

CHAPTER-I

INTRODUCTION

1.1 GENESIS

A reliable and robust database is the foundation of organized and proper planning. The Central Statistics Office (CSO), since its inception, has been instrumental in creation of database for various sectors of the economy and its periodic updation so as to meet the requirements of the planners for sound and systematic planning both at the macro as well as micro levels. While data requirements may be enormous in various sectors, the judicious collection and maintenance of data for various sectors within the available resource is a challenge. Our economy can broadly be classified into two sectors, namely, Agricultural and Non-Agricultural sectors. Fairly reasonable database exists for Agricultural Sector whereas such data base for Non-Agricultural sector is much desired. Keeping in view the importance of the non-agricultural sector in the economy and non-availability of basic frame for adoption in various sampling techniques for collection of data and estimation of various parameters, conducting Economic Census was felt necessary. With this background, the CSO started Economic Census for preparing frame of establishments, particularly the 'area frame' which could be used for various surveys for collection of detailed data, mainly on non-agricultural sector of the economy.

1.2 EARLIER ATTEMPTS

Broadly the entire planning period may be divided into two: prior to conduct of the First Economic Census i.e. prior to 1977 and thereafter i.e. after the economic census was carried out periodically. Efforts to fill up the data gaps for the non-agricultural sector were made right from the beginning of the First Five Year Plan. The first National Sample Survey (NSS) round (1950-51) covered non-agricultural household establishments as one of its subject themes. Such establishments were covered regularly up to the tenth NSS round (1955-56). Subsequently, selected activities were taken up for survey intermittently in different rounds (14th, 23rd & 29th rounds). Establishment schedules were canvassed in 1971 population census. The census of unorganized industrial units was carried out during 1971-73. Census of the units falling within the purview of Development Commissioner, Small Scale Industries, was carried out during 1973-74 and a survey on distributive trade was conducted by some of the States during the Fourth Five-Year Plan period (1969-74). All such efforts made prior to 1977 to collect data on non-agricultural establishments have been partial and sporadic. Area sampling with probability proportional to population were mostly used even to capture establishments. For a survey of establishments such sample design is not only inefficient but also results in under coverage of desired number of establishments and low reliability of the estimates derived. The prolonged efforts of statisticians and planners in finding a way out for collection of information on amorphous areas of activity resulted in a decisive breakthrough with the advent of conduct of Economic Census.

1.3 ECONOMIC CENSUSES CONDUCTED IN THE PAST

The Economic Enquiry Committee set up in 1925 under the Chairmanship of Dr. Visweswarayya and more importantly the Bowley-Robertson Committee set up later in 1934, were mainly responsible for the government's decision to set up an Inter-Departmental Committee with the Economic Adviser to the Government of India as the chairman. The Inter-Departmental Committee recommended the formation of a Central Statistical Office for coordination, institution of a statistical cadre, establishment of State Bureaus at State Head Quarters and maintenance of important statistics for the entire country. Bowley and Robertson Committee also commissioned a study to explore the possibility of conducting economic censuses in India. The first coordinated approach was made by the erstwhile Central Statistical Organisation (CSO), Government of India, by launching a plan scheme 'Economic Census and Surveys' in 1976. The scheme envisaged organising countrywide census of all economic activities (excluding those engaged in crop production and plantation) followed by detailed sample surveys of unorganised segments of different sectors of non-agricultural economy in a phased manner during the intervening period of two successive economic censuses.

The basic purpose of conducting the economic census (EC) was to prepare a frame for follow up surveys intended to collect more detailed sector specific information between two economic censuses. In view of the rapid changes that occur in the unorganised sectors of non-agricultural economy due to high mobility or morbidity of smaller units and also on account of births of new units, the scheme envisaged conducting the economic census periodically in order to update the frame from time to time.

