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# Enhancing Social and Gender Statistics Workshop

## *India Country Paper*

### **A. Organisation of Statistical Services**

India is a federal country constituting 28 States and 7 Union Territories. The division of administrative functions between the Government of India and the State Governments is on the basis of the subject classifications under the Union, State and Concurrent Lists as detailed in the Constitution of India. At the Centre, the responsibilities are further divided amongst the various Ministries and Departments, according to the Allocation of Business Rules, 1961 that are amended from time to time. The collection of statistics on any subject generally vests in the authority (Central Ministry or Department or State Government Department) that is responsible for that subject according to its status in the Union, State or Concurrent Lists. In accordance with its federal structure, India has created a statistical system, which is both decentralised and centralised. Large-scale statistical operations such as Population Census, Economic Census and nation-wide sample surveys are centralised. In addition, the compilation of macro-economic aggregates like national accounts, price indices and industrial production are largely central activities. However, the State governments and statistical organisations of the State are also engaged in collecting and generating data on a number of variables. Even where the responsibility for policy formulation lies with the Central Ministries, the actual collection of data may be done by the State governments through their agencies.

2. The collection of statistics for different subject-specific areas, like agriculture, labour, commerce, industry, etc. vests with the corresponding administrative Ministries. More often than not, the statistical information is collected as a by-product of administration or for monitoring the progress of specific programmes. Some of the Ministries, like Agriculture, Water Resources, Health, etc. have full-fledged statistical divisions, while most others have only a nucleus cell. Large-scale statistical operations like the Population Census, Annual Survey of Industries, Economic Census, etc. are generally centralised, and these cater to the needs of other Ministries and Departments, as well as State Governments. In important Ministries, officers of the Indian Statistical Service (ISS) and subordinate statistical staff perform the statistical functions. The Central Statistical Organisation (CSO) in the Ministry of Statistics and Programme Implementation in the Government of India is the nodal agency for coordination of statistical activities and maintenance of statistical standards with the Central Ministries and Departments. For coordination with the States and Union Territories, it operates through State Directorates of Economics and Statistics (DESSs).

3. The Statistical System in the States is similar to that at the Centre. It is generally decentralised laterally over the Departments of the State Government, with major Departments, such as, agriculture or health, having large statistical divisions for the work of Departmental statistics. At the apex

level is the Directorate of Economics and Statistics, which is responsible for the coordination of statistical activities in the State. The DESs have large organisations at the headquarters, with statistical offices in the districts and, in some cases, in the regions of the State. The statistical activity of the DESs is more or less uniform. They publish statistical abstracts and handbooks of the States, annual economic reviews or surveys, district statistical abstracts, and State budget analysis; work out the estimates of the State Domestic Product and Retail Price Index Numbers and engage in such other statistical activities as is relevant to the State.

