sector each may be formed at the State / UT level consisting of all the FSUs of the State / UT (i) having at least one big unit of an activity under coverage on the basis of its number of workers or (ii) having large number of workers engaged in the same activity as in (i). The cut-off points for identifying these FSUs are given in Statement 1. *All the FSUs of the special strata will be surveyed*. The stratum number for special stratum will be 9 for each State or UT.
  - b) **General Strata (hereafter,** stratum will refer to **general stratum** unless otherwise mentioned) will be formed form the remaining FSUs in the following manner:

Rural: In the rural areas each NSS region will be treated as a stratum.

**Urban**: In the urban areas, the strata will be formed within an NSS region as under:

- (i) towns with population (P) less than or equal to 10 lakhs and
- (ii) each town with P > 10 lakhs. as per Population Census 1991.

| Statement 1: activity-wise cut-off number of workers for identifying FSUs with big unit or large number of workers for special strata |                                |                                  |  |  |  |  |
|---|--------------------------------|----------------------------------|--|--|--|--|
| Activity  | cut-off number of workers      |                                  |  |  |  |  |
|   | At least on big unit in an FSU | Total no. of<br>Worker in an FSU |  |  |  |  |
| (1)   | (2)                            | (3)                              |  |  |  |  |
| 1. storage & warehousing  | 200                            | 300                              |  |  |  |  |
| 2. hotels   | 200                            | 350                              |  |  |  |  |
| 3. post & telecommunications  | 200                            | 250                              |  |  |  |  |
| 4. mechanized road transport  | 250                            | 400                              |  |  |  |  |
| 5. real estate, renting and business activities   | 300                            | 750                              |  |  |  |  |
| 6. health and social work   | 500                            | 550                              |  |  |  |  |
| 7. restaurants  | 300                            | 350                              |  |  |  |  |
| 8. education  | 300                            | 550                              |  |  |  |  |
| 9. other community, social and  | 400                            | 700                              |  |  |  |  |
| personal service activities & other transport   | 400                            | 700                              |  |  |  |  |

#### 1.4.4 Sub-stratification

After leaving out the FSUs which have formed part of the special strata at State/UT level, the remaining FSUs of a stratum are to be grouped into a number of sub-strata following the sequential steps as described below:

Sub-stratum 1: all FSUs having at least one establishment (i.e. enterprise with at least

one hired worker) of Storage and Warehousing

Sub-stratum 2: all FSUs, excluding those in the already formed sub-stratum 1, having

at least one establishment of Hotal.

Sub-stratum 3: all FSUs, excluding those in the already formed sub-strata, having at

least one establishment of Post and Telecommunications.

Sub-stratum 4: all FSUs, excluding those in the already formed sub-strata, having at

least one establishment of Mechanized road transport.

Sub-stratum 5: all FSUs, excluding those in the already formed sub-strata, having at

least one establishment of Real Estate, Renting & Business Activities

(i.e. Tabulation category K of NIC '98)

Sub-stratum 6: all FSUs, excluding those in the already formed sub-strata, having at

least one establishment of Health & Social Work (i.e. Tabulation

category N of NIC '98).

Sub-stratum 7: all FSUs, excluding those in the already formed sub-strata, having at

least one establishment of restaurant.

Sub-stratum 8: all FSUs, excluding those in the already formed sub-strata, having at

least one establishment of Education (i.e. Tabulation category M of

NIC '98).

Sub-stratum 9: all FSUs, excluding those in the already formed sub-strata, having at

least one establishment of Other Community, Social and Personal Service Activities (i.e. Tabulation category O of NIC '98) & other

transport.

Sub-stratum 10: all FSUs, excluding those in the already formed sub-strata, having at

least one own account enterprise (OAE) i.e. enterprise with no hired worker in any one of the Tabulation categories H, I, K, M, N, O of NIC

'98).

Sub-stratum 11: rest of FSUs of the stratum.