1.3.1 First Economic Census (EC -1977) and Follow Up Surveys

The First Economic Census was conducted throughout the country, except Lakshadweep, during 1977 in collaboration with the Directorate of Economics & Statistics (DES) in the States/Union Territories (UT). The coverage was restricted to only non-agricultural establishments employing at least one hired worker on a fairly regular basis. Data on items such as description of activity, number of persons usually working, type of ownership, etc. were collected.

Reports based on the data of EC-1977 at State/UT level and at all India level were published. Tables giving the activity group-wise distribution of establishments with selected characteristics and with rural and urban break up were generated. State-wise details for major activities and size-class of employment in different establishments, inter-alia, were also presented in tables.

Based on the frame provided by the First Economic Census, detailed sample surveys were carried out during 1978-79 and 1979-80 covering the establishments engaged in manufacturing, trade, hotels & restaurants, transport, storage & warehousing and services. While the smaller establishments (employing less than six workers) and own account establishments were covered by National Sample Survey Organisation (NSSO) as a part of its 33rd and 34th rounds, the larger establishments were

covered through separate surveys by the CSO. Detailed information on employment, emoluments, capital structure, quantity & value of input, output, etc. were collected and reports giving all important characteristics on each of the concerned subjects were published.

1.3.2 Second Economic Census (EC-1980) and Follow Up Surveys

The Second Economic Census was conducted in 1980 along with the house-listing operations of Population Census 1981. This was done with a view to economizing resources, manpower, time and money. The scope and coverage were enlarged. This time all establishments engaged in economic activities - both agricultural and non-agricultural whether employing any hired worker or not were covered, except those engaged in crop production and plantation. All States/UTs were covered with the sole exception of Assam, where Population Census 1981 was not conducted.

The information on location of establishment, description of economic activity carried out, nature of operation, type of ownership, social group of owner, use of power/fuel, total number of workers usually engaged with its hired component and break-up of male and female workers were collected. The items on which information were collected in Second Economic Census were more or less the same as those collected in the First Economic Census. However, based on experience gained in the First Economic Census certain items viz. years of operation, value of annual output/turnover/receipt, mixed activity or not, registered/ licensed/recognised and act or authority, if registered were dropped.

The field work was done by the field staff consisting of enumerators and supervisors employed in the Directorate of Census Operations of each State/UT. The State Directorates of Economics & Statistics (DES) were also associated in the supervision of fieldwork. Data processing and preparation of State level reports of economic census and their publication were carried out by the DES.

Based on the frame thrown up by EC-1980, three follow-up surveys were carried out, one in 1983-84 on hotels & restaurants, transport, storage & warehousing and services, second in 1984-85 on unorganised manufacturing and third in 1985- 86 on wholesale and retail trade.

The economic census scheduled for 1986 could not be carried out due to resource constraints. However, the EC- 1980 frame was updated during 1987-88 in 64 cities (12 cities having more than 10 lakh population and 52 other class-I cities) which had problems of identification of enumeration blocks and changes due to rapid urbanization. On the basis of the updated frame, four follow-up surveys were conducted during 1988-89, 1989-90, 1990-91 and 1991-92 covering the subjects of hotels & restaurants and transport, unorganized manufacturing, wholesale & retail trade and medical, educational, cultural & other services respectively.

1.3.3 Third Economic Census (EC-1990) and Follow Up Surveys

The Third Economic Census was synchronized with the house listing operations of the

Population Census 1991 on the same pattern as EC- 1980. The coverage was similar to that of EC-1980. All States/UTs except Jammu & Kashmir, where Population Census 1991 was not undertaken, were covered.

Based on the frame thrown up by EC-1990 four follow up surveys were carried out:

- (i) Establishment Survey covering sectors of mining & quarrying, storage & warehousing in 1992-93;
- (ii) Establishment Survey covering sectors of hotels & restaurants and transport in 1993-94;
- (iii) NSS 51st round covering directory, non-directory and own account establishments in unregistered manufacturing sector in 1994-95; and
- (iv) Directory Trade Establishments Survey in 1996-97. NSS 53rd round covered the residual part of the unorganised trade sector in 1997.

