# STATISTICS ON EDUCATION[*]

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## 1.     INTRODUCTION

The nexus between education and national development is well established. As such, education figures prominently in the policy and programme planning agenda of most countries across the globe. Education is also an important priority area on the national agenda. There are several important goals and targets to be reached in education for it to contribute effectively to national development.  This requires careful planning and formulation of effective programmes and schemes.  Evidence based planning and management of education has become important not only to justify higher investments in the social sector but also enhance the competitiveness of India in the global economy. Therefore, for proper planning and policy making, very reliable and elaborate statistical base is a critical need.  Given that educational planning has been recognised as an integral part of socio-economic planning, reliable and elaborate statistical base in education is necessary.  A sound statistical base in education assumes further importance   because India  is increasingly recognising  the crucial role of education in  socio-economic development.  The availability of timely, relevant and reliable information on education at all levels (national, state, district, sub-district and school levels) makes a critical input for effective educational planning, administration, monitoring and evaluation. .

Educational statistics assume greater significance today than ever in view of the structural and systematic changes that are rapidly taking place in the social and economic sectors in India. Effective implementation of government plans and   schemes obviously depends upon the powerful information base consisting of both quantitative and qualitative data in the international, national and sub-national contexts.  Not only that socio-economic planning requires convergence of strategic national development goals set in various sector plans but also defining the long-term development trajectory of the country.  A sound and objective oriented elaborate database in each of the sectors in the Indian economy, including education, therefore, becomes a non-negotiable enabling institutional requirement to place the country on the strategic development path.

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[*]     Substantial parts of the paper have been drawn from authors' earlier articles (Tilak and Panchamukhi 2001; and Tilak 1993).

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Development policy interventions in India, of late, have been emphasising decentralisation in most of the sectors in general and in educational planning and administration in particular. The 73rd and 74th amendments to the Constitution emphasise decentralised decision-making for the development of the rural areas and also the urban local bodies, and make a pointed reference to education where decentralisation is considered highly desirable for the not only for purposes of efficiency and equity but also for effectively aligning programme planning to local contexts and needs. The Right to Education Act 2009 also outlines an elaborate role for decentralised planning and administrative machinery in making elementary education a fundamental right. In this context also, a strong database at sub-national levels, particularly at the district and lower levels, would be essential. An education sector specific database would greatly facilitate not only educational planning but also provide inputs to planning of such aspects as manpower, labour market, demography, health etc. Educational statistics are necessary for both short-term planning and extremely useful for perspective planning as well. In short, a sound information base relating to education can be considered to play an important role in educational planning, and overall economic planning in the country. Hence, long-term considerations should be borne in mind in deciding about reforming the statistical information systems.

While policy makers and planners experience the need for comprehensive database, researchers on education also experience in their research the need for latest, reliable and inter-temporally and inter-regionally comparable data and information. Research in education can be considered under two heads, namely, conceptual research and empirical research. Obviously, the two are not mutually exclusive; in fact, one feeds on the other. Empirical studies drawing certain generalisations for the purpose of conceptualisation, and the conceptual research trying to test the concepts -- both require a sound information base. Educational research has to depend upon the information on many aspects, including intangibles. Demand of the researchers for data in this field is qualitatively of a different character. Researchers struggling to measure the phenomena, like human development, educational standards, performance levels in education, interface between educational status and health status etc., require data on diverse aspects of these phenomena. In view of the difficulty in precise conceptualisation and definition of these phenomena, most often the phenomena are indicated by what are termed as the indicants rather than the variables in question themselves. Thus, the indicants of the social phenomena may be innumerable, some of which could be even intangible, and in whose case, once again, information on the 'indicants' may be felt necessary. Hence, the education researcher is actually engulfed by what may be termed as the need for 'information quagmire' or 'data labyrinth'. It depends upon the efficiency and expertise

of the researcher in such a context to judiciously identify the relevant information and data and use them for the purpose of meaningful analysis.

One can identify four purposes for which educational statistics are important: (a) for making sound policies and effective plans, (b) for efficient administration and management, (c) for research, and (d) for information, and dissemination of information. For the purposes of proper policymaking, planning, and management and for research, very reliable and elaborate statistical base is critical. The various purposes for which education statistics are required by the planners, policymakers and researchers can be grouped into two broad categories, as shown in Figure 1.

