WORKSHOP ON THE ORGANISATION OF NATIONAL STATSITICAL SYSTEMS AND USER-PRODUCER RELATIONS – JULY 21-24, 2008 AT COLOMBO, SRI LANKA

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The Indian Statistical System presently functions within the overall administrative framework of the country. The Indian federal structure has influenced the organization of the statistical system as well. 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. The collection of statistics on any subject generally vests in the authority (Central Ministry / Department or State Government Department), that is responsible for that subject according to its status in the Union, State or Concurrent Lists. By and large, the flow of statistical information emanates from the States to the Centre except in cases where the State-level operations are an integral part of Centrally- sponsored schemes or data are collected through national sample surveys. Further, large-scale statistical operations like the Population Census, Annual Survey of Industries, Economic Census, etc. are generally centralized, and these cater to the needs of other Ministries and Departments, as well as State Governments.

The Central Statistical Organization (CSO) in the Ministry of Statistics and Programme Implementation (MOS&PI) is the nodal agency for planned development of the statistical system in the country and for bringing about coordination in statistical activities among statistical agencies in the Government of India and State Governments. Besides, the CSO is also responsible for laying down and maintaining norms and standards in the field of statistics. Though the CSO has no legal authority to enforce standards and coordination, in the case of Central Ministries, the work is done through institutional arrangements like inter-departmental meetings of Working Groups, Technical Advisory Committees on various subjects, Standing Committees, etc. Coordination with States is through meetings of high-level statistical coordination committees of the State Governments and also through a Conference of Central and State Statistical Organizations (COCSSO). The COCSSO provides a platform for discussion on statistical issues of common interest to the Central and the State Statistical Organizations, and provide an overall perspective to the development of statistical activities in the country.

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 (DES), which is formally responsible for the coordination of statistical activities in the State. The DESs have large organisations at the headquarters, with statistical offices in the districts. The statistical activities of the DESs are more or less uniform.

A. IMPROVING COORDINATION IN NATIONAL STATISITCAL SYSTEM

In view of the federal structure of the country, and largely decentralized statistical system, there is a need for a high degree of coordination between the central statistical

authorities and the state-level organisations, as also between the central and state coordinating agencies, for avoiding duplication of efforts and following uniformity in concepts and definitions besides smooth flow of data. A number of steps / initiatives have been taken by the Central Statistical Organization in the recent past for strengthening the coordination mechanism. Statistical Advisers have been posted in important Ministries and Departments of Government of India in order to make available sound statistical inputs and advice for the purposes of policy formulation and decision-making under the technical guidance of the National Statistician. All central Ministries / Departments have been addressed at the highest executive level for involving CSO in all the major statistical activities undertaken by them. . The Conference of Central and State Statistical Organisations (COCSSOs), which is an instrument for providing a forum for regular interaction among the Central and State Statisticians, has been strengthened / revived with regular meetings on an yearly basis. State Governments have been addressed at the highest possible level for declaring the State Directorates of Economic and Statistics (DES) as nodal agencies for coordination of statistical activities in the States and making it mandatory for other Ministries / Departments to involve / consult DES in all major statistical activities undertaken by them. Like at centre, Statistical Advisers have been posted at State capitals to act as liaison officers between the CSO and DES. For strengthening the statistical system in the States, including improvement of coordination and management of statistical activities, a Centrally-sponsored scheme has been prepared under which financial assistance would be provided to States.