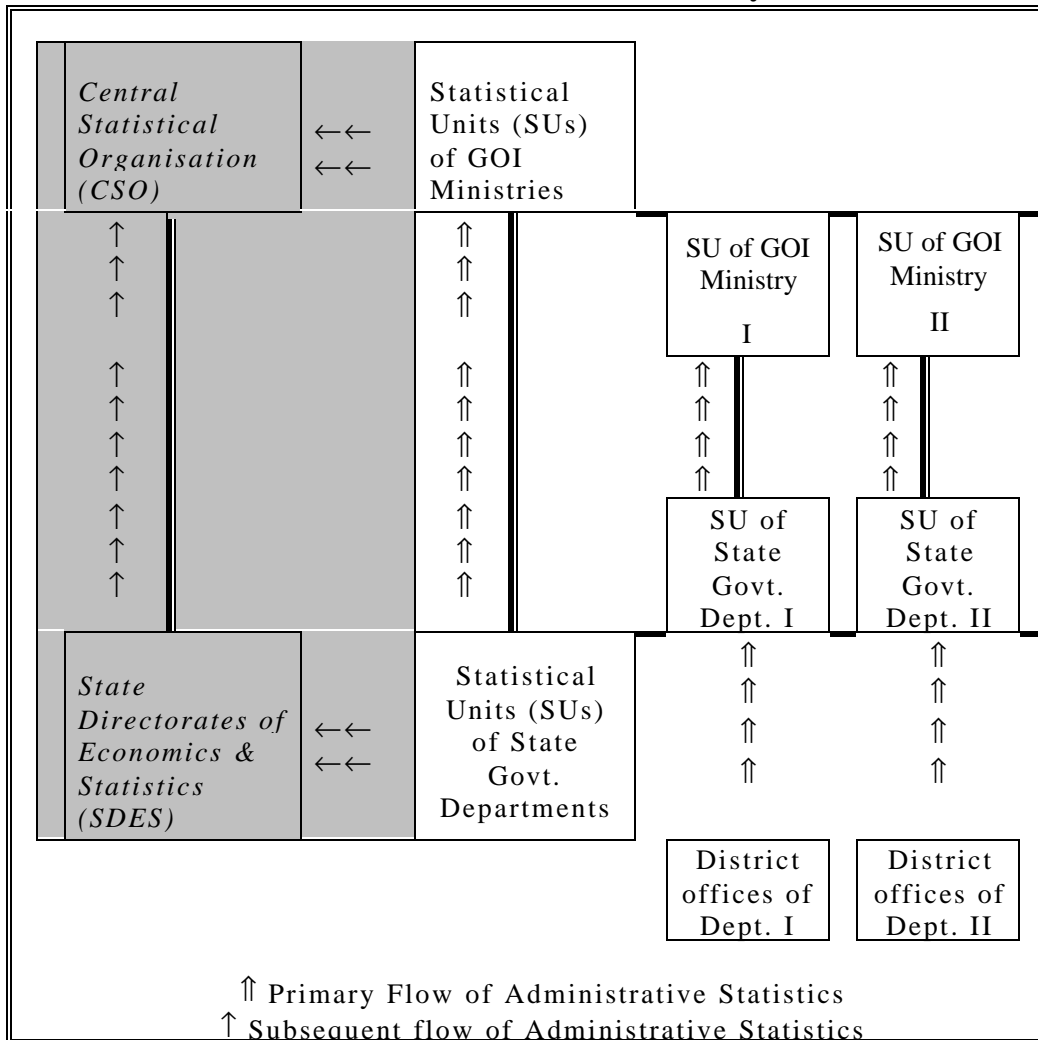
4. The broad areas of Social Statistics include Population, Health and Family Welfare Statistics, Labour and Employment Statistics, Education Statistics, Gender Statistics, Poverty Statistics, Environment Statistics etc. In India, the concerned Ministries and Departments of the Union Government are engaged in the collection, compilation and dissemination of Social Statistics through the corresponding Departments in the State Governments in prescribed formats. Many of the data series are a by-product of the general administration of the States based on the records of the concerned offices, as also a product of the administration of particular Acts of the Government and Rules framed under them. The Indian Statistical System generates data on a wide range of subjects in the Social Sector.

5. The main agencies involved in the compilation of social statistics are:

- (i) Central Statistical Organisation (CSO)
- (ii) National Sample Survey Organisation (NSSO)
- (iii) Registrar General & Census Commissioner, India
- (iv) Ministry of Health & Family Welfare
- (v) Ministry of Labour
- (vi) Ministry of Human Resources Development in respect of education, women & child development, gender, nutrition etc.
- (vii) Ministry of Social justice & Empowerment in respect of disabilities
- (viii) Ministry of Environment & Forests
- (ix) Ministry of Rural Development
- (x) Ministry of Urban Development
- (xi) Ministry of Home Affairs for crime related statistics
- (xii) Planning Commission for development indicators

6. The flow chart given below attempts to depict a simplified version of the present Indian Statistical System, the flow of Administrative Statistics, and the links between different statistical offices. It is a system built upwards from district offices of State Government Departments, to the level of these Departments, and from there, to the corresponding Ministries at the Centre.

**Flow Chart 1: Indian Statistical System**



Source: Report of the National Statistical Commission, August, 2001

7. The major publications, where the social & gender statistics are being published, are as follows:

- (i) Statistical Abstract, India
- (ii) Selected Socio-Economic Statistics, India
- (iii) Women and Men in India
- (iv) Health Information of India
- (v) Rural Health Statistics
- (vi) Family Welfare Programme in India Year Book
- (vii) Indian Labour Statistics
- (viii) Indian Labour Year Book
- (ix) Indian Labour Journal.
- (x) Compendium of Environment Statistics
- (xi) National Family Health Survey
- (xii) Selected Education Statistics

- (xiii) Education in India
- (xiv) Sarvekshana
- (xv) National Human Development Report

8. The major deficiencies in these areas are attributable largely to the lack of strong administrative statistical system. Routine data collection on schools, students enrolled, hospitals, medical and paramedical personnel, births and deaths occurring in the population, labour and employment, etc. have been neglected resulting in the delays in bringing out periodical statistical reports and publications by various Ministries and Departments in the Social Sector. From the Population Census, Education, Health or Labour Statistics, delays predominate with a time lag ranging from 5 to 10 years in some cases defeating the very purpose of the exercise.