**Figure 1: Purpose for which Educational Statistics are Required**
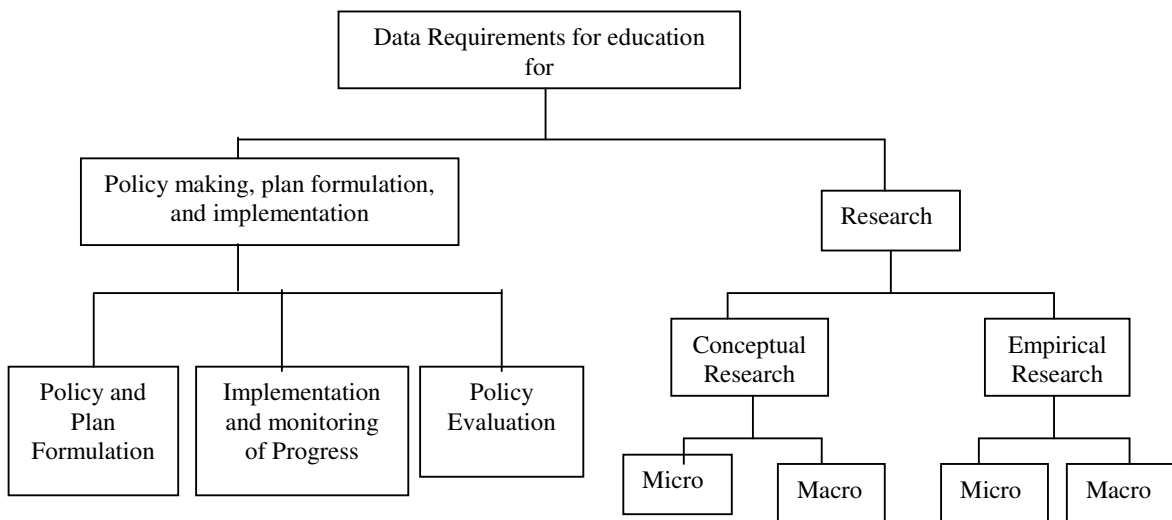


Large parts of data required for different purposes described in Figure 1 might be common. In other words, same data sets could be put to different uses. One may require some additional details for a specific purpose. For a long time in the development planning process, the information system, relating particularly to education in India, did not receive due attention. Educational statistics divisions and statistical officers even today continue to remain marginalised. However, with the shift in the perceptions of the policy planners about the role of education in development, particularly education as 'investment, the development planning paradigm in the social sector has changed significantly during the last two decades. With the increasing awareness of the role of education in socio-economic planning, the nature, quality and scope of the system of education statistics, their collection processes, and publication have improved in the country,

although much needs to be done to improve the existing information system on education   for facilitating strategic planning and efficient management of the sector.

Concentrating on these aspects, the present paper attempts to:

♦ review the current status of educational statistics,
♦ identify and discuss problems relating to educational statistics including their reliability, comparability of data collected by various institutions, gaps in data and the bottlenecks in their timely processing and dissemination, and outline important strategies for streamlining and improving the whole system.

The unsatisfactory status of educational statistics in India did receive the attention of researchers and  planners much earlier.  There was a high level committee constituted to review educational statistics in 1982 (Ministry of Education, 1982). In addition, there were a few important accounts of the status of education statistics and several suggestions also have flown from those studies and reports.[1]   Some aspects of the diagnosis and some of the recommendations made earlier are   still valid.  Since the turn of this century, the Government of India has taken several initiatives to improve the education management information system in the country that includes constitution of the Review Committee on Educational Statistics under the chairmanship of S. Sathyam in 2007 and an Expert Group under the Chairmanship of R. Govinda in 2011. The Review Committee on Educational Statistics constituted by the MHRD recommended adopting unified system for collection and dissemination of educational statistics to overcome difficulties arising from multiple sources of data . Subsequently, the expert group on unified educational statistics provided a road map to evolve the unified system for collection of school education statistics.  While the Sathyam Committee came out with around 120 recommendations to improve the database for education sector as a whole, it suggested several major interventions for improving the current database in school education, which includes expanding the information infrastructure and staff at all levels, from national to state, district, block and cluster levels, going for an unified set of concepts and definitions in school education, a unified system of school education statistics, use of technology for improving collection, collation and dissemination of educational statistics and online access to raw data for deepening the use of educational statistics in research, planning and management of education and improving accountability through building public awareness and enabling  wider participation of various stakeholders in  education development debates (MHRD, 2008).

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1. For example, see Kamat (1977), Srivastava and Hirinnaih (1977), Pandit (1976), Dhar (1978), Kwatra (1978), Department of Education (1977), IAMR (1981), and Tilak (1985).

Putting in place a unified system of school education statistics was the most challenging recommendation of the Sathyam Committee. While accepting the Sathyam Committee recommendations, the Ministry of Human Resource Development, Government of India took an important step in constituting the Expert Group headed by R. Govinda to prepare a road map for implementing the Unified District Information System for Education (UDISE) in the country. The road map recommended by the expert group on UDISE-included establishing a dedicated department at national, state and district levels to act as a nodal agency/point for collection and dissemination of school education statistics. The expert group suggested that the mechanism to collect and disseminate school education statistics ought not to be tied to any education development schemes/programmes. Further, it recommended integration of existing databases on school education designed and maintained by NUEPA, i.e. the District Information System for Education (DISE) relating to elementary education and the Secondary Education Management Information System (SEMIS) into one single system in phases from the academic year 2012-13 onwards. It was also observed that   proper maintenance of records in schools is a critical ingredient in the adoption and sustenance of unified system for collection of school education statistics. The expert group identified a set of core records to be maintained by each school and recommended its adoption across the country.