1.3.4 Fourth Economic Census (EC-1998) and Follow up Surveys

With a view to meeting the demand of various user departments for the data on unorganized sectors of the economy and considering the nature of large number of small units which are subjected to high rates of mobility and mortality, it was felt that the economic census must be brought back to quinquennial nature so that an up-to-date frame can be made available once in five years for conducting the follow up surveys. Fourth economic census was planned during 1996. But due to various reasons, the scheme could be launched only in 1998.

The overall responsibility for organisation and conduct of the economic census rested with the CSO. The DESs of States/UTs were made responsible for conducting the field work and preparing the report for their respective State/UTs.

Based on the frame thrown up by Economic Census 1998, the following follow-up surveys were carried out:-

- (i) Special establishment survey in unorganized sector 1998-99.
- (ii) Survey on Unorganized Manufacturing sector: 2000-01 (NSS 56th round)
- (iii) Survey on Unorganized establishments in services sector (excluding trade and finance): 2001-02 (NSS 57th round)
- (v) Survey on Unorganized Manufacturing sector: 2005-06 (NSS 62nd round)
- (vi) Survey on Unorganized establishments in services sector excluding trade: 2006-07 (NSS 63rd round)

1.3.5 Fifth Economic Census (EC-2005) and Follow up Surveys

The Fifth Economic Census was conducted in 2005. The overall responsibility for organisation and conduct of Economic Census rested with the CSO. The DESs of respective States and UTs were made responsible for conducting the field work and preparing the report concerning their States/UTs.

Based on the frame thrown up by Fifth Economic Census, the following follow-up surveys were carried out:-

- (i) NSS 67th round during 2010-11 (Survey on Unincorporated Non-Agricultural Enterprises excluding Construction);
- (ii) NSS 73rd round during 2015-16 with the coverage similar to that of NSS 67th round.

1.4 SIXTH ECONOMIC CENSUS

Economic Census (EC) is the complete count of all establishments (i.e. units engaged in production and/or distribution of goods and services not for the purpose of sole consumption) located within the geographical boundaries of the country. The Sixth EC was conducted during January, 2013 to April, 2014 (see **Annexure V for details**) in all the States and Union Territories of the country in collaboration with State/UT Governments. Overall guidance was provided by Economic Census Unit of the Economic Statistics Division, Central Statistics Office (CSO), Ministry of Statistics and Programme Implementation (MOSPI), Government of India.

1.4.1 Brief Objective of Sixth EC

The Sixth EC proposes to provide up to date information on number of establishments and number of persons employed therein, activity wise, of all the sectors (excluding crop production, plantation, public administration, defence and compulsory social security) of the country including their distribution at all-India, State, district, and at village/ward levels for comprehensive analysis of the structure of the economy (micro, macro and regional levels).

1.4.2 Scope and Coverage

The Sixth EC was conducted in all the States/UTs. All economic activities (agricultural and non-agricultural), except those involved in crop production and plantation, public administration, defense and compulsory social security, related to production and/or distribution of goods and/or services other than for the sole purpose of own consumption were covered. However, as were done in earlier censuses, the following activities were kept out of the purview of the Sixth EC:

- (i) Establishments of shelter-less and nomadic population, which keep on moving from place to place and camp either without shelter or with makeshift shelter.
- (ii) Establishments engaged in some illegal activities like smuggling, gambling,

beggary, prostitution, etc.

- (iii) Domestic servants, whether they work in one household or in a number of households, drivers, etc. who undertake jobs for others on wages.
- (iv) All wage-paid employees of casual nature.
- (v) Household members engaged in household chores.
- (vi) Persons doing different types of jobs depending on the availability of work e.g. loading, unloading, helping a mason or a carpenter, doing earthwork for a contractor.
- (vii) Household members working for other households and earning some money which is insignificant.
- (viii) Households in which none of the members is engaged in any gainful activity i.e. Households depending on remittance, rent, interest, pension etc.