## **B. Historical Background, Data Sources and Current Status of Social Statistics**

### **Population and Vital Statistics**

9. The Population Census of India, conducted every ten years, is the most comprehensive source of information on the size, distribution, living conditions and demographic characteristics of the population. It is also an important source of the religious, linguistic and cultural profiles of the people. It serves therefore, both as a tool of the State polices and as a means for understanding the socio-economic transformation of the society, economy and polity of the nation. In India, a census over different parts at different time points was first conducted during the period 1867-72, being known as the Census of 1872. However, since 1881 a Population Census has been conducted in the country regularly every ten years and the Census 2001 is the 14<sup>th</sup> and the latest in the series. With each census, the scope and the coverage have been enlarged, particularly since the Census 1961, in order to provide meaningful information for developmental planning as also to make it more responsive to the present day requirements. The provisional totals of the Census 2001 conducted during February-March 2001 have been released on 26 March 2001 and have placed India's population at 1027 million as on 1 March 2001. Provisional totals of the population at the district level, by sex, in broad age categories 0 to 6 and 7+, literate and illiterates among men and women aged 7 and above and main and marginal workers are already available for all the States and UTs. The detailed census tables will be continued to come out and all the census tables will be generated and published within 3 years of the conduct of census, earlier such tables were made available with a gap of 4-5 years.

### **Health and Family Welfare Statistics**

10. Health is a State subject and vital and public Health Statistics are traditionally the responsibility of State Health Directorates. However, in a few States vital statistics have been the responsibility of State Directorates of Economics and Statistics. Presently, the Central Ministry of Health & Family Welfare (H&FW) consists of three Departments, namely, Department of Health, Department of Family Welfare and Department of Indian System of Medicines & Homeopathy (ISM&H). The Directorate General of Health

Services (DGHS) is the technical advisory wing of Ministry of Health & Family Welfare and is responsible for running the various national disease control/eradication programmes. At the national level, a small Bureau existed since 1937, which was organised in 1961 into the Central Bureau of Health Intelligence (CBHI) in the DGHS, to coordinate and advise on the development of health information in the country. At the national level, it is the sole organisation dealing with collection, compilation, analysis and dissemination of health data for the country as a whole. As an offshoot of administrative procedures and implementation of various national health programmes, many data series flow into the various Organisations/Divisions of Directorate General of Health Services, Department of Health and these form the basis of the annual central health statistical publication *Health Information of India* brought out by CBHI.

11. The Department of Family Welfare is responsible for implementing programmes for population control and maternal and child health now renamed as Reproductive and Child Health. The Family Welfare programme is a centrally sponsored programme implemented by the respective States and UTs. The information flow starts from the peripheral level where the service delivery takes place. In the sub-centres, ANMs are responsible for the maintenance of records in respect of acceptance of family planning methods, services to pregnant women and immunisation for vaccine preventable diseases in respect of infants. The information flows to Primary Health Centres (PHCs), and from PHCs to districts where it is consolidated for the district. From the district, the information in the prescribed form is expected to flow to the State and Centre through NICNET. Department of Family Welfare publishes *Family Welfare Programme in India Year Book*, annually. The latest issue relates to the year 1997-98.

### **Labour and Employment Statistics**

12. As Labour is a subject in the Concurrent List of the Constitution, both the Union and State Governments have powers to legislate on issues concerning Labour; their conditions of work, welfare, safety, health, etc. The responsibility for implementation of the legislation largely rests with the State Governments except in certain industries in the Central sector where it rests with the Union Government. The system of collection of Labour Statistics in India is quite old. The Labour Bureau in the Union Ministry of Labour has been the Central agency collecting and disseminating data on various aspects of labour ever since it was established in 1946.

13. The major agencies involved in the collection of Labour and Employment Statistics are the Ministry of Labour and its affiliates such as Labour Bureau and the Director General of Employment and Training (DGE&T); the National Sample Survey Organisation (NSSO); and the Registrar General & Census Commissioner of India. The Central Statistical Organisation (CSO) also collects data on employment through the Economic Census.

14. The Labour Bureau collects statistics through statutory and voluntary returns under different Labour Acts. The State Governments compile such

statistics at the State level; the Bureau in turn consolidates them for the country as a whole covering all States and sectors of the economy and brings out periodical reports. It also conducts occasional surveys concerning labour in specific geographic areas or for some specific section of labour. Essentially, these are either to study the socio-economic conditions of labour with a view to formulating policy measures or to assess the impact of labour enactments. The Labour Bureau also undertakes compilation and maintenance of Consumer Price Index (CPI) numbers for industrial, agricultural and rural workers.