The attempt of the paper here is to present an updated view of the current status and highlight the needed improvements. While discussing the present status of educational statistics, the role of the various agencies in collection, processing and publication of the educational statistics like the Ministry of Human Resource Development (MHRD), Central Statistical Organisation (CSO), National Sample Survey Organisation (NSSO), the National Informatics Centre (NIC), the National Council of Educational Research and Training (NCERT), National University of Educational Planning and Administration (NUEPA) etc., are also briefly described.  The requirements of researchers and planners, and gaps in educational statistics are identified.

The paper is organised in four  sections, including the introductory section.  Section 2 proposes to make a critical assessment of the nature and quality of educational statistics collected and published by various organisations, mainly the Department of Education (DOE) of the MHRD, the NCERT, the NUEPA, and the NSSO.  Strengths, deficiencies and gaps in the data are also identified.  It presents a panoramic view about the nature of the data requirements and availability for the purpose of research as well as policymaking and planning in education.  Section 3 gives a brief account of efforts toward computerisation of educational statistics or the electronic management information system in India and Section 4 presents a short summary and   outlines a

few recommendations for the improvement of the status of education statistics in the country – in terms of the scope, converge, quality, reliability and timely publication.

**2.      Nature and Status of Educational Statistics**

A large number of organisations collect and publish educational statistics that are used in one form or the other in educational planning and research in India.   These organisations are broadly of two categories:

♦ Those which are directly involved in education decision making or in providing technical support in decision making and collect statistics as a part of their regular activities; and
♦ Those organisations which although are not directly involved in any education function, nevertheless collect statistical information from primary and secondary sources.

Some of the organisations of the first category include the  Departments of School Education and Literacy (DSE&L) and Higher Education (DHE) of the MHRD, University Grants Commission (UGC), Planning Commission, National Council of Educational Research and Training (NCERT), National University of Educational Planning and Administration (NUEPA) etc.  The second category includes the Office of the Registrar General of India (Census of India), the Directorate General of Employment and Training (DGET), National Sample Survey Organisation (NSSO), etc.

Educational statistics can be classified as follows:

♦ *Regular educational statistics*, such as the ones published by  the MHRD, NCERT, UGC, Office  the Registrar General of India, etc.,
♦ *Ad-hoc educational statistics*, collected and published by NSSO, National Council of Applied Economic Research (NCAER), DGET, International Institute of Population Studies (National Family and Health Surveys of IIPS), etc., and
♦ *Purpose-specific educational statistics*, such as the ones collected largely from secondary sources by the Institute of Applied Manpower Research (IAMR), Planning Commission, Indian Council of Medical Research (ICMR) (for information on medical education in India), All-India Council for Technical Education (AICTE) (for technical education), Indian Council of Agricultural Research  (ICAR) (for information on agricultural education in India), and Indian Council of Social Science Research (for information on social sciences).

It may be useful to note the nature of educational statistics available from some of the above sources.

a)      **Departments of School/Higher Education, Ministry of Human Resource Development**

Obviously the MHRD is the single most important official source of educational statistics, published by the Government of India.  The Departments of School/Higher Education of the MHRD publish a large set of statistics on education in a number of publications, some of which are annual publications, some are periodically produced, and some are produced occasionally.  Some important

publications are listed in Table 1.  The list is selective and not exhaustive.  There are quite a few publications, many of them being occasionally published, and some others discontinued.

**Table 1: Selected List of Statistical Publications of Department of School/Higher Education, Ministry of Human Resource Development, GOI**

| Sl. No | Name of the Publication | Periodicity |
|---|---|---|
| 1. | Education in India | Annual |
| 2. | Selected Educational Statistics discontinued since 2007-08 | Annual |
| 3 | Statistics of School Education | Annual |
| 4 | Statistics of Higher and Technical Education | Annual |
| 5. | Handbook of Education and Allied Statistics | Occasional |
| 6 | National Level Educational Statistics at a Glance | Annual |
| 7 | Educational Statistics at a Glance | Annual |
| 8. | Analysis of Budget Expenditure on Education | Annual |
| 9 | Annual Financial Statistics of Education Sector | Annual |
| 10 | Allocation of Plan Expenditure during FYPs | One for every five-year plan since 10$^{th}$ Plan |
| 11 | Results of High School and Higher Secondary Examinations | Annual |
| 12 | Foreign Students Studying in Indian Universities | Occasional |
| 13. | Indian Students and Trainees Going Abroad | Annual |
| 14 | Annual Report of the MHRD | Annual |

A brief description of the most important among these publications is given below.

### i)        Education in India

Of all, *Education in India* is the most important one; it gives comprehensive statistics on a variety of aspects of education, by levels and by states every year.  This is being published since 1946-47.  For several years it was published in three volumes: Volume I concentrates on enrolments, teachers and institutions; Volume II provides details on incomes and expenditures of educational institutions; and Volume III is on examinations.  Since 1984-85, each volume has further been split into two parts, one on school education, and another on colleges.