Issues which need be taken up for further strengthening the coordination are:

- Maintaining a pool of eminent experts in different subject areas for getting comments on various statistical matters quickly and also for constituting various committees and working groups on technical matters;

- Having an institutional mechanism through which CSO could effectively coordinate with different Ministries at the Centre on statistical matters, like assigning dual responsibilities to Statistical Advisers posted in various Ministries, whereby they would assist the concerned Ministries in the matters of statistics and coordinate with the National Statistician in respect of maintenance of quality statistics;

- Organising a periodic conference of State Ministers in-charge of statistics with a view to according greater importance to official statistics in the public administration of the State/UT and improving coordination;

- Formally entrusting the State DESs, the responsibility of periodic review of the content, methodology and output of the statistics of all State Departments, and to make suggestions for further improvement of those statistics;

- Organising an annual conference of Statisticians of all State level Departments on the lines of COCSSO by DES;

- Involving the Director, DES in its decision making processes in the State by making him a member of, or an invitee, to committees and groups dealing with plans and programmes in substantive fields; and

- Creating a common statistical cadre of statisticians in the States for manning statistical posts in all Departments.

B. AUTONOMY OF NATIONAL STATISTICAL OFFICES

Autonomy of National Statistical Offices can be expressed in two forms. One is organizational autonomy, where the statistical office is established separately from the government agencies, and second is professional autonomy where statisticians strictly adhere to the professional standards and ethics associated with official statistics such as objectivity and impartiality. Organizational autonomy is often associated with the second type of autonomy, which is professional autonomy. However, it is possible to have professional autonomy even being located in a government ministry. Professional independence of statistical officers is of critical importance as it allows national statistical offices to play its role as a national information provider free from bias and influence. In a democratic governance framework, this information role towards the general population is critical for protecting the credibility of statistics.

In India, though the National Statistical Office is part of the Government Ministry, the governance arrangement for major activities of official statistics consists of Advisory Boards or Councils, Working Groups, etc., which assist the National Statistical Office and Line Ministries in providing appropriate guidance on a range of matters. To ensure autonomy and independence, it has been ensured that the Chairman of those Committees / Councils are from outside the Government set up and are men of eminence in their own fields of economic or statistic or social sciences. Like-wise, it is ensured that these committees/councils have members who are also eminent academicians from the field besides concerned governmental functionaries. Like for example, on conduct of large scale sample surveys, there is a high powered Steering Committee which consists of a non-official chairman, who is a man of eminence in the field. The members of this Council include five academicians, five data users and senior statistical officers from the National Statistical Office (NSO). Further, to provide necessary technical inputs for various surveys, Working Groups under the chairmanship of renowned academicians, outside the Governmental framework, have been formed to decide the frame to be used for the survey, sampling design, schedules of enquiry, etc. Similarly for compilation of National Accounts and all related issues, an Advisory Committee has been set up, which is headed by a renowned academician with members from academic institutions, central bank, outside experts besides senior government functionaries. In the field of Price Statistics, a Technical Advisory Committee on Statistics of Prices and Cost of Living has been functioning which likewise has members from academic field as also from chambers of commerce and industry. In case of wholesale price index number, which is revised on ten yearly basis, a Working Group is invariably set up to decide the base year, selection of commodities, preparation of weighting diagram, quotations, etc. This group also has its chairman as an eminent non-official statistician / economist with members from academic fields.

It is felt that in the Indian context, inclusion of academic and private sector members (both producers and users of data) in the governance arrangement for official statistics has helped the official statisticians to be in close contact with changes in data collection for a particular specialization or sector. Further, the external participation has served as a mitigating form against criticism of conceptual or methodological inadequacies by providing a forum of non-politicized credibility to the NSO's collection and dissemination of statistics.

In order to further improve the statistical system, including autonomy and credibility of data produced, government has recently set up a high level National Commission on Statistics (NSC), independent of the government and responsible to the Parliament in respect of policy making, coordination and certification of quality of core statistics. The NSC has a chairman, who is a prominent social scientist, and four expert members. The Commission is to serve as a nodal and empowered body for all core statistical activities of the country; evolve, monitor and enforce statistical priorities and standards, and; ensure strong coordination through a closer linkage between the NSO and central and state statistical organizations. The Secretary of the Commission is the Chief Statistician of India, head of NSO. For budgetary purposes, the NSC is in the Ministry of Statistics and Programme Implementations. At present, the NSC has been set up through a Government order. However, it is proposed to empower the NSC through a legislation addressing issues like its status, powers and functions; terms & conditions of service of Chairman/Members of NSC; modalities of its functioning; its mandate, and; budget, accounts and audit.