Sub-stratum number for FSUs of the special strata will be 1 to 9 only.

#### 1.4.5 *Total sample size (FSUs)*

States and UTs (except A & N Islands, Dadra & Nagar Haveli and Lakshadweep) will participate with at least on equal matching basis. However, central sample size (FSUs) may be around 16000 keeping in view that there will be about 900 investigators available for the survey each having the annual work-load of 18 FSUs.

## 1.4.6 Allocation of total sample to States and UTs

The total sample FSUs will be allocated to the States and UTs broadly in proportion to number of workers subject to the availability of investigators ensuring more or less uniform work-load.

## 1.4.7 Allocation of State/UT level sample to Rural and Urban sectors

State / UT level sample size will be allocated to rural and urban sectors in proportion to the total number of workers.

#### 1.4.8 Allocation of Rural / Urban sector level sample size to strata / sub-strata

Rural / Urban level allocation will be further allocated to strata in proportion to the total number of workers. Again, the allocation among the constituent sub-strata of a stratum will be done in proportion to the total number of workers with weights 4 for sub-stratum 1; 3 for sub-strata 2, 4, 5, 7 and 9; 2 for sub-strata 3 & 6 and 1 for sub-strata 8, 10 & 11. For sub-stratum 11, size will be taken as 1 for each FSU. (The weights for allocation of sample FSUs among sub-strata in a strum are taken to be inversely proportional to the total number of FSUs in those sub-strata).

Minimum allocation for sub-stratum will be 4 FSUs provided there exist at least 4 FSUs in sub-stratum. In case there are less than 4 FSUs in a sub-stratum, all the FSUs will be allocated and surveyed.

Allocation to sub-strata may be rounded to multiple of 4 so that it is possible to allocate at least 2 FSUs to each substratum in a semi-round (six monthly) to get semi-round wise estimates.

### 1.4.9 Selection of FSUs

FSUs will be selected from sub-strata 1-10 by circular systematic sampling (CSS) with probability proportional to size (PPS), size being the number of workers in the FSU. For substratum 11, FSUs will be selected by CSS with equal probability. The samples will be drawn from each sub-stratum in the form of two independent equal sub-samples. Wherever States and UTs will participate on equal matching basis a combined sample of state and central sample at the sub-stratum level will be drawn. Odd numbers will be assigned to central sample and even numbers to state sample. In case of unequal matching, central and state samples will be selected independently. However, it may lead to repetition of state and central samples.

#### 1.5: Selection of hamlet-groups/sub-blocks / households/enterprises - important steps

- 1.5.0 **Proper identification of the FSU boundaries:** The first important task of the field investigators is to ascertain the exact boundaries of the sample FSU as per its identification particulars given in the sample list. For urban samples, the boundaries of each Urban Frame survey (UFS) block may be identified by referring to the map corresponding to the frame code specified in the sample list (even though map of the block for a latter period of the UFS might be available). However for 66 towns for Karnataka where EC '98 work was done without using UFS blocks, the boundaries of each selected ward are to be ascertained by referring to the appropriate map.
- 1.5.1 **Formation of segment 9:** Having determined the boundaries of the sample FSU, all big non-agricultural enterprises having 200 or more workers in the entire FSU and having operated at least one day during last 365 days preceding the day of survey (hereinafter to be called as big enterprises for brevity) will be listed and eligible units under coverage will be surveyed separately in addition to the eligible smaller enterprises (i.e. enterprises having less than 200 workers and having operated at least one day during last 365 days preceding the day of survey) under coverage to be surveyed as per normal procedure. All the listed big units (whether under coverage or not) will constitute segment 9.
- 1.5.2 **Decision on hamlet-group/sub-block formation:** Having constituted segment 9 as stated above, a **decision** has to be taken whether listing has to be done in the whole sample FSU or not for formation of sampling frame of the smaller enterprises. For this, approximate present population (P) and approximate total number of non-agricultural enterprises (E) for the whole of sample FSU may be ascertained first from knowledgeable persons While ascertaining the approximate number of non-agricultural enterprises for formation of hg's/sb's, big enterprises will be excluded. Depending upon the values of 'P' and 'E', decision may be taken to divide the sample FSU into a fixed number of hamlet-groups (hg's the term applicable for rural samples) / sub-blocks (sb's the term applicable for urban samples) as per the rules given below:

Value of P no. of hg's/sb's to be value of E no. of hg's/sb's to be formed in the FSU as per formed in the FSU as population criterion per enterprise criterion (2) (4) (1) (3) 0 - 12000 - 1201@ 1@ 4 4 1201 - 1600 121 - 160 5 5 1601 - 2000 161 - 200 6 2001-2400 201 - 240 6 7 7 2401 - 2800 241 - 280 (and so on) (and so on)

Table 4: Determination of number of hg's/sb's

@ no. of hg's/sb's = '1' means the whole FSU is to be considered for listing

[For rural areas of Himachal Pradesh, Sikkim and Poonch, Rajouri, Udhampur and Doda districts of Jammu & Kashmir, number of hg's to be formed in the village as per

population criterion will be : 1 for  $P \le 600$ , 4 for  $601 \le P \le 800$ , 5 for  $801 \le P \le 1000$ , 6 for  $1001 \le P \le 1200$  and so on (procedure remains unchanged as per enterprise criterion)]

For selected wards of the aforesaid 66 towns of Karnataka constituent UFS blocks will be treated as sub-blocks and as such no sub-block formation will be resorted to in the selected UFS blocks. However only two UFS blocks will be selected from these selected wards: one satisfying some criterion with probability 1 and the remaining by simple random sampling. In case there are only two or less UFS blocks, all will be selected.

- 1.5.3 The number (D) of hamlet-groups (hg's)/ sub-blocks (sb's) to be **actually** formed in the sample FSU will be the **higher** of the two values as per population and enterprise criteria. If value of P is less than or equal to 1200 (600 for certain hilly areas specified above) *and/or* value of E is less than or equal to 120 for an FSU, hg/sb formation should not be resorted to and the whole of sample FSU has to be considered for listing. It is to be noted that D will be the number of UFS blocks constituting the selected wards of the aforesaid 66 towns of Karnataka.
- 1.5.4 **How to form hamlet-groups/sub-blocks?**: In case hg's/sb's are to be formed in the sample FSU, the same may be always done by more or less **equalizing** population (refer to chapter two for details). Please note that while doing so, it is to be ensured that the hg's/sb's formed are clearly identifiable in terms of physical landmarks. As stated in para 1.4.2 there will be no sub-block formation in the selected UFS blocks of the sample wards of the aforesaid 66 towns of Karnataka and these sample wards will be treated like FSU with sub-block formation, where sub-blocks are the UFS blocks in reality.
- 1.5.5 How to form segments 1/2 ? : After formation of hg's/sb's in large FSUs of sub-strata 1-9, the hg/sb having maximum number of sub-stratum specific establishments/OAEs (e.g. storage & warehousing establishments/OAEs for sub-stratum1, hotel establishments/OAEs for sub-stratum 2 and so on – for details about stratum/sub-stratum please see Appendix-IV) will be selected with probability 1 and designated as segment 1. In case there is no establishments/OAEs specific to the respective sub-stratum then segment 1 will be decided on the basis of number of establishments/ OAEs specific to other sub-stratum (details may be seen in chapter 2.) After formation of hg's/sb's in large FSUs of sub-strata 10 and 11, segment 1 will be decided on the basis of total number of enterprises. If there is no enterprise at all in the large FSU of any sub-stratum, the hg/sb with maximum percentage share of population will be taken as segment 1. In case, there is more than one hg/sb satisfying the condition of labeling as segment 1, some objective criterion (details may be seen in chapter 2) is to be considered for selection of hg/sb to be labeled as segment 1.Two other hg's/sb's will be selected from the remaining (D-1) hg's/sb's by circular systematic sampling with equal probability. These two together will constitute segment 2 and combined listing and selection of enterprises/ households will be done.