The present existing system of collection of educational statistics was introduced in 1976-77 on the basis of the recommendations of the Sixth All-India Conference on Educational Statistics, held in 1975.  Under this system, it was decided to collect the basic minimum statistics on education from state governments with a staggering time schedule in different types of forms, namely, ES-I, ES-II, ES-III and ES-IV.[2]  Further, it was also decided that detailed data on education would be

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2.   (a) *Form ES-I* (Numerical Data): This form covers information on number of institutions, enrolment, and teachers by sex and type of institutions, enrolment by stages/courses and enrolment by classes (grades) with sex-wise break-up also. (b) *Form ES-II* (Financial Data): Under this form important statistics relating to income of

collected on quinquennial basis to fill up the gaps under the annual system.  It was also proposed that sample surveys would be conducted on regular basis to fill up other data gaps.  In addition, it was also decided to collect certain important and basic statistics (data on number of students, institutions and teachers) quinquennially at district level that would help in analysing regional disparities in education and to formulate plans and programmes for reducing disparities.

Statistics are collected from the individual education institutions, but they are consolidated at block, district, state and national levels.  State-wise and national level data are finally made available in published form in *Education in India*.

*Education in India*, earlier used to be the principal source of information, provides a lot of useful statistics.  The statistics provided therein enable one to build time-series data on a few select important dimensions of education situation, enables inter-state, inter-temporal and intra-sectoral (inter-level) comparisons.  It provides information for estimating enrolment ratios, pupil-teacher ratios, expenditure per student, and analysing income and expenditure aspects of education by levels.   However, *Education in India* suffers from some major weaknesses.  It lacks  important information on: (a) un-recognised institutions; (b) non-formal education; (c) wastage, stagnation, survival and promotion rates; (d) socio-economic background of students; (e) attrition rate of teachers; (f) data on school attendance; and (g) enrolment by age-groups.  In fact, there are many more weaknesses and gaps, some of which are associated with other publications as well, and some of which are described in later sections.

Secondly, there has been a long time-lag in the collection of educational statistics. It is 3-4 years in the case of some states in respect of Vol. I (on students, institutions and teachers) and more so in case of financial statistics (Vol. II) and still longer in case of Vol. III. The latest volume on *Education in India* is available for the year 1999-2000, dated by more than 12 years.  Vol. III seems to have been discarded altogether.  The major reasons for time-lag are reported to be:  the huge magnitude of the number of institutions from which the data is to be collected; delay in the printing and consequential supply of institutional proforma by the states; lack of sufficient and trained statistical staff, particularly at the district and block levels; and low priority given to collection

different educational institutions by source and expenditure incurred by items and type of expenditure break-up in the recurring and non-recurring is also collected. (c) *Form ES-III* (Examination Data): Information is collected through this form on the examination results (Matriculation and above standards) of different courses run by the universities and boards.  Information is collected in respect of number of students appeared and number of students passed. (d) *Form ES-IV* (Numerical Data in respect of Scheduled Castes and Scheduled Tribes): This form is similar to Form ES-I, the only difference being that this form is meant for Scheduled Caste and Scheduled Tribe students only.  Information is collected in respect of student enrolments and teachers belonging to Schedule Castes and Scheduled Tribes. All the Forms are canvassed annually to collect the statistics at state level only.

processes in general. However, there is a long time lag in processing and publication as well. Latest volumes on college education [Vols. I, II and III (C)] refer to much earlier years.

For a long time after independence, *Education in India* was being published in two volumes, i.e., *Education in India* and *Education in States*. The later ceased its publication in the late 1960s. The MHRD seems to be attempted at reviving the same, and also published a similar one in the form of *Education in the States/Union Territories*. The first volume was published in 1998 and the second volume in 1999. It gives a few details in brief on several aspects of education situation in the several states and union territories.

### ii)      Selected Educational Statistics/Statistics of School Education

*Selected Educational Statistics*, another important publication of the Department of Education, of the MHRD, is, in a sense, an answer to some problems of time lag. This annual publication contains the same data as are available in *Education in India*, but very briefly. More importantly, it is published until recently with very little time lag. It gives state-wise information on educational institutions, by levels, enrolments of total, scheduled caste and scheduled tribe population, by gender, teachers, pupil-teacher ratios, gross enrolment ratios, and a one-page information on state-wise plan and non-plan budget expenditure on education (totals). Obviously, the most important shortcoming of this publication is absence of many details, including specifically on income and expenditure. Secondly, when many of the statistics provided in it are provisional in nature, one occasionally finds differences in the statistics provided in *Education in India* and the *Selected Educational Statistics*. Moreover, since 2007/08, the publication *Selected Educational Statistics* seems to have been replaced with the publication entitled *Statistics of School Education:* the latest volume of the Statistics of School Education is available for the year 2010-11.

### iii)     Analysis of Budgeted Expenditure on Education

The *Analysis of Budgeted Expenditure on Education* published annually by the MHRD covers a three-year period, and gives several details on budgeted expenditure on education by levels and states. This publication provides information on actual, revised and budget estimates on various categories for three consecutive years. The latest year for which this publication is available refers to 2011/12 along with time-series data. Quite a few important details are available on budget expenditures on education, including by levels of education, and major items (heads) of

expenditures. Data given in this volume and those in *Education in India* are not strictly comparable, but they are somewhat complementary.