C. HOW USEFUL ARE ADMINISTRATIVE DATA FOR STATISTICAL PURPOSES

The Administrative Statistical System in India came into being as administrative information system whose essential purpose was to aid the Government Departments in the execution of their functions of implementation of different Acts, Rules and Regulations of Governments. Even when such Acts were passed by the Central Government, their implementation was decentralized through the State Government Departments and their district or other sub-offices. The statistics thus had a direct purpose of being not only of interest to but also necessary for the working of the departments. The regularity, quality, and completeness in the collection of these statistics, interwoven with the working of these departments, were thus indirectly ensured.

The collection of statistics through the administrative set up does not involve special costs. The collection is oriented to definite purposes and the record and verification of information is part of administration. Departmental agencies and officials have not only good knowledge of the subject, but also of local language and local conditions, especially rural. Information collected is relevant and direct, and the respondents do not have to make calculations before answering a query. It is handled by agencies that have special knowledge of the subject. Finally, there is an identifiable purpose in their data collection and they are in the best position to interpret the data. All this has lent a solid foundation to the decentralized administrative statistical system, and in turn, to the Indian Statistical System.

The quality of statistics generated from administrative records is, however, directly related to the interest the administrative departments take in it and the effective use they make of it. It is however a fact that strictness in the administrative functions of several departments of most State Governments is waning, resulting in a virtual neglect of the information system resulting in (a) incomplete coverage, (b) delays in availability of information, and (c) unsatisfactory quality of Administrative Statistics.

The deterioration has taken place at its very roots, namely at the very first stage of collection and recording of data, and has been seen in sectors like agriculture, labour, industry and to some extent in education. In Agricultural Statistics, the system of regular yearly recording of area under crops is in a very un-satisfactory state. Overburdened with all kinds of other work, the village official, the last point of revenue administration, whose basic function is the maintenance of land records, does not find time for this work. For a different reason, the same is true of the system of Labour Statistics. The Office of the Chief Inspector of Factories (CIF), charged with the implementation of the Factories Act (1948), does not even maintain an up-to-date list of factories, and neglects to collect the half-yearly and annual returns, the basic returns to be filed under the Act, from more than a third of the factories. The situation about education statistics is only a little better. The position about the collection of other Administrative Statistics is equally unsatisfactory.

The causes of the failure are of two different types. The first is the overburdening of the staff with other work to such an extent that they are left with no time for their normal work. The second failure occurs, without these extenuating circumstances, and consists in the neglect of the normal work by Government offices.

It is relevant to mention another factor that affects not the Administrative Statistical System but other statistical projects of the Indian Statistical System such as the Agricultural Census or the Livestock Census. The planners of these projects also adopt the same approach when they assign the project work to the lowest-level staff of *village level workers* or primary teachers. Further, since the collection of data by these functionaries, costs almost nothing, reducing considerably the cost of the project, village-level staff become an easy choice as field workers. That also induces the ministries of the Government of India to plan censuses of different types rather freely; i.e. without having to consider the cost of fieldwork, and with freedom to choose the census as the means of collecting data, without having to consider alternative ways of collecting data. The result is that the staff has least respect for statistical work in general. They have also become aware of why they get loaded with such projects and are now hesitant to do such work conveying a message that the days of free data-collection are over.