15. The Directorate General of Employment and Training (DGE&T) in the Ministry of Labour, in its administration of various provisions of the Employment Exchanges (such as Compulsory Notification of Vacancies) Act, 1959 has been collecting statistics on employment and the likely vacancies to occur for the organised sector of economy under the Employment Market Information Programme (EMIP) which covers: (a) all establishments in the public sector (except defence establishments and armed forces, however, the programme covers civilian employees in defence establishments), (b) non-agricultural establishments in the private sector, employing 25 or more persons on a compulsory basis, and establishments having 10-24 workers on a voluntary basis. National Employment Service programme of the DGE&T forms another source of information on unemployment, under which the DGE&T compiles statistics about the number of persons on the Live Register of 954 Employment Exchanges located throughout the country. This data provides an idea of the incidence of unemployment in the country. The DGE&T brings out a number of publications based on the data collected through the Employment Market Information Programme (EMIP) and the National Employment Service (NES). The data collected through EMIP is disseminated through various publications, which provide estimates of the utilisation of labour force in different sectors, industries, occupations, etc. the excess and shortage of manpower and the present level of employment generation in various industries. The publications of DGE&T include *Quarterly Employment Review*, *Quick Estimates of Employment in the Organised Sector* (Quarterly), *Employment Review* (Annual), *Occupational-Educational Pattern of Employees in India* (for public sector and private sector on alternate years), *Employment Exchange Statistics* (Annual), *Apprenticeship Training in India* (Annual), *Census of Central Government Employees* (Annual) and *Bulletin of Job Opportunities in India* (Annual). Most of these publications are however, being brought out with a considerable time lag.

16. The NSSO collects information on certain key parameters of employment and unemployment in its surveys annually and through a comprehensive survey on employment and unemployment quinquennially. The first comprehensive survey on employment and unemployment was carried out during 1972-73 (27<sup>th</sup> Round). Since then the survey on employment and unemployment has become part of the quinquennial programme of NSSO and so far six such comprehensive surveys have been conducted, the latest being the 55<sup>th</sup> Round. The NSSO classifies workers by three approaches namely, usual status, current weekly status, and current

daily status and further by demographic, social, economic and spatial characteristics. It helps in capturing the prevalence of intermittent work and characteristics of workers in more detail than the Census. Estimates of number employed according to activity status and their social, demographic and economic characteristics are available at the National and State level. Similarly, data for the unemployed is also available by the three approaches and characteristics. The NSSO brings out a number of reports based on these surveys. The key results of the survey on employment and unemployment for the 55<sup>th</sup> Round conducted during July 1999 to June 2000 were brought out in December 2000.

17. The Decennial Census conducted by the Registrar General and Census Commissioner of India provides data on various characteristics of the labour force once in every 10 years for the entire country. The data so collected on workers are tabulated for main worker and marginal worker under various demographic, social and economic characteristics, which include classification by industrial activity and occupation. The tabulation also gives the spatial distribution of workers by rural/urban residence at National, State and district levels.

18. The Central Statistical Organisation conducts Economics Census, which is another source of data on employment. So far four Economics Censuses have been conducted in the years 1977, 1980, 1990 and 1998. The Economics Census covers both agricultural (other than crop production and plantation) and non-agricultural activities and is intended to gather basic information on the number of enterprises and their employment by location, type of activity and nature of operation. It provides information on the number of persons working and the number of hired employees in these enterprises. The All-India provisional results for the Economics Census, 1998 have already been brought out and the final results are expected by June 2001. Most of the States have also brought out State-level reports.

### **Education Statistics**

19. Education is a concurrent subject, which implies a meaningful partnership between the Union Government and the States. As per the National Policy on Education, (NPE, 1986), the Union Government has the responsibility to reinforce the national and integrative character of education, maintain its quality and standards, to study and monitor the educational requirements of the country with regard to manpower development, to cater to the needs of research and advanced study, to look after the international aspects of education and human resource development and in general to promote excellence at all levels of the educational system. To fulfil its role, the two Departments concerned with education in the Ministry of Human Resource Development, one for Elementary Education and Literacy and the other for Secondary and Higher Education, closely interact with the States and UTs.

20. The Educational Statistics System in India dates back to the pre-independence period. Annual Educational Statistics began to be collected from 1913-14 followed by elaborate quinquennial reviews. To assess the

status and to prepare a plan to this effect, the Ministry of Education (MOE) conducted the first All-India Educational Survey (AIES) in 1957. Since then, five more AIESs have been conducted by National Council of Educational Research and Training (NCERT) from time to time and the 7<sup>th</sup> AIES is presently collecting information. These surveys have become an integral part of the system of Educational Statistics in India.

21. The two main sources of educational data are the educational institutions and households. The educational institutions provide the data on enrolment and number of teachers, which is collected annually from all recognised institutions being compiled at the national level by the Department of Secondary and Higher Education (DS&HE). More detailed statistics on students, teachers and physical facilities in schools up to higher secondary level are collected in 5 to 7 years through All India Educational Surveys (AIES) conducted by the NCERT. Important sources of household data on education are the decennial Population Census and the sample surveys conducted by the National Sample Survey Organisation. Data on literacy, level of education and schooling status are collected in the decennial Population Census. The data on these and some other items such as expenditure on education and school dropouts are also collected in certain rounds of National Sample Surveys.

22. In general, the data collected from schools are first compiled manually at the block level, then the block level figures are aggregated to prepare district tables and finally, State level tables are prepared by aggregating the district level tables. The MHRD brings out a publication, *Selected Educational Statistics* annually based on the data received from the States.