For 66 towns of Karnataka constituent UFS blocks of the selected wards will be listed first and then two UFS blocks will be selected: one having maximum number of enterprises of the category specific to the sub-stratum will be selected with probability 1 and labeled as segment 1 and another will be selected with Simple Random Sampling out of the remaining and labeled as segment 2. In case, number of UFS blocks available in the selected block is two then both will be selected and the one having maximum number of enterprises of the category specific to the sub-stratum will be selected with probability 1 and labeled as segment 1 and the other will

be labelled as segment 2. If there is only one UFS block in the selected ward this block will be selected and labeled as segment 1.

Listing and selection of enterprises/households will be done separately for segment 1 and segment 2.

FSUs not undergoing hg/sb formation will be identified as segment 1 for the purpose of processing.

It may be noted that formation of segment 9 is altogether different from that of segment 1 and segment 2.

- 1.5.6 **Listing of households/enterprises vis-à-vis their frame**: Having determined the segments i.e. area(s) to be considered for listing, the next step is to list all the households and NAEs [including those found to be temporarily locked after ascertaining temporariness of locking of households /NAEs from local enquiry]. Although all NAEs are to be listed, only the unorganized service sector establishments/OAEs (excluding trade and finance) under 5-digited code of Tabulation categories viz H,I,K,M,N&O of NIC '98 and operated for at least 30 days (15 days for seasonal enterprises) during the reference year (i.e. last 365 days preceding the date of survey) will **qualify** for the survey. Such establishments/OAEs will hereafter be referred to as '**eligible establishments/OAEs**'. Listing of households as well as eligible establishments/OAEs for the purpose of sample selection will be independent for segments 1 & 2 (*Hereinafter enterprises will mean eligible establishments/OAEs only*.)
- 1.5.7 **Sampling of households** (**for schedule 1.0**): A sample of 4 households will be selected from the households listed in the sample FSUs for canvassing schedule 1.0: Household consumer expenditure. In sample FSUs with hg/sb formation, two households will be selected from each of the two segments for this purpose. In the case of selected wards of 66 towns of Karnataka, treatment will be the same as that of sample FSU with hg/sb formation. If, however, there is a shortfall in the required number of households in a particular segment, the quota for the other segment shall be increased so that a total of 4 households is selected in all.

If the number of households (H) in the frame is less than 4 then all the households will be selected. If  $H \ge 4$  the households will be first arranged by their means of livelihood and then the required number of sample households will be selected **circular systematically** with a random start for each segment of the sample FSUs separately.

- 1.5.8. **Stratification of Second Stage Units**: In each segment of the sample FSU, attempt will be made to divide enterprises into nine-second stage strata (SSS) as under:
  - SSS 1: Storage and Warehousing
  - SSS 2: Hotel
  - SSS 3: Post and Telecommunications
  - SSS 4: Mechanized Road Transport
  - SSS 5: Real Estate, Renting & Business Activities (i.e. Tabulation category K of NIC '98)
  - SSS 6: Health & Social Work (i.e. Tabulation category N of NIC '98)
  - SSS 7: Restaurant
  - SSS 8: Education (i.e. Tabulation category M of NIC '98)
  - SSS 9: Other Community, Social and Personal Service Activities (i.e. Tabulation category O of NIC '98) and other transport

In each SSS the enterprises will again be divided into two types: one 'OAEs' and the other 'establishments', wherever possible. As there are two segments, two enterprise types and nine SSS, there will be a maximum of 36 combinations in all.