The second cause for the failure of Administrative Statistical System(AdSS) arises out of the ebbing efficiency and effectiveness of Government administration. As stated before, Administrative Statistics are generated indirectly as a part of Government administration from the quantitative information that departments collect in order to implement the Acts, Rules or Regulations, which also empower and require them to collect information from the relevant units in prescribed forms. Collection of information thus becomes a part of their normal function. The soundness of the AdSS thus depend on the assumption that the department carry out its functions satisfactorily. For example, quantitative and other information is collected from factories because it aids the Office of the Chief Inspector of Factories (CIF) to carry out its

functions of inspection of factories to see that they satisfy the provisions under the Factories Act and other related Acts. Factories are required to furnish relevant information to the Office of the CIF in various forms (called factory returns) prescribed under Rules framed under the Acts, and it is the responsibility of the Office of the CIF to ensure that they do so. But when that office carries out its functions without a large proportion of factories having filed their returns, it should be obvious that it is not doing so as satisfactorily as it is expected to do. The growing unsatisfactory condition of factory statistics system is but a reflection of this unsatisfactory working of the Office of the CIF. In general, over the years, the system of Government administration is deteriorating. The failure of the AdSS is but a corollary of this deterioration of the system of Government administration.

The entire system of Administrative Statistics is record-based in the offices of the Government, which are empowered and responsible for the administration of different Acts and Rules of the Government. The Information Technology revolution has prompted many State Governments to declare their intentions to launch programmes to computerise their administration to achieve the goal of e-governance. In this programme, a beginning has been made for computerization of the offices administering the Acts and Rules (Sales Tax Commissioner, Transport Commissioner, Registrar of Stamps and Duties, Chief Inspector of Factories, and the like), which directly deal with units or people. It is expected that this will lead to three tangible benefits. First, it will facilitate and systematize the routine, essentially clerical, operation of recording, maintaining, updating and processing of administrative records and data, resulting in an increase in the efficiency of the office, and help in enhancing the quality of information. Second, these offices will be able to speedily process the Administrative Statistics collected by them. Technology is available to link the PCs in their sub-offices to the processing PC in the headquarters office and the Directorate of Economics and Statistics for further speeding up of the process. Third, apart from the improvement of Administrative Statistics, computerization will also act as a strong catalyst in the improvement of the overall working of these offices to the benefit of the concerned units and people, the recipients of the Government services.

The key issues which need be addressed to improve the statistics from administrative records are:

-- Strengthening of the State Statistical System, whereby the nodal statistical agency i.e. Directorate of Economic and Statistics, have a regular interaction with those responsible for collection of statistics from administrative records in the form of review meetings, annual conferences, etc.;

-- Taking of steps by the State Governments to reduce the burden of the additional work given to lowest-level Government functionaries such as village level workers and primary teachers so that they can effectively carry out statistical functions assigned to them;

-- Instructing the offices implementing different Acts and Rules to be vigilant that all relevant units file with them regularly the statutory statistical returns required by the Acts and Rules, and take necessary action under the Acts against the defaulting units; and

-- According priority to computerization of administrative offices that generate administrative statistics.

D. HOW CAN WE INCREASE USER ENGAGEMENT

Statistics is playing an important part in all sectors. Of late, the cross disciplinary use of statistics has increased. It is, therefore, important that statistical data producers are not only aware of the needs and views of the users but also properly take them into their account. It is also important that users know that the statistics they are using is produced with high standards. In India, as a policy, the users are involved in the major statistical data collection / production programmes of not only the NSO but also of other organisation of the Government.

The major programmes of NSO are compilation of National Accounts, Conduct of Large Scale Socio-economic Surveys, Annual Surveys of Industries, compilation of Pri8ce Indices, etc. The high level Standing Technical Committees for the above programmes decides on concepts, definitions, data collection methodology, data processing, tabulation plan, etc. The Committees invariably have data users as members. These committees are also generally chaired by persons who have been the users of that data for a long time.

The information on statistics produced and released is publicised through print and electronic media. To the extent feasible, reports, publications or key results are made available to the public on the NSO's website. The NSO also organises seminars after the release of socio-economic survey reports where users are invited to present papers on survey findings. India is a subscriber of special data dissemination standards (SDDS) of IMF and has an advance release calendar for data required for macro-policy formulation and implementation.