23. There are various agencies involved in the collection of data on technical and higher education in the country. This area comprises higher (general education), technical education, medical education, agricultural education and teacher education. The UGC is responsible for collection and reporting of data on higher education obtained directly from colleges and universities. Prior to 1982, the Department of Education in MHRD as well as UGC collected data on higher education but in order to avoid duplication, it was decided that UGC alone should collect data on higher education. However, the UGC faces problems of time lag and non-response from the reporting institutions, but some basic statistics are published every year in UGC's Annual Report. The Central Bureau of Health Intelligence (CBHI) in the Department of Health collects data on education in allopathic and dental systems of medicine from the Medical Council of India (MCI) and the Dental Council of India (DCI). The Department of Indian System of Medicine & Homeopathy (ISM&H) collects and publishes data on ayurveda, unani, siddha and homeopathy education. The All-India Council of Technical Education (AICTE) – the apex body to regulate technical education in the country – does not collect any data at present, but intends to collect the same in the near future. With regard to agricultural education, the Department of Agricultural Research & Education (DARE) is the apex body, but it does not collect data on agricultural education on a regular basis. In the area of teacher education, the National Council of Teacher Education (NCTE)

collects limited data annually and has developed a computerised Management Information System (MIS), but the data are collected only to monitor the teacher education programmes of various institutions and to ensure that the prescribed norms are adhered to. At present these data are not tabulated or compiled for any statistical purpose.

### **Gender Statistics**

24. Women, who constitute half of the population, are generally not treated as equal with men in the matter of self-development although their betterment and well being are crucial to the progress, prosperity and peaceful existence of mankind. It is, indeed a matter of gratification that the Constitution of India grants equality to women. In order to ameliorate the material conditions of living for women, the Government of India enacted legislations for rapid economic development and ultimately, restructuring the socio-economic order in the country. A realistic appraisal of the success or otherwise of various Governmental measures, policies and programmes devised for the improvement of the status of women is not possible without the timely availability of reliable statistics and relevant indicators. The efficiency and effectiveness of a statistical system is judged by its capability to produce reliable data covering the entire spectrum of subject, bearing policy relevance and in its capacity to disseminate these data with a minimum possible time lag.

25. Gender Statistics as a separate subject area is of recent origin. These statistics are not collected separately but are arrived at by studying the male-female break up given by different data sources such as Population Census, large-scale sample surveys and administrative statistics. Of course, there are certain areas, which are exclusively related to women such as crime against women, domestic violence, maternal health, etc. Therefore, the current status accorded to Gender Statistics may be the same as given to other socio-economic statistics such as Population, Labour, Health, Education Statistics, etc. Like most of the Socio-economic Statistics in the country, Gender Statistics also suffer from problems of coverage, time lag and reliability.

26. Although the Department of Women and Child Development is the nodal agency for policy formulation with regard to the development of women, Gender Statistics are produced by a large number of Ministries such as, Ministry of Health & Family Welfare, Ministry of Human Resource Development, Central Statistical Organisation, National Sample Survey Organisation, Registrar General of India, etc. Being a newly emerging area, the CSO has attempted to undertake a number of methodological studies in the field of Gender Statistics.

27. Keeping in view the importance of the Gender Statistics in the country, a number of steps have already been taken for improvement in its collection and compilation. The Central Statistical Organisation implemented a project, 'Improvement of Statistics on Gender Issues' during 1993-97, as a part of which, National Workshops were organised to facilitate the interaction of users and producers of Gender Statistics. In these workshops, a set of indicators for gender planning were identified and the status of databases on

those indicators were reviewed. The indicators, on which data were already available, were included in a publication, *Women & Men in India* brought out annually by CSO. For the indicators on which data were not available, a National Plan of Action (NPA) was prepared in which the organisations to bring out the specific gender-related data were identified. The follow-up of the NPA has already resulted in the better availability of sex-disaggregated data on some indicators such as land ownership by sex, availability of credit facilities from bank by sex, maternal mortality rate, etc. Department of Women & Child Development also brings out, though not regularly, a publication entitled, *Women in India*. The National Crime Record Bureau is also attempting to improve its statistics on crime against women. The gender-segregated information is not available below State level. Though, some attempts are being made for the coordinated development of the Gender Statistics in the country, much more remains to be done.

28. India has also undertaken a Time Use Survey during 1998-99 with a view to assess the contribution of women and men in the economy through their paid work as well as unpaid household work and to study the gender discrimination in the personal and leisure activities. For the purpose of this survey, which was the first one of its kind in the country, a new classification of activities was developed, taking into consideration the peculiar socio-economic conditions in the country. The results of which have highlighted that a significant amount of work both paid and un-paid being done by households especially by women, which have not being taken into accounts under the national income. Further, gender bias in the amount of time spent on personal and leisure activities is clearly evident from the results of this survey. CSO is presently undertaking two more exercises on the 'Valuation of Unpaid Work and Volunteer Services' and 'Estimation of Workforce' using the results of the Time Use Survey.