1.4.3 Committees and Working Groups at Central Level

A Standing Committee was constituted under the Chairmanship of Chief Statistician of India & Secretary, MOSPI, to look into various aspects of conduct of Sixth Economic Census. The members of the Committee for the Sixth Economic Census inter-alia include Registrar General and Census Commissioner of India (RGI & CC), Adviser (Financial Resources) and Adviser (Perspective Planning) both from the Planning Commission (now NITI Aayog), Chief Economic Adviser, Ministry of Finance and other officers of the level of Additional Secretary/ Joint Secretary of the Central Ministries/Departments concerned like Micro, Small and Medium Enterprises, Commerce and Industry, Women & Child Development, Panchayati Raj, Rural Development and Labour & Employment as well as DG (CSO), DG & CEO (NSSO), Additional DGs heading National Accounts Division, Social Statistics Division & Training Division of CSO and Field Operations Division, Survey Design and Research Division, Data Processing Division of NSSO as well as Deputy Director Generals of Computer Centre, CSO and CSO Industrial Statistics Wing. Six State Governments namely, Jammu & Kashmir, Assam, Maharashtra, Tamil Nadu, Uttar Pradesh and West Bengal were represented by their respective Director General/Director, Directorate of Economics & Statistics. The Standing Committee also included other experts from esteemed educational institutions in the field of statistics and economics and Ex-DGs of CSO.

The Committee was assisted by a Working Group headed by Prof. S. P. Mukherjee, Retired Professor and Head, Department of Statistics, Calcutta University for development of concepts & definitions, strategy for conduct of field work, tabulation of data and dissemination of results. All the secretarial assistance to the Standing Committees and Working Group was provided by the Economic Census Unit of Economic Statistics Division, CSO.

1.4.4 Co-ordination Committee at State/District Level

State Level Co-ordination Committees (SLCC) under the chairmanship of Chief Secretaries/ Development Commissioners and District Level Coordination Committees (DLCC) under the chairmanship of District Collectors were constituted to review the progress of work and take appropriate measures for smooth conduct of the Census within the prescribed time frame.

1.4.5 New Initiatives

During the Sixth EC, several seminal steps and modifications were undertaken to increase the coverage of information besides making the process simpler and data more reliable. These include:

i) Coverage

- The practice followed since the Second EC to cover all agricultural activities excluding crop production and plantation was continued in the Sixth EC as the information on crop production plantation is being covered under quinquennial Agricultural Census since 1970-71.
- In case of non-agricultural activities, establishments engaged in public administration, defence and compulsory social security activities were excluded during Sixth EC, as such information is already available with the Government and also due to the difficulties faced in collecting information from such establishments during the Fifth EC.

ii) Changes made in the Schedules

In Sixth EC, two schedules were canvassed, viz., i) House and Establishment Listing Schedule (6A) (**Annexure-I**) and ii) Directory of Establishment Schedule (6C) (**Annexure-III**) in place of three schedules canvassed during Fifth EC. House and Establishment Listing Schedule of Sixth EC were formed by merging '**House List**' and '**Enterprise Schedule**' of the Fifth EC. Further, the '**Address Slip**' Schedule of Fifth EC was modified and renamed as **Directory of Establishment Schedule** in Sixth EC for developing Business Register.

The third schedule 'Establishment Abstract' (Schedule 6B) (**Annexure -II**) was a derived schedule of summary information based on the information contained in House and Establishment Listing Schedule, which was required to be prepared by each enumerator. This summary information was used to generate provisional results, which were released on 30/7/2014.

iii) Inclusion of New Items/Changes made in Main Schedule i.e., House and Establishment Listing Schedule