In order to bring about uniformity in the standards and concepts to be followed, the NSO has initiated work relating to preparation of a large number of Manuals on various statistical indicators to document the process, procedures and standard practices in vague in regard to compilation. This will, *inter-alia*, help the users in better understanding of the statistical data, and detailed procedures involved in compilations for ensuring credibility of data produced.

However, **t**here is no formal mechanism at present in NSO by which users of statistics in diverse fields can effectively express their views and provide feedback on the effectiveness of services / data provided by NSO. The NSO in India is exploring the possibility of organising regular conferences of Data Users to deal with this situation.

E. ROLE OF NATIONAL STATISTICAL OFFICE IN ANALYSIS, INCLUDING THE PROVISION OF MICRODATA

One of the primary functions of the NSO in India is to disseminate statistical information on various aspects to Government, Semi-Government, private data users and international agencies. This is important because NSO is in a better position to understand the definitions, concepts, methodology of data collection enabling it to carry out qualitative analysis on broad parameters, leaving the in-depth and micro level analysis for data users. Secondly,

analysis by NSO fulfils its role of "informing" the Government and community. The mode of dissemination in India is mainly through publications, regular and adhoc, besides internet. Similarly, the line ministries also analyse and disseminate official statistics through the above modes as also through print media.

The official statistics and results of surveys / censuses published by the NSO are usually accompanied by an analysis of data on key parameters. The analysis is mostly at National and State level. The results of large scale multipurpose sample surveys conducted by NSO are released through a number of reports. The summary of survey findings and analysis of survey results are published in a journal called 'Sarvekshana'. Similarly, results of Economic Census, conducted every fifth year, are analysed on broad parameters by the NSO, and released through publications, internet and print media.

In order to encourage independent and high quality research work in the field of applied statistics, particularly on issues and problems relating to official statistical system in the country, a scheme of Awards and Fellowships for outstanding and meritorious research work in the field of Applied Statistics has been started by the NSO from the year 2000. Under the scheme, financial assistance is provided to research institutions / organisations / non-government orgnaisations for surveys, studies in official statistics. Grants are given to statisticians to enable them to present research papers in international conference / seminars / workshops.

To explore the capabilities of professional statisticians involved with official statistics, including their academic interests and analytical contribution to Indian Statistical System, the NSO has since the year 2003 been holding periodic seminars on 'official statistics' where in papers are presented by the Statistical Officers on various themes of official statistics, which are published in "Official Statistics Seminar Series".

India has since 1999, adopted a national policy on dissemination of statistics, which provides for making available validated data to national users in the form of hard copies and magnetic media on payment basis for analysis purposes. User has to ensure that the data is used for statistical research. Maintenance of confidentiality of the individuals unit's identification, directly or indirectly, is to be ensured. The users are required to acknowledge the data source in research output, and make available the research output and short summary of the conclusions, free of cost, to the data provider. The policy enables the researchers and private organisations to undertake independent research.

The National dissemination policy envisages setting up of a 'data warehouse' to enable data users and general public to have easy access to the published as well as unpublished validated data from one source. The data warehouse is to contain data from various source agencies, integrate it into the logical areas, share the data in a manner that is accessible and understandable to non-technical decision makers, and deliver information to decision makers through report writing and query tools. To set up the national data warehouse of official statistics, the computer centre of NSO has procured COGNOS data warehouse tool comprising of applications and technologies for collecting, managing, processing and presenting multidimensional data for analysis. The design and development for the pilot projects are in progress.

The Government requires statistics at macro level of national aggregate such as national income and accounts, poverty, unemployment, etc. as also at micro level for operational planning, where disaggregate statistics are more relevant and therefore important. The two types of statistics are identifiable separately i.e. macro level for use of the Central Government, given its responsibility of economic policy making, and micro level with the State governments for operational planning. In most cases, the state statistical system possesses the data. However the key issue is capability to process and analyse data on demand, and to synthesise the data from different sources which is at present lacking with the States.