*The Analysis of Budget Expenditure* concentrates on government expenditure only and follows a government budgetary classification and provides details on plan and non-plan expenditures and under revenue and capital accounts; but misses quite a few important details, while *Education in India* adopts a more functional economic classification of expenditures and incomes, such as recurring and non-recurring incomes/expenditures.[3] *Budget Analysis* also does not give any idea of the income and related aspects of the education sector. Expenditures are disaggregated by certain items, but not exhaustively. Important details such as expenditure on salaries of teachers and others are not separately given.

Another annual publication titled *Annual Financial Statistics of Education Sector* was started by the MHRD since 1996. It presented summarised details of the budget expenditures on education, given in the *Analysis of Budget Expenditures*. This publication also seems to have been discontinued by the MHRD. In fact, hardly a few additional details were available in the *Annual Financial Statistics* that were not available in the *Analysis of Budget Expenditure*.

### iv) Other Publications of the MHRD

The MHRD also publishes quite a few other important statistical volumes. For example, it publishes *A Handbook of Education and Allied Statistics*. The first publication in this series was brought out in 1980 and the fourth in 1996. Though it is a handbook giving information in nutshell over a time period -- continuously or often at regular intervals, yet it is a very useful publication and provides information collected from various sources. Besides, the MHRD is bringing out the publication entitled *Results of High School and Higher Secondary School Examinations* since 2007/08, *Educational Statistics at a Glance* since 2008, and *Statistics of Higher and Technical Education* since 2006/07.

As described in Table 1, there are quite a few other important publications of the DSE&L and DHE, MHRD on a variety of aspects of education in India -- at the national level and at state level. Most of these publications are useful, when these focus on aspects that are not covered in other volumes. But some publications are drawn from some other equally popular publications of the MHRD that are produced almost around the same time.

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3. Until the middle of the 1970s, they were classified into 'direct' and 'indirect' incomes/ expenditures.

It may be mentioned that, recently, the MHRD has initiated a survey, i.e. *All India Survey on Higher Education (AISHE)* to create a database to assess the status of tertiary education in the country. A Task Force headed by the Additional Secretary (HE), MHRD with representatives from UGC, AICTE, MCI, IASRI, CSO, Universities, State Higher Education Departments oversee the survey. The first (2010-11) survey report provides a profile of higher education institutions, including profiles of teachers, non-teaching staff, academic programmes conducted by school/centre/department/faculty, intake/enrolment in higher education institutions, examination results and receipt and expenditures of higher education institutions. The survey is an annual feature and the latest report of the survey (provisional) is available for the year 2011-12.

The survey covers the entire country. In the survey, institutions of higher education have been categorised into three broad categories –i.e. universities, colleges and stand-alone institutions. A list of 621 universities, 32974 colleges, and 11095 stand alone stand institutions was prepared during the first survey for the year 2010-11. In the absence of the data on the total number of institutions of higher learning in India, the core list of institutions to be covered in the survey has been prepared by consulting the websites of the state governments, ministries and institution and consulting the central ministries, councils and state governments for providing the list of institutions under their control. Therefore, the list of institutions of higher learning prepared for the survey is not exhaustive. The first survey (report published in 2012), however, could cover only 554 universities, 17023 colleges and 5713 stand alone institutions. The survey is conducted online for which a dedicated portal (http://aishe.gov.in) has been developed. The survey uses an e-DCF for collecting data, which can be expanded according to the structure/size of the institution. Once data are uploaded by all the institutions covered under the survey, data compilation is done automatically in pre-designed report formats. One unique feature is that the filled in DCFs are always available
on the portal, which can be accessed by the institutions and related departments and authorities. So far, the survey has not been successful in covering all the institutions of higher learning in the country as it collects data online using the portal, http://aishe.gov.in. It will take some time to institutionalise the survey process and create a reliable database on higher education in India. As of now, this – a large sample survey, seems to be the only source of information on higher education in India.

In addition to some of the problems described above, there are two important problems associated with the several publications of the MHRD. First, many a time, statistics published in different publications are not consistent with each other. For example, there are differences even in the case of enrolments given in the *Education in India* and *Selected Educational Statistics*.

Secondly, how far are the educational statistics published by the MHRD reliable?  It is widely opined that the statistics on enrolments given in the MHRD publications and also a few other publications (e.g., NUEPA) that rely on data collected from schools, could be over-biased, as schools tend to over report enrolments with a view to (a) get more teaching posts, (b) get more other enrolment-dependent grants and incentives under various education development schemes such as the *Sarva Siksha Abhiyan* (SSA) and the *Rashtriya Madhyamik Shiksha Abhiyan* (RMSA), and (c) give a false idea of rapid progress in enrolment drives and towards reaching the goal of universalization of elementary education.  As a result, the statistics on not only enrolments, but also on pupil-teacher ratios, wastage/dropout rates etc., are subject to suspicion.

**b)      National Council of Educational Research and Training**

*i)       All-India Educational Surveys*

*All-India Educational Surveys* are another important source of educational statistics in India. These surveys were launched in the beginning with a view essentially to provide critical inputs into the formulation of the five-year Plans, by providing information on schooling facilities and other related aspects.  These *Survey*s give a clear picture of the nature and quantum of educational facilities available in the vicinity of every habitation in the country and help to properly plan and locate primary, middle, and high/higher secondary schools in the plan period.  After all, this is one of the earlier stated primary purposes of the surveys.