1.5.9. **Number of enterprises to be selected**: Considering that there will be 36 combinations (segment x SSS x enterprise type), 36 enterprises (1 enterprise per combination) have to be selected if enterprises are available in all the combinations. As per NSS 55<sup>th</sup> round the average number of enterprises listed in a sample FSU is found to be 11 for activities under coverage of the present round. Thus it is very likely that only a few of these combinations will be available in most of the sample FSUs. The procedure for ascertaining the number of enterprises to be selected as well as compensation of enterprises if any is outlined below:

In a sample FSU, a maximum of 18 OAEs and 18 Establishments (36 enterprises) are to be surveyed. The various possibilities and related procedure of selection is described below:

|         |   | FSUs without hg's/sb's formation   | FSUs with hg's/sb's formation  |
|---------|---|--|--|
| Case 1: | The total number of establishments or the total number of OAEs is ≤18.        | Select all for canvassing sch. 2.345.  | Select all for canvassing sch. 2.345.  |
| Case 2: | Either the total number of establishments or the total number of OAEs is > 18 | The objective is to select at most 18 OAEs and 18 establishments The following steps are to be followed separately for OAEs and establishments.  | The objective is to select at most 18 OAEs and 18 establishments The following steps are to be followed separately for OAEs and establishments.  |
|         |   | Step 0: If number of establishments (OAEs) is $\leq$ 18, select all of them.   | Step 0: If number of establishments (OAEs) is $\leq$ 18, select all of them.   |
|         |   | Step-1: Start from SSS 1 and allot 2 establishments (OAEs) at a time to an activity (wherever possible). Go up to SSS 9 in this manner. If desired number of enterprises are not achieved, go to Step 2. | Step-1: Start from SSS 1 and allot 1 establishment (OAE) at a time first in segment 1 and then in segment 2 (wherever possible). Go up to SSS 9 in this manner. If desired number of enterprises are not achieved, go to Step 2. |
|         |   | Step-2: Start from SSS 1 and allot 1 establishment (OAE) at a time to an activity (wherever possible). Go up to SSS 9 in this manner. If desired number of enterprises are not achieved, go to Step 3.   | Step-2: Start from SSS 1 and allot 1 establishment (OAE) at a time first in segment 1 and then in segment 2 (wherever possible). Go up to SSS 9 in this manner. If desired number of enterprises are not achieved, go to Step 3. |
|         |   | <b>Step-3</b> : Repeat step 2 till the desired number of enterprises are selected.   | <b>Step-3</b> : Repeat step 2 till the desired number of enterprises are selected.   |

Note: After completion of the various steps mentioned above in any FSU, see whether in any segment X activity X enterprise type there are more than 8 enterprises. If so, reduce the number of enterprises to be selected from that segment X activity X enterprise type to 8 (step 4).

1.5.10 **Selection of enterprises**: Enterprises will be selected independently from each combination (segment x SSS x enterprise type) with **SRSWOR** (sch.2.345). Some examples of selection of enterprises are given below:

## Examples of selection of enterprises

1. FSUs without hamlet group formation

a)

| م مانینات |                | COAEs      |                       |    |                           |  |
|-----------|----------------|------------|-----------------------|----|---------------------------|--|
| activity  | number of esta | ionsnments | number of OAEs        |    | reamrks                   |  |
|           | in the frame   | selected   | In the frame selected |    |                           |  |
| 1         | 10             | 10         | 10                    | 10 | Since the total number    |  |
| 2         | 0              | 0          | 0                     | 0  | of enterprises in the     |  |
| 3         | 0              | 0          | 0                     | 0  | FSU is equal to 36, all   |  |
| 4         | 0              | 0          | 0                     | 0  | are selected for detailed |  |
| 5         | 0              | 0          | 6                     | 6  | enquiry.                  |  |
| 6         | 0              | 0          | 0                     | 0  |                           |  |
| 7         | 0              | 0          | 0                     | 0  |                           |  |
| 8         | 0              | 0          | 0                     | 0  |                           |  |
| 9         | 10             | 10         | 0                     | 0  |                           |  |
| all       | 20             | 20         | 16                    | 16 |                           |  |