- a. Number of members in the household (HH);
- b. Number of only wage earners/salaried employees in the HH;
- c. Number of establishments outside HH with fixed structure owned by HH members;
- d. Number of establishments outside HH without fixed structure owned by HH members;
- e. Number of establishments inside HH owned by HH members;
(Items under 'a' to 'e' above were included at the household level to guard against possible under-listing of establishments located within the household or those without fixed structure)
- f. Broad Activity Code (all activities divided into two-digit 24 broad activity codes);
- g. Three-digit National Industrial Classification(NIC)-2008 Codes recorded in place of four-digit NIC-2004 codes earlier, to minimize wrong reporting of NIC codes;
- h. Collection of data for handicraft/handloom establishments for the first time;
- i. Information on ownership of proprietary establishments collected for under Sex Code "Others" i.e. transgender for the first time;
- j. Religion of the owner of proprietary establishments;
- k. Nature of operation: 'Non perennial' was divided into casual and seasonal; and
- l. Use of Bar Codes along with Form Number for the first time to facilitate proper accounting of canvassed schedules.

iv) Items Excluded from the Main Schedule i.e., House and Establishment Listing Schedule:

- a. Information on subsidiary activity (only information on major activity collected);
- b. Power used in entrepreneurial activity (confined to Directory of Establishment schedule);
- c. Registration code (confined to Directory of Establishment schedule); and
- d. Number of children (male/female) usually working.

v) New Items Added in Directory of Establishment Schedule:

- a. Does a computer and/or internet facility exist in the establishment?

- b. Whether using power in production of goods and services?
- c. Whether an exporting unit?
- d. Address of main office along with that of branch office with PAN and TAN numbers; and
- e. Registration information under nine (09) codes.

1.4.6 Other Important Changes Made/ Decisions

- i) Enumeration Blocks (EBs) of Population Census 2011 were used as primary geographical units for both urban and rural areas for the purpose of listing of establishments. In most of the earlier ECs, UFS (Urban Frame Survey) Blocks of NSSO were taken as the primary geographical units for urban areas. Use of EBs would facilitate the linking of Census 2011 database with that of Sixth EC at the lower geographical levels like EBs and wards. It is likely to enhance the utility of Sixth EC data.
- ii) Reference period for counting number of persons employed: In Fifth EC, last year / season was taken. For Sixth EC, number of persons employed on the last working day has been considered, to minimize the error due to recall lapse.
- iii) Minimum qualifications for enumerators and supervisors were prescribed for the first time for better understanding of the terms used in schedules and ensuring proper collection of data. The minimum qualifications were as under:
 - Qualification of Enumerators: Higher Secondary
 - Qualification of Supervisors: Graduation
- iv) Schedules in 15 languages were designed through National Institute of Design (NID), Ahmedabad. Further, a visual identity for the Sixth EC was created by the National Institute of Design (NID), Ahmedabad, in the form of a LOGO consisting of four elements viz. factory, gears, writing hand and common people in green and blue colours. The factory symbolized large scale industry, the gears symbolized the work and functionality with reference to the economy and the Common People represented small scale industries while the writing hand represented recording of census data. The green colour represented ecology and the blue colour was a representative of industrial functioning.
- v) Nearly five crore schedules were got printed centrally by CSO and requisite number of schedules supplied to District Statistical Offices (DSO)/Head Quarters of DESs of all the States/UTs for maintaining uniformity in the schedules to facilitate proper data processing.