The *All-India Educational Surv*eys, among others, provide information on:

♦ rural and urban habitations by population slabs served by primary, upper-primary; secondary and higher secondary schools within a defined distance from the nearby habitations;
♦ villages according to the facilities for non- formal education;
♦ villages according to the facilities for adult education and functional literacy;
♦ primary, middle, secondary and higher secondary schools with various types of facilities available, including infrastructural facilities, such as type/quality of buildings, number of classrooms, space, playgrounds, instructional and learning material, quality of teachers, etc.;
♦ class-wise and gender-wise enrolment of children by age in urban and rural areas;
♦ number of teachers by gender and by qualifications (of science and mathematics teachers);
♦ attrition rate of teachers in primary, middle, secondary and higher secondary schools;
♦ schools offering vocational courses, enrolment in vocational classes, availability of workshop facilities and qualification of teachers, etc.

Thus the information provided by these surveys is indeed unique, because it is not available otherwise from any other source.  This refers particularly to the quantity and quality of schooling facilities available across the nation.   Such information was extremely useful for launching

programmes, like 'Operation Blackboard', proposed in the *National Policy on Education 1986*[4] and the implementation of various provisions of the Right to Education Act relating to establishment of schools in neighbourhoods.   Further, the strength of these surveys is that they are a census counts rather than a sample survey, implying that facilities and the related aspects about each school are enumerated. Normally the *All-India Educational Surveys* do not collect any data on finances and related aspects.[5]   Also except in case of the third survey, higher education is deliberately kept outside the scope of these surveys.  The surveys are confined to school education only.

So far,  eight surveys have been conducted.  The first survey was conducted in 1957 by the Ministry of Education and Social Welfare[7]. It provided valuable inputs for the formulation of the Third Five Year-Plan that focused on expansion of schooling facilities on a large scale.    The periodicity of the surveys was decided in such a way that they provide inputs for the five-year Plans. However, it could not exactly happen in case of subsequent surveys and the subsequent five-year plans, due to inordinate delays in launching and conducting the surveys and processing the information.[8] The seventh in the series was renamed as 7th All India School Education Survey (7th AISES, with the reference date of 30th September 2002 ) to specifically indicate its scope i.e., School Education. The 8th AISES with 30th September 2009 as the reference date focuses on collecting relevant data for monitoring implementation of the SSA.

The overall objective of the 8th All-India Educational Survey was to develop the database to estimate and analyze a set of educational indicators for:

- Describing the current status of school education system at different levels with respect to access, enrolment, retention, participation in school process and achievement,
- Assessing the progress of educational development and indirectly the success of policies, programmes and project interventions by tracking the direction and magnitude of change in the values of the indicators over time, and identifying problems or deficiencies in the system for necessary intervention, and
- Assessing equity in educational opportunities and achievements across relevant levels and sub-populations of the education system for possible interventions needed to remove disparity by administrators, policy makers and researchers

The coverage of the data collected under the 8th survey is as follows:

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4.  That the operation blackboard programme was planned on the basis of the fourth survey conducted in 1978 (and not the fifth survey conducted in 1986) is a different matter.  The fifth survey results were not available at the time of the designing of the programme.

5.  Occasionally the surveys attempted at collection of some financial data; but could not obtain reliable and comprehensive data and detail; hence the meagre data collected are not published..

7.  All the subsequent surveys were conducted by the NCERT.

8.   That the five-year Plans also could not be initiated at regular intervals (of five years) is a different matter.

- Availability of schooling facility for primary, upper-primary, secondary and higher secondary stages within the habitations (including SC/ST) in different population slabs. In case the facility is not within the habitation, the distance at which available.
- Availability of basic facilities in the recognized schools such as building, classrooms, drinking water, electricity, urinals, lavatories, incentive schemes and beneficiaries, medical check-up and vaccination/inoculation of students.
- Class-wise enrolment (all categories, SC, ST, OBC, Economically backward minority communities - Muslim) and children with disabilities by sex) in primary, upper primary, secondary and higher secondary stages of recognized schools.
- The subject-wise enrolment at higher secondary stage, availability of laboratories and library, physical education teachers, librarian, guidance counselor, non-teaching staff in the recognized secondary and higher secondary schools.
- The position of teachers (by sex and SC/ST/OBC/) with academic and professional qualifications at different school stages in recognized schools.
- Distribution of recognized schools in regard to languages taught and languages used as medium of instruction.
- Enrolment and teachers in primary/upper primary classes of unrecognized schools.
- The position of enrolment and instructors in schools/centres under the Education Guarantee Scheme & Alternative and Innovative Education (EGS&AIE).
- Number of children and teachers by sex in pre-primary schools.
- The position of enrolment and teachers in oriental schools, viz., *Maktabs*, *Madrasas* and *Sanskrit Pathshalas*.
- Class-wise enrolment by single age, new entrants, promotees, and repeaters in the context of UEE (NCERT, 2013).