F. ADJUSTING THE STATISTICAL ORGANISATION TO EMERGING STATISTICAL ISSUES

Statistics is an integral part of the dynamics of social and economic development. New developments/changes in the spheres have important implications for National Statistical Offices, particularly identification of new data requirements, evaluation of appropriate methodologies for their collection and in developing capacity to meet those requirements.

Since 1991, India has followed the policy of economic liberalization and globalization. This has created a greater need for timely, relevant and high quality statistical data for economic policy. The occurrence of financial crisis in some countries highlighted the need for establishing standards for regular and timely flow of relevant data for macro economic policy formulation and thus evolving of Special Data Dissemination Standards (SDDS). Other Important statistical issues that emerged during the last decade are Environmental Statistics, Gender Statistics, Statistics on Disasters, and Statistics for Local Level Development, etc. The succeeding paragraphs enumerate the strategies adopted by India to tackle some of these issues.

Special Data Dissemination Standards: India subscribed to SDDS in December 1996. At the time of subscribing, India did not meet the prescribed standards either or both in terms of timeliness and periodicity. Quarterly National Accounts and quarterly Labour data were not compiled. Although monthly production index and four consumer price indices were compiled, timeliness was of 14 weeks and six week respectively. The NSO was dependent upon a large number of data source agencies in the data requirements in the compilation of national accounts and production index. It was a challenge to reduce timeliness. India saw this as an opportunity to improve the coverage, timeliness and periodicity of the SDDS data categories, to bring them up to international standards.

A Regional seminar conducted by IMF at Bangkok in 1996 to apprise the countries on salient features of the SDDS and its implications to the statistical systems helped in formulating a strategy for implementing SDDS in India by the end of transition period. Review of SDDS categories indicated that multiplicity of agencies were responsible for different categories due to the decentralization of statistical system. Since coordinating with so many agencies was difficult for the timely implementation of SDDS, three agencies were entrusted with the responsibility of meetings the standards namely (a) the NSO for real sector (b) Ministry of Finance for Fiscal sector, and (c) the Central Bank for financial and External Sector . A central nodal agency was entrusted with the responsibility of entire operations of SDDS. To oversee the progress of implementation, Working Group and Steering Committees were set up.

The NSO devised a strategic action plan to meet the standards on real sector data categories and initiated simultaneous actions like:

(i) holding meetings with the representative of the data sources agencies to emphasize the importance of SDDS to the country and the necessity to upgrade the statistical machinery in the source agencies;
(ii) supporting the resource requirement plans of the source agencies;
(iii) seeking the views of the countries which had subscribed to the SDDS on the Standards and their experiences;
(iv) identifying the problem areas and data gaps for arriving at possible solutions;
(v) undertaking study visits to the advanced statistical systems;
(vi) requesting the IMF to conduct workshops on compilation of quarterly national accounts;
(vii) conducting three pilot quarterly estimates of GDP, beginning with the quarter October-December, 1996 -- first two exercise for identifying the assumptions, which would appear as foot notes, and the third exercise for incorporating refinements in the methodology and the data availability;
(viii) conducting a pilot study with the objective of generating quarterly employment statistics from the sub-rounds of the annual thin sample survey on the subject;
(ix) holding meetings with the data source agencies to reduce the time lag in the IIP; and,
(x) reducing the time lag in the CPIs within the existing system of compilation.

The implementation of the above plan enabled India to be in observance of SDDS in respect of Real sector data categories.

Environment Statistics: **D**epletion of natural resources and growing pace of degradation brought the issue of environment management at the forefront in 1970s. Environment being a multidisciplinary subject like Bio-diversity, atmosphere, water, land, soil and human settlements, it became necessary to develop an efficient statistical system on environment that could meet the growing demand of data on various aspects of environment by various governmental agencies, environmentalists and general public.