- vi) A Census Kit containing plastic folders for each of the three schedules and nine (09) items, i.e. board, pencils, ball pens, sharpener, eraser, markers, chalk box, clips and calculator, was provided to each enumerator and supervisor for safe keeping and facilitating proper collection of information.
- vii) The NIC coding in Column 13 of the House and Establishment Listing Schedule-6A has been done by trained staff of DESs at their respective DSOs, to improve the quality of coding.
- viii) Information contained in Directory of Establishment Schedule is entered by trained officials of DSO for ensuring correct and complete addresses. Software was developed and trainings for its use were provided to officials of DES of States/UTs by Computer Centre, MOSPI.
- ix) Abridged House List (AHL) and Layout Maps (LMs) of Census 2011 EBs were procured from office of RGI & CC and provided to the Enumerators to facilitate proper coverage.
- x) Wide publicity was made through print, audio and video media to generate awareness among masses about the importance of Sixth EC and soliciting their co-operation in data collection.
- xi) Data collected was inspected at all levels and the same was cross validated by using information available with alternative sources such as number of industrial and commercial electricity connections at State/District level and Registrations in District Industries Centers and results based on NSS Reports in order to increase credibility of the information collected in the Census.
- xii) M/s HCL Info system was assigned the work of scanning and data capturing. As per arrangements entire scanning was undertaken at HCL's Storage and Scanning Centre (SSC) created at Faridabad (Haryana), whereas, the data capturing was decentralized. It was undertaken at seven Data Processing Centers of Office of RGI& CC, which also provided technical support and guidance, located at Delhi, Lucknow, Bhopal, Mumbai, Chennai, Kolkata and Gandhinagar.
- xiii) Computer Centre, CSO, MOSPI undertook validation and tabulation of data of Sixth EC. A SAS based BI tool is being procured by Computer Centre, CSO, MOSPI. It will provide connectivity/access to unit level data available with Computer Centre which would facilitate generation of all State/UT Specific and All India tables of Sixth EC using drag and drop operations.

1.4.7 Inter- Ministerial Consultations/ Appraisal

Consultations were held with the stakeholders and other subject Ministries during finalization

of various aspects of Sixth EC. Several suggestions from them were incorporated in the design of the Schedules to suit their respective needs.

The Ministries/Departments/Organizations consulted were as under:

- i. Ministry of Labour and Employment;
- ii. O/o Registrar General of India & Census Commissioner, Ministry of Home Affairs;
- iii. DIPP, Ministry of Commerce & Industry;
- iv. Department of Economic Affairs, Ministry of Finance;
- v. Department of Expenditure, Ministry of Finance;
- vi. Ministry of Corporate Affairs;
- vii. Ministry of Rural Development;
- viii. Ministry of Panchayati Raj;
- ix. NITI Aayog (then Planning Commission);
- x. Ministry of Women and Child Development;
- xi. Ministry of Micro, Small and Medium Enterprises (MSME);
- xii. Development Commissioner (DC) of Handlooms/Handicrafts; and
- xiii. DESs of State/UT Governments

Representatives of most of the Ministries consulted were the members of Standing Committee of Sixth Economic Census, formed under the Chairmanship of Chief Statistician of India & Secretary (MOSPI), to provide overall direction and guidance for conduct of Sixth EC.

1.4.8 All-India Conference

An All-India Conference of State Secretaries in-charge of Planning and Statistics and Directors of Economics & Statistics to discuss various issues relating to implementation of the scheme was organized on 20.12.2011 at New Delhi.

1.4.9 Training

The Ministry conducted seven regional training programmes, each of two days' duration, covering theory and field training for core group of Trainers consisting of officers from CSO, NSSO and senior officers from Directorates of Economics & Statistics of State/UT Governments, at Guwahati, Shimla, Bhopal, Puducherry, Thiruvananthapuram, Tripura and Ranchi during August, 2012 – April, 2013. A representative from Craft Council of India also participated in all the training programmes and provided instructions/clarifications regarding handicraft/handloom items for proper identification and listing of handicraft/handloom activities in the Census. One officer from CSO/NSSO and two officers from State/UT Governments imparted training to the State and district officials, who in turn provided training to the field functionaries like Charge officers, enumerators and supervisors. A 40 minutes' documentary for imparting training to enumerators and supervisors was developed through Directorate of Audio and Visual Publicity (DAVP) in Hindi and thereafter dubbed in 13 regional languages and also in English, with a message of Hon'ble Minister (IC), MOSPI. The CDs of the Documentary were distributed at District level. This was found very useful in communicating uniform instructions to the field staff.