The second survey was conducted in 1965, the third survey in 1973, the fourth in 1978, the fifth in 1986, the sixth in 1993, the seventh in 2002 and the eighth in 2009. Except the first one, all others were conducted by NCERT. Except the fourth survey, all other surveys were conducted with a gap of more than five years. In view of differences in periodicity, a systematic comparison of the progress in respect of education during different five-year Plans would be difficult. It is desirable to have such educational surveys at specified fixed intervals. These surveys should immediately precede the starting of the five-year Plan so that information is available for plan purposes, as originally anticipated. Also, the gap between two successive surveys should be strictly five years; this will facilitate the assessment of progress for a uniform period of five years.

The reference date for different surveys also differed. For the first survey, the reference date was 31st March 1957. With regard to the other surveys it was decided to have reference date when enrolment in schools gets stabilised. For the second, third and fourth educational surveys, the reference date was 31st December of the respective years of survey, and for the fifth and the sixth surveys, the reference date was 30th September, 1986 and 30 September 1993 respectively. For this reason also, precise comparison of the information between surveys becomes difficult. However, by and large, the information may be taken to refer to the year in which reference date falls.

More importantly, because of the erratic periodicity of the surveys, the results of the surveys could not provide timely inputs into the formulation of the five-year Plans, and in general, their utility in planning gets reduced. That many operations involved in the survey were manual in nature posed quite a few other problems in addition to delay in their production. The surveys could not provide required details at micro decentralised levels, including at district levels. The focus had been on the national and state level results and the records of the results at district and below district levels were not maintained. In fact, raw data were lost. The surveys are conducted by the NCERT with the assistance of state education departments. That there is no permanent structure and machinery to conduct the surveys on a regular basis is found to be an important problem. It is for the sixth survey that NCERT collaborated for the first time with the National Informatics Centre (NIC). Though the arrangement did not reduce the time lag much, it was envisaged that (a) decentralised level data would be available, and (b) data would be available to the planners and researchers in electronic media.[9]        Since then the quality of AISES has improved significantly. However, the large time lag in making the survey data available for use in policy planning and programme management is making the data obsolete and less useful.

In addition to the problems relating to time lag, retrieval and other aspects, another major problem relates to incompatibility of the survey data with the data collected by the MHRD. Substantial differences are found between the two with respect to enrolments and several aspects. Attempts to reconcile the two data sets were not found to be easy.[10]

From the above, it is clear that *All-India Educational Surveys* are very useful sources of educational statistics. The last three surveys have compiled comprehensive information, all of which is computerised. Unfortunately, school-wise and village-wise information from all the surveys is not available at all in a systematic way. Since these data were not computerised, such inter-temporal comparisons of the details about education are unfortunately not possible. It is alarming to learn that some data are even destroyed after every three years because of difficulties in storage.

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9   Data sets are now made available on CD-ROMs by the NCERT.

10  See, for example, Mehta (1993) for similar details relating to the sixth survey.

11  The quinquennial surveys are based on about 1,20,000 households and annual rounds on about 40,000 households.

Table 2 presents survey-wise details in a summary form.  Apart from the year, reference date, scope, status of computerisation, the table gives brief comments on whether the survey data are comparable with those from other sources, and on other aspects.

**Table 2: All-India Educational Surveys – Survey wise Details and Comments**

| Survey and Responsible Agency | Year and Reference Date | Scope | Status on Computerisation | Reconciliation of Data with Other Sources and Other Comments |
|---|---|---|---|---|
| (1) | (2) | (3) | (4) | (5) |
| **First Survey**<br><br>Ministry of Education & Social Welfare (MOE) | 1957<br><br>31.3.1957 | School education<br><br>Census enumeration of schools, teachers, enrolment, etc. Only recognised primary schools as the first enumeration unit. Village as the second enumeration unit.<br>All habitations in the village considered. | Not computerised | These data are not reconciled with the Census enrolment figures or figures published by the MOE. |
| **Second Survey**<br><br>MOE and NCERT | 1965<br><br>31.12.1965 | As above | Not computerised | These data are not reconciled with the census figures or figures published by the MOE. |
| **Third Survey**<br><br>MOE, NCERT, IAMR and UGC. | 1973<br><br>31.12.1973 | School education, college education and university education<br><br>For the first time enumeration of unrecognised schools was attempted.<br><br>Teacher training institutes at pre-primary, elementary and secondary levels.<br><br>Professional profiles of teacher educators developed.  Hostels for SCs and STs also covered | Partially computerised | Reconciliation of these data with the data from other sources not attempted. |

| | | Data on financing of education including the financing of private schools were also collected.

Information about school buildings, playgrounds, laboratories was also part of the survey.

Sampling frame as in the case of the first and second surveys. | | |
|---|---|---|---|---|
| **Fourth Survey** | 1978 31.12.1978 | School stage | | Report brought out in 1980 |
| **Fifth Survey** | 1986 30.9.1986 | School stage, Educational facilities at various school stages.

Distance of the school from the habitation particularly of SC and ST population.

Availability of physical facilities, like school buildings, play- grounds, drinking water, urinals, lavatories, furniture and other facilities like medical check up of students, incentive scheme etc.

Position of inputs like blackboard, chalk, library, laboratory, book banks etc.