## **Publications**

### **Central Statistical Organisation**

29. The Central Statistical Organisation (CSO) in the Ministry of Statistics & Programme Implementation (MOS&PI) with a view to make available such statistics and indicators for the use of planners, policy makers, academicians, researchers and public at large, is bringing out a number of publications. One such publication is entitled Statistical Abstract, India, which has been brought out from 1900. The latest issue of this publication pertains to the year 2000. It contains time series data for national aggregates as well as state-wise data. The CSO also brings out a number of other publications including "Selected Socio-Economic Statistics India" on a regular basis since 1987 and 'Women and Men in India since 1995.

### **Population Census of India, Office of the Registrar General, India**

30. The results of the Population Census data are published in various tables categorised into six broad categories indicating the nature of topics covered in each series. These are:

- A Series: General Population Tables
- B Series: General Economic Tables

C Series:	Social and Cultural Tables
D Series:	Migration Tables
F Series:	Fertility Tables
H Series:	Tables on Houses and Household Amenities.

### **Ministry of Health and Family Welfare**

31. As an offshoot of administrative procedures and implementation of various national health programmes, many data series flow into the various Organisations/Divisions of Directorate General of Health Services, Department of Health and these form the basis of the annual central health statistical publication *Health Information of India* brought out by CBHI. The central Programme Officers consolidate the programme-specific information flowing from States and UTs and furnish these to CBHI for publication. Data are also collected by CBHI directly from the Directorate of Health Services of all States and UTs, statutory councils such as, Medical, Dental, Nursing and Pharmacy Council, Office of Registrar General of India (RGI), and from other Central Departments and International Organisations for publication. Data are presented at the State and UT level along with all-India figures. The combined issue for the years 1995 and 1996 is the latest issue. The combined issue for the years 1997 and 1998 is under print. These publications do not provide data below the State and UT level. Also the data published are not gender and age specific. Apart from the regular annual publication, *Health Information of India*, CBHI also brings out *ad hoc* publications. *Health Map of India, 1998* is the latest among such publications of the CBHI and this depicts in maps, the district wise number of hospitals with bed strength and dispensaries, as also the number of specialised hospitals in various districts. The data are also presented in tabular formats side by side with the maps. The CBHI is also the nodal agency to implement the Health Management information System (HMIS) that was started to rectify the information deficiencies in the area of implementation of various health and family welfare programmes and by routine health service activities, as well as to provide linkages among them on a monthly basis. The HMIS is however, did not function satisfactorily due to various reasons.

32. Apart from CBHI, the Rural Health Division of DGHS compiles and publishes *Rural Health Statistics*. This is a six-monthly bulletin, containing information on Government health infrastructure and manpower deployment in the rural areas. This publication also presents data at State and UT level. The National AIDS Control Organisation (NACO) under Department of Health collects data on cases and deaths due to AIDS/STD and publishes these in its *Annual Update*. This is not a statistical publication in the strict sense. CBHI also takes the data on important items from the Rural Health Division and NACO as well as from Department of Family Welfare and Department of ISM&H and publishes the same in *Health Information of India*.

33. The Department of Family Welfare is responsible for implementing programmes for population control and maternal and child health now renamed as Reproductive and Child Health. The Family Welfare programme is a centrally sponsored programme implemented by the respective States and

UTs. The information flow starts from the peripheral level where the service delivery takes place. In the sub-centres, ANMs are responsible for the maintenance of records in respect of acceptance of family planning methods, services to pregnant women and immunisation for vaccine preventable diseases in respect of infants. The information flows to PHCs, and from PHCs to districts where it is consolidated for the district. From the district, the information in the prescribed form is expected to flow to the State and Centre through NICNET. Department of Family Welfare publishes *Family Welfare Programme in India Year Book*, annually. The latest issue relates to the year 1997-98.

#### **Ministry of Labour**

34. Publications based on the data collected and compiled through regular and *ad hoc* surveys:
  - (a) Annual Survey of Industries;
  - (b) Rural Labour Enquiry once every five years;
  - (c) Occupational Wage Surveys (OWS);
  - (d) Reports on the working and living conditions of various target groups such as women workers and workers belonging to SC/STs, Unorganised Sector, survey on Labour Conditions and Contract Labour;
  - (e) Monthly compilation of Index Numbers for Industrial, Agricultural and Rural Workers;
  - (f) Evaluation study on implementation of the Minimum Wages Act.
  