Besides, an **Instruction Manual** in Hindi/English was printed and provided to all the State/Central Government Officials to facilitate training. **Guide for Enumerators and Supervisors**, consisting of all details regarding filling up of the schedules, concepts and definitions, illustration of filled in schedule and some frequently asked questions, was provided to the 1.17 million field staff (**Annexure VI**). The Guide was translated from English and printed in the regional languages by the respective State/UT DESs for better understanding of the field staff.

1.4.10 Creation of Cell for Economic Census (EC)

With the approval of Ministry of Finance, Government of India, 235 posts were created for creation of EC cell at each State/UT Head Quarter. The detail of posts created by State/UT Governments is at (**Annexure VI**). Further 30 posts were also created for creation of Cell in CSO, MoS&PI. All the posts were created for a period of 30 months.

1.4.11 Publicity

In order to convey and spread information regarding the economic census and especially to ensure that all corporate units, establishments and self-employed persons in the primary (excluding crop production and plantation), secondary and tertiary sectors are fully aware of its importance, participate actively in it and cooperate well with the enumerators, the economic census agencies and departments, advertisements were made by the CSO and all the States/ UTs using the media like newspapers, radio and TV channels to provide impetus to the census operation and spread knowledge about it.

1.4.12 Audio-Visual Media

To have proper impact on the masses 60 second video and audio clippings were prepared. Thereafter audio clippings were dubbed in all regional languages. This apart, 4 video clippings were developed separately in 4 regions and later on dubbed in the regional languages spoken in those areas.

1.4.13 Print Media

Advertisement (appeal) with request for seeking public cooperation was issued in newspapers throughout the country through the Directorate of Audio and Visual Publicity (DAVP), Ministry of Information and Broadcasting. In addition to this, publicity measures were also undertaken by the State/UT Governments, so as to provide wide publicity of the census operation and spread knowledge about its utility and ensuring cooperation.

1.4.14 Field Operation

The fieldwork of Sixth EC started in November, 2012 on pilot basis in some blocks of Assam and Puducherry. Thereafter, it was conducted in the entire country during January, 2013 - April, 2014. The Population Census 2011 frame of 2.48 million EBs including about 43,000 uninhabited EBs was used for the geographical coverage during Sixth EC. 2.45 million EBs including about 18,765 uninhabited EBs was covered during the field work of Sixth EC. This included some smaller EBs of Population Census being merged to save cost while some bigger EBs were split to ensure proper coverage of industrial/market areas. 87,700 such merged/split EBs were covered. Further, some industrial pockets not covered during Population Census 2011 were covered under Sixth EC. Accordingly, 99,892 additional EBs, those not covered in the Population EBs frame were also covered during Sixth EC.

About 8.5 lakh enumerators and 3.2 lakh supervisors were deployed to collect information from the entire country. These enumerators and supervisors were provided comprehensive training. About 20,000 training programmes, each of two days (including field visit) were organised. For

listing purposes, all houses/ households/establishments were visited. Establishments with fixed structures were listed at the place of their operation. On the other hand, economic activities that are carried out without any fixed structures were covered/ listed at the place of the residence of the owner.

All types of establishments (perennial, seasonal and casual), existing on the date of census, although may not be in operation on the day due to certain reasons, were covered in the census. The data were collected from all the entrepreneurs and usual households. The work of the enumerators was supervised by high level officers. Further inspection of field work in all EBs by supervisors was also put in place and 200 officers of NSS were imparted training for conducting surprise inspection to ensure coverage & quality of enumeration work. For collection of information on number of workers employed, information as on last working day was collected during visit by the enumerator. For information on major source of finance, the outstanding loan against the agency on the day of visit was considered.

1.4.15 Data Validation

The quality of Census results hinges upon seriousness, dedication and honesty of enumerators and supervisors. To ensure the quality of work carried out by the enumerators, particularly regarding the complete coverage of all establishments, attempts were made to cross-validate the data of Sixth EC with those available from the following sources:-

- a) Estimated number of establishments/workers as per 67th round of NSS, 2011-12 (Survey on Unincorporated Non-agricultural Enterprises excluding Construction);
- b) Number of industrial and commercial connections given by the Electricity Department; and
- c) Number of units registered with District Industries Centre.