b)

| activity | number in the  | frame | number selected |        |      |      |      |       | reamrks  |
|----------|----------------|-------|-----------------|--------|------|------|------|-------|--|
|          | establishments | OAEs  | establis        | hments | OAEs |      |      |       |  |
|          |                |       | step 1          | step 4 | step | step | step | total | Since the total number of                                |
|          |                |       |                 |        | 1    | 2    | 3    |       | enterprises in the FSU is                                |
| 1        | 10             | 0     | 10              | 8      | 0    |      |      |       | more than 36, selection is                               |
| 2        | 0              | 4     | 0               |        | 2    | 1    |      | 3     | required. Since number of                                |
| 3        | 6              | 3     | 6               | 6      | 2    | 1    |      | 3     | establishments is less than 18, all are selected in step |
| 4        | 0              | 6     | 0               |        | 2    | 1    |      | 3     |  |
| 5        | 0              | 2     | 0               |        | 2    | -    |      | 2     | 1. After that, from the                                  |
| 6        | 0              | 5     | 0               |        | 2    | 1    |      | 3     | OAEs, 18 are selected in                                 |
| 7        | 0              | 2     | 0               |        | 2    | -    |      | 2     | steps 1 to 3. Now, total                                 |
| 8        | 0              | 2     | 0               |        | 2    | -    |      | 2     | number of establishments                                 |
| 9        | 0              | 0     | 0               |        | 0    | _    |      | 0     | is restricted to 8 for                                   |
| all      | 16             | 24    | 16              | 14     | 14   | 4    |      | 18    | activity 1.  |

#### 2. FSUs with hamlet group formation

a)

| activity | number of establishments |                |        |           | number of OAEs |          |        |          | reamrks                   |
|----------|--------------------------|----------------|--------|-----------|----------------|----------|--------|----------|---------------------------|
|          | segr                     | segment 1 segm |        | segment 2 |                |          |        |          |                           |
|          | in the                   | selected       | in the | selected  | in the         | selected | in the | selected |                           |
|          | frame                    |                | frame  |           | frame          |          | frame  |          |                           |
| 1        | 0                        | 0              | 0      | 0         | 0              | 0        | 6      | 6        | Since the total number    |
| 2        | 1                        | 1              | 0      | 0         | 0              | 0        | 0      | 0        | of enterprises in the     |
| 3        | 2                        | 2              | 10     | 10        | 0              | 0        | 0      | 0        | FSU is equal to 36, all   |
| 4        | 0                        | 0              | 0      | 0         | 0              | 0        | 0      | 0        | are selected for detailed |

| 5   | 0 | 0 | 2  | 2  | 5  | 5  | 0 | 0 | enquiry. |
|-----|---|---|----|----|----|----|---|---|----------|
| 6   | 0 | 0 | 0  | 0  | 0  | 0  | 0 | 0 |          |
| 7   | 0 | 0 | 0  | 0  | 7  | 7  | 0 | 0 |          |
| 8   | 2 | 2 | 0  | 0  | 0  | 0  | 0 | 0 |          |
| 9   | 1 | 1 | 0  | 0  | 0  | 0  | 0 | 0 |          |
| all | 6 | 6 | 12 | 12 | 12 | 12 | 6 | 6 |          |

b)