35. Publications based on data collected and compiled through statutory returns:
  - (g) Review of different Acts;
    - Report on Minimum Wages Act, 1948;
    - Maternity Benefit Act 1961;
    - Shops Act;
    - Plantation Labour Act, 1951;
    - Motor Transport Workers Act, 1961;
    - Industrial Employment (Standing Orders) Act, 1946;
    - Workmen's Compensation Act, 1928
  - (h) Pocket Book of Labour Statistics;
  - (i) Indian Labour Statistics;
  - (j) Indian Labour Year Book;
  - (k) Indian Labour Journal.
- (l) III. Publications based on data collected and compiled through Voluntary returns:
  - (m) Industrial disputes;
  - (n) Closure/retrenchment;
  - (o) Trade Union Act, 1926
  
36. The DGE&T brings out a number of publications based on the data collected through the Employment Market Information Programme (EMIP) and the National Employment Service (NES). The data collected through EMIP is disseminated

through various publications, which provide estimates of the utilisation of labour force in different sectors, industries, occupations, etc. the excess and shortage of manpower and the present level of employment generation in various industries. The publications of DGE&T include *Quarterly Employment Review*, *Quick Estimates of Employment in the Organised Sector* (Quarterly), *Employment Review* (Annual), *Occupational-Educational Pattern of Employees in India* (for public sector and private sector on alternate years), *Employment Exchange Statistics* (Annual), *Apprenticeship Training in India* (Annual), *Census of Central Government Employees* (Annual) and *Bulletin of Job Opportunities in India* (Annual).

### **Environment Statistics**

37. The CSO brought out a *Compendium of Environment Statistics* in 1997 and this has now become an annual publication of CSO. The Compendium provides valuable information on the present status of the five broad components of environment identified by UNSD. Apart from the CSO, various Ministries and Departments of Central and State Governments collect information related to Environment Statistics and the same are published in various publications, namely, *Forestry Statistics*, *The State of Forest Report*, *Inventory of Forest Resources of India*, *State of Environment*, etc. by organisations within the Ministry of Environment and Forests; *Agriculture Statistics at a Glance* and *Fisheries Statistics* by the Ministry of Agriculture; *Water Statistics* by Ministry of Water Resources, etc. Most of these publications are annual, but the time lag in bringing out the publications in respect of the Ministry of Environment and Forests is about 3 to 5 years. Information on some indicators is also being collected by other agencies like the Central Pollution Control Board, Registrar General, Ministry of Urban Development, Tata Energy Research Institute, etc.

### **D. Estimation Methodology:**

38. As mentioned above, the decadal population census provides a large amount of information on various facets of life. However, the information of some of these indicators are required more frequently, but the same could not be made available through the routine data collection by the statistical system. Some of these indicators are: population of the country, States, districts every year, birth rate, death rate, infant mortality rate, child mortality rate, maternal mortality rate, fertility rate, employment & unemployment, population living below poverty line etc. For the purpose of estimates of population at various point of time till the next census and beyond, a technical working group is being set up from time to time, which provides the population projections till the next census and beyond. The projections provided by this Group are based on the standard methodology of the UN, however, appropriate assumptions and modifications are taken into account keeping in view the requirement of the country. On the basis of past experiences, it has been seen that the estimates of population in different years have been very close to the population estimated by different sources like NSSO and also matched with the census figures. As in India, the system of civil registration is not fully successful, therefore, for the annual estimates of birth rate, death rate, infant mortality rate and fertility rate, a well-organised sample surveys are undertaken. These surveys are named as

“Sample Registration System”. These surveys provide the annual figures of these parameters.

39. The National Sample Survey came into existence in 1950 with an objective to conduct multi-subject household enquiries, designed to fill gaps in the data required for planning, in randomly selected villages and urban blocks spread over the entire geographical area of the country. NSSO undertakes quinquennial survey for obtaining information about employment & unemployment and consumption expenditure among households. The data so collected through the consumption expenditure surveys are used for the purpose of estimating the number of person living below poverty line. The sampling technique used for the most of the NSSO surveys is stratified multistage sampling. NSSO also undertake surveys on various other subjects like morbidity surveys, disability surveys, condition of people living in rural and urban areas including amenities available in the house. At present the NSS covers, in each round, a sample of about 12000 to 14000 villages and blocks at all-India level in the 'Central Sample' (covered by the NSSO) and an independent sample of about 14000 to 16000 villages and blocks at the all-India level through 'State Sample' (covered by the various States/Union Territories). NSS data on socio-economic surveys are regularly released through the quarterly publication “*Sarvekshana*”, including data on the following:

- Household Consumption
- Employment and Unemployment
- Manufacturing and Trade
  - Organised Manufacturing
  - Unorganised manufacturing
- Agriculture
  - Agrarian structure
  - Crop area and yield
- Human Resource Development
  - Education
  - Disability
  - Utilisation of the Public Distribution System
- Housing Conditions
- Debt and Investment Surveys
- Prices

40. The two National Family Health Surveys (NFHS) conducted in 1992-93 and 1998-99 by the International Institute for Population Sciences, Mumbai, have collected important information on the health, status of the population, family planning, fertility and mortality as well as growth and development of children, levels of anaemia of women and children and related parameters at the State and National levels which were not available earlier. In the second round, it has also collected data on the prevalence and perception of domestic violence. The sample size in this survey was specified for each State in terms of target number of completed interviews with eligible women. The target sample size was set considering the size of the State, resources available for the survey and the aggregate level at which separate estimates were needed.