Further, to strengthen concurrent data validation, sample inspections by CSO, NSSO and State DES Officials were also put in place at the time of fieldwork.

1.4.16 Release of Provisional Results

The Provisional Results were based on information compiled using Schedule 6B i.e., 'Establishment Abstract' of Sixth Economic Census. Dr. Pronab Sen, the then Chairman, National Statistical Commission and Dr. T.C.A. Anant, Chief Statistician of India and Secretary, Ministry of Statistics and Programme Implementation, Government of India, jointly released the provisional results of Sixth Economic Census, consisting of information on State/UT wise number of establishments along with the total number of persons employed by type of structure of establishment and employment (hired/not-hired) with the rural and urban breakup in New Delhi at a function attended by officers from Central Ministries/Departments and State and UT Governments on 30/7/2014.

1.4.17 Release of Directory of Establishments

Directory of establishments with 10 or more workers covering all the States and UTs based on the data collected through Directory of Establishment Schedule 6C is planned to be released after the release of All India Report of Sixth EC based on data collected through main schedule i.e. House and Establishment Listing Schedule 6A.

1.4.18 Tabulation Plan

The Tabulation Plan for All India Report and State/UT level reports to be brought out by State/UT Governments was approved by the Standing Committee. The Computer Centre, MOSPI undertook the activity of generation of tables. Efforts are being made for using the relevant software for generating the required tables by drag and drop method. The access of the software would be made available at 50 locations. This apart, to enhance the utility of Sixth EC data, it is proposed to synchronize it with Population Census, 2011 data at the lowest geographical area and thereafter it would be displayed on the map.

1.4.19 Classification of Activities

Economic activities are assigned 3-digit codes as per National Industrial Classification (NIC) 2008. The State/UT Governments are given the responsibility to ensure proper reporting of NIC codes at district level by training their personnel.

1.4.20 Uses of Sixth EC Database

- (i) The area frame based on Sixth EC has been used for the 73rd round of National Sample Survey (NSS) and the list frame as per Sixth EC comprising establishments with 10 or more workers is proposed to be used for the next 74th round of NSS to be devoted on service sector;
- (ii) The data of Sixth EC is used in the development of National Business Register;
- (iii) The data is proposed to be used by Ministry of Labour & Employment for development of National Career Centres; and
- (iv) The Sixth EC data would also be useful for subsequent follow-up surveys by NSSO and survey /census of MSME and also for identifying the focus areas in the National Skill Development Programme.

1.4.21 Limitations of Sixth EC

- (i) It was planned to complete Sixth EC in each State/UT during a period of two months and the entire EC during a period of six months. But due to stretching of fieldwork of Socio Economic and Caste Census (SECC) from June, 2011 to December, 2012, the fieldwork of Sixth EC could not be started before January, 2013. Further, because of certain genuine administrative difficulties in some States/UTs, the fieldwork for the entire country could not be completed in the stipulated period of six months.
- (ii) Collection of information is not generally record-based but based on oral information. The factors like recall lapse and casual approach on part of informant may lead to some non- sampling errors.
- (iii) The fieldwork was assigned to persons like Aanganwaadi workers, Gram sevaks, Panchayat secretaries, Unemployed Youth, NGO Workers, etc. who were new to statistical data collection work.
- (iv) Information on proprietary establishments owned by 'Others' i.e. transgenders, being collected for the first time, was difficult to collect. In the past, such information was compiled under male category. Therefore, there is some possibility of its contamination with data, pertaining to males.
- (v) Although certain improvements were made in the schedule to guard against under-listing of establishments (particularly the home-based units or those operating without fixed structure), data may be subject to some error on account of such under-listing, which is difficult to eliminate totally in a massive census operation.