| activity | nı        | umber of es | stablishm | ents     |           | number   | of OAEs   |          | reamrks   |  |  |
|----------|-----------|-------------|-----------|----------|-----------|----------|-----------|----------|---|--|--|
|          | segment 1 |             | segment 2 |          | segment 1 |          | segment 2 |          | Since the total number of   |  |  |
|          | in the    | selected    | in the    | selected | in the    | selected | in the    | selected | establishments in the FSU is  |  |  |
|          | frame     |             | frame     |          | frame     |          | frame     |          | equal to 17, all are selected for                                     |  |  |
| 1        | 0         | 0           | 0         | 0        | 14        | 5        | 5         | 4        | detailed enquiry. From the 29   |  |  |
| 2        | 1         | 1           | 0         | 0        | 0         | 0        | 2         | 2        | OAEs we have to select 18. To   |  |  |
| 3        | 2         | 2           | 10        | 8        | 0         | 0        | 0         | 0        | achieve this, we are selecting one at a time starting from activity 1 |  |  |
| 4        | 0         | 0           | 0         | 0        | 0         | 0        | 0         | 0        | first from segment 1 and then   |  |  |
| 5        | 0         | 0           | 1         | 1        | 5         | 4        | 0         | 0        | from segment 2 till we reach a  |  |  |
| 6        | 0         | 0           | 0         | 0        | 0         | 0        | 0         | 0        | total of 18 selected OAEs. After                                      |  |  |
| 7        | 0         | 0           | 0         | 0        | 3         | 3        | 0         | 0        | this selection process is over, we are observing that a total of 10   |  |  |
| 8        | 2         | 2           | 0         | 0        | 0         | 0        | 0         | 0        | establishments have been selected                                     |  |  |
| 9        | 1         | 1           | 0         | 0        | 0         | 0        | 0         | 0        | from activity 3, segment 1.   |  |  |
| all      | 6         | 6           | 11        | 9        | 22        | 12       | 7         | 6        | Hence, this number has been brought down to 8.                        |  |  |

| explanation of selection of OAEs |        |           |      |      |         |         |       |       |          |           |      |         |         |       |  |  |  |
|----------------------------------|--------|-----------|------|------|---------|---------|-------|-------|----------|-----------|------|---------|---------|-------|--|--|--|
| number of OAEs                   |        |           |      |      |         |         |       |       |          |           |      |         |         |       |  |  |  |
| activity                         |        | segment 1 |      |      |         |         |       |       |          | segment 2 |      |         |         |       |  |  |  |
|                                  | in the | selected  |      |      |         |         |       |       | selected |           |      |         |         |       |  |  |  |
|                                  | frame  | step      | step | step | step 3  | step 3  | total | frame | step     | step      | step | step 3  | step 3  | total |  |  |  |
|                                  |        | 1         | 2    | 3    | (contd) | (contd) |       |       | 1        | 2         | 3    | (contd) | (contd) |       |  |  |  |
| 1                                | 14     | 1         | 1    | 1    | 1       | 1       | 5     | 5     | 1        | 1         | 1    | 1       | -       | 4     |  |  |  |
| 2                                | 0      | 0         | 0    | 0    | 0       |         | 0     | 2     | 1        | 1         | 0    |         |         | 2     |  |  |  |
| 3                                | 0      | 0         | 0    | 0    | 0       |         | 0     | 0     | 0        | 0         | 0    |         |         | 0     |  |  |  |
| 4                                | 0      | 0         | 0    | 0    | 0       |         | 0     | 0     | 0        | 0         | 0    |         |         | 0     |  |  |  |
| 5                                | 5      | 1         | 1    | 1    | 1       |         | 4     | 0     | 0        | 0         | 0    |         |         | 0     |  |  |  |
| 6                                | 0      | 0         | 0    | 0    | 0       |         | 0     | 0     | 0        | 0         | 0    |         |         | 0     |  |  |  |
| 7                                | 3      | 1         | 1    | 1    | 0       |         | 3     | 0     | 0        | 0         | 0    |         |         | 0     |  |  |  |
| 8                                | 0      | 0         | 0    | 0    | 0       |         | 0     | 0     | 0        | 0         | 0    |         |         | 0     |  |  |  |
| 9                                | 0      | 0         | 0    | 0    | 0       |         | 0     | 0     | 0        | 0         | 0    |         |         | 0     |  |  |  |
| total                            | 22     | 3         | 3    | 3    | 2       | 1       | 12    | 7     | 2        | 2         | 1    | 1       |         | 6     |  |  |  |