The urban and rural samples within each State were drawn separately and to the extent possible, the sample within each State was allocated proportionally to the size of the State's urban and rural populations. The State samples were not large enough to provide reliable estimates for individual districts in any State. A uniform sample design was adopted in all the States. In each State, the rural sample was selected in two stages: the selection of primary sampling units (PSU), which are villages, with probability proportional to population size at the first stage, followed by the random selection of households within each PSU in the second stage. In urban areas, a three-stage procedure was followed. In the first stage, wards were selected with PPS sampling. In the next stage, one census enumeration block (CEB) was randomly selected from each sample ward. In the final stage, households were randomly selected within each sample CEB. At the national level, the overall sample weight for each household or women is the product of the design weight for each State and the State weight. In this survey, the sampling error for each variable was also calculated along with the design effect for each estimate.

#### **Civil Registration System (CRS)**

41. The Civil Registration System of a country envisages recording each and every incidence of vital event for legal purposes and in the process captures a lot of information on various characteristics of these events, which help in the compilation of a continuous series of vital events. Complete, timely and accurate registration of births and deaths is very crucial for the understanding of population dynamics at the local level and planning of effective health and development programmes. In India, civil registration was first introduced in the last century mainly as an aid to public health administration for locating and identifying diseases of public health importance and to undertake remedial measures to control mortality. However, registration was kept voluntary and different provinces had different legislations and there was no standardisation of concepts, definitions and classifications. The enactment of the 'Registration of Births and Deaths (RBD) Act, 1969' replacing all diverse laws that existed on the subject, and the Model Rules framed under the Act introduced a uniform piece of legislation to overcome the problems of multiplicity of Acts and Rules that existed in the country. Thus, the Act aimed to have a uniform system of registration and data collection on vital statistics and provides for compulsory registration of births and deaths in the country. However, registration of marriages and divorces is not compulsory in India. Despite the Act, the CRS has not been able to provide the estimates of vital indicators due to its incompleteness. The success of registration of births and deaths varies from 30% to 95% and 25% to 85% respectively in various States in the country.

#### **E. Improvement Required in the compilation of Social Statistics**

42. India has been collecting a large amount of data on social aspect of its citizen either through the administrative system or through well-designed sample surveys. There are certain areas, which needs improvement in terms timeliness, completeness and reliability. The following suggestions are given for improvement in the compilation of social statistics:

- (a) In order to avoid delays in the transmission and compilation of social statistics, a system for computerised network may be established. This will also improve the completeness and quality of data. Use of Information Technology and Internet facilities should be made for data transmission from district to the State and from State to National level.
- (b) A timetable for the conduct of various activities of the Population Census right from preparatory work, enumeration work, data processing and tabulation should be finalised sufficiently well in advance.
- (c) The census organisation must accord utmost priority for modernising the entire census operations by acquiring modern processing equipments and utilising the latest technological advancements in the field of information technology and printing for speedier processing and dissemination of census results.
- (d) A computerised health information system at all treatment facilities is an essential prerequisite for establishing an effective Health Management Information System to provide a comprehensive database on working of health programmes at the decentralised level upto the district.
- (e) At present the information from the private institutions like schools, colleges, hospitals, nursing homes etc. are not included in the official statistical system mainly due to non-availability of information from these institutions. For the purpose of proper flow of information from private institutions, a suitable system may be devised. Further, it is also suggested to conduct one-time census so as to have a frame for future surveys.
- (f) All the censuses, large-scale sample surveys and Administrative Statistics should have a provision for collecting data with sex break-up, where applicable.
- (g) Indicators of gender disparity such as equity index should be computed at State level for every State. Presently, this is not possible due to non-availability of gender-disaggregated data at the district level. There is need to improve the capacity at the State and district levels. Further, appropriate methodologies for computing HDI and GDI at State level are required by using small area techniques. Studies should be conducted using gender related data to highlight existing gender disparities.
- (h) There should be a gender data bank in each State as well as at the national level.
- (i) At present the availability of information at the local areas is quite poor, therefore, it is suggested that a minimum list of variables/indicators that should be collected at village/local level should be identified and a system of their compilation and aggregation should be established. Similarly, the variables and indicators required for aggregation at the district, State and National levels should also be identified.
- (j) The Civil Registration System must be strengthened so as to provide the complete registration for births and deaths. The information so available should be used for estimating the vital indicators at the disaggregated levels like district and block levels.