Recognizing the importance of environment statistics, the subject was first discussed in the central-state coordination forum i.e. COCSSO and on its recommendations, a multidisciplinary working group with members from Department of Environment, NSO, State Directorates of Economics & Statistics, and research institutions was set up. The group suggested a provisional list of variables as framework for development of Environment Statistics. It also suggested few variables on which data need to be collected on urgent basis. Thereafter, a Steering Committee on Environment Statistics was set up in NSO under the Chairmanship of Director General, which finalized the framework for development of environment statistics along with table formats, and identification of data source agencies. The Committee approved the first compendium of Environment Statistics which presented the available data relating to environment in India. The compendium was prepared under the broad framework for Development of Environment Statistics. Subsequently, 7 more issues of the Compendium have been brought out.

Natural Resource Accounting (NRA): The Conventional Accounting does not take into account the environmental component and their contribution to the economic development. To understand the links between economy and environment, the concept of Integrated Environment and Economic Accounting (IEEA) emerged on the initiative of the United Nations. This field of Environmental Accounting is at a developing stage in India.

The entire process of Environment Accounting of Natural Resources involves three steps viz. Physical accounting, monetary valuation and Integration with Economic Accounting. To begin with, a Technical Working group on Natural Resource Accounting constituted in NSO developed the concept paper and recommended covering all sectors of the economy with major emphasis on Forests and Biodiversity, Minerals, Marine resources, and Energy. To start with, the available secondary data, gaps and requirement of additional primary data was identified. In 1999-2000, a pilot project on Natural Resource Accounting was started in one of the States, namely Goa.

The findings of the study generated lot of discussion. In order to develop sector-wise uniform methodology for natural resource accounting, the NSO has commissioned eight studies on NRA to specialized institutions. The reports of these eight studies have been finalised. Based on these studies, technical papers for different sectors on methodology, data requirement, filling up of data gaps for NRA will be prepared to develop national level framework for different sectors.

National Disaster Statistical System: Natural and human induced disasters cause unimaginable loss of life and property and damages to public and private infrastructure, eroding gains of hard earned economic development and resulting in expenses on relief and rehabilitation. Of late, disasters are on the rise due to climate changes, unplanned human settlement, unsafe building practices and other factors. These developments have led to paradigm shift in disaster management from one of post disaster relief and reconstruction to a holistic management of disaster encompassing pre-disaster prevention, mitigation, preparedness on disaster response and post disaster relief, reconstruction and recovery.

The holistic management of data requires analytical data on hazards, risks and vulnerabilities of different natural and human induced disasters at all levels. At present raw data on different aspects of disaster are confined to newspaper reports or official files. Sometimes periodical bulletins and reports are published by some agencies, but there is no system to collect, compile, validate and publish such data at one place on a regular basis for use of policy makers, analysts, disaster managers and other users. Thus, a need was felt for development of comprehensive national data base on disasters which would facilitate formulation of area specific disaster risk profile, assessment of long term impact of disasters, development of policies, strategies and frameworks, preparation of proper planning for disaster preparedness and allocation of adequate resources for prevention and mitigation of disasters.

In April 2007, the NSO made a beginning by organizing a brainstorming workshop in collaboration with National Institute of Disaster Management, wherein issues for development of statistical system on hazards and disaster statistics were discussed. Issues like criteria for defining disasters, indicators for data collection, responsibility of various organisations, formats for data collection, methodology for estimation and reporting of losses, measurement Impact issues etc. were discussed in details. As a follow up of the workshop, two Committees have been set up. One Committee with examine in details the existing status of hazard statistics in the country and suggest methodological and institutional improvements needed to develop a comprehensive data base in the country. Second Committee will perform the similar work for disaster statistics.

Thus, basically India follows a system of organizing Workshops for brainstorming the issues, and setting up of Committees / Working Groups, with all stake holders as members, for dealing with emerging statistical issues. This system is working fine.