Three schedules, viz, village information form, urban information form and school information form were developed. | Most of the data not computerised. | Preliminary report of brought out in Feb. 1989.

Data are not comparable with the data collected by other agencies. |
| **Sixth Survey**

NCERT, NIC, and State/UT Govts.

Tools:

Village Information form (VIF)

Urban information form (UIF) | 1993 30.09.1993

Canvassing made to all villages,

All urban | Present position of educational facilities at various school stages, distance to be covered by child to reach the school, enrolment in general and of SC and ST and girls in particular with special reference to UEE.

Physical facilities like | Planned to be computerised

Database available on NICNET.

Provisional tables released on 19th December 1995. | Census codes and Education surveys codes are the same. Hence reconciliation with 1991 Census possible. Reconciliation not done.

Reconciliation with the data from the Ministry of Education not attempted. |

| | | | | |
|---|---|---|---|---|
| School Information form(SIF-2) of Education meant for compiling information about languages and media of instruction, school buildings, sports and other facilities, medical check up, incentive schemes for students, class-wise.<br><br>Enrolment by age and sex, for all, SC and ST.<br><br>Class-wise repeaters.<br><br>Teacher Information Form (TIF)<br><br>Educational Finance Form (EFF) Income and expenditure of the schools<br><br>College Information Form (CIF) | areas<br><br>Selected schools through SE. | playground, furniture etc.<br><br>Basic Amenities like medical check up, drinking water, urinals, etc.<br><br>Educational inputs like blackboard, library laboratory, text books bank etc. Selected school incentives for enrolment. Pre primary educational facilities.<br><br>Habitation as unit of data collection along with school as unit. | | Teachers are supposed to give information to both DOE and NCERT and the reference date for both also is reported to be 30th September. The actual data compiled for the MHRD has the purpose of facilitating determination of grants to institutions, and hence may possibly refer to the beginning of an academic year. Hence, the two sets of data are not comparable. Further probing regarding this question is necessary.<br><br>Incomplete data; not published. |
| | All teachers in selected schools<br><br>Schools and districts | | | |
| Educational Statistics: A Flash (ESF) 2% data entry error provided for. | All degree colleges with classes XI and XII.<br><br>All CD blocks/ urban areas. | | | Data are available on CD-ROMs. |
| **Seventh Survey** conducted in 2002 (reference date 30th September 2002) using more or less the same tools as that of the Sixth Survey with minor modifications with similar coverage. No attempt was made to collect finance data, while detailed data on access, participation, teachers, etc. were collected. | | | | Data available both in hard copy and in CD-ROMS. Huge time lag in making available processed data is a major limitation. |

| | |
|---|---|
| **Eighth Survey** conducted in 2009 (reference data 30th September 2009) using more or less the same tools as that of the Seventh Survey with minor modifications with similar coverage. No attempt was made to collect finance data, while detailed data on access, participation, teachers, etc. were collected. The survey was somehow focused to monitor progress towards UEE due to implementation of the SSA. The time lag in making available the processed data has almost made the survey redundant from the point of view of their ise in policy and programme planning. Too much dependency of the NCERT on NIC is perceived as the main reason for huge time lag in data availability. | Flash statistics available on the web portal; data are being processed. |

**c)      National University of Educational Planning and Administration (NUEPA)**

*i)      The District Information System for Education (DISE)*

Since the turn of the 21st century, the National University of Educational Planning and Administration (NUEPA) has been playing a critical role in revamping the information base both for school and higher education in the country. With the implementation of the externally funded primary education programme in India [i.e. the District Primary Education Programme (DPEP)] in the mid 1990s, the need for creating and/or strengthening decentralised/district level database for planning and management of elementary education was felt. NUEPA (the then NIEPA) took the lead role in developing a system for data collection and management called the *District Information System for Education* (DISE). Initially, the coverage of DISE was limited to elementary education in project districts in India, i.e. districts covered under the DPEP. With the implementation of mostly the nationally funded country-wide education for all programme called the *Sarva Siksha Abhiyan* (SSA) since 2001, the coverage of DISE expanded to ultimately include all the 640 districts and all the schools in the country. The State and District Project Offices were made responsible for collection and management of data under the DISE; the same arrangement still continues today. The point here is that such an initiative for creating a district level database on school education was undertaken in a project mode, and it is yet to be mainstreamed into the official education management information system.   It is only recently attmpts are being initiated in this direction. Although the statistics generated under the DISE were extremely useful, in fact, extensively used for policy-making, district planning and monitoring elementary education in the country, these were not formally given the status of official statistics. However, the existence of the DISE was critical for promoting evidence-based planning and management of elementary education in the country.

The DISE, for the first time, collected offline data from the school using structured Data Capture Format (DCF) and computerised the same at the district level. Data computerised at the

district level were then transmitted to state and national levels for further processing and dissemination. NUEPA acted as the nodal agency both for implementing DISE and analysis and dissemination of data collected under the DISE. It may be noted that primary and upper primary sections rather than the school was the unit for data collection under the DISE, which means that in secondary schools having primary and upper primary sections, for example, information about the secondary section and other related aspects were not collected under the DISE. Because of this segmental approach to data collection, schools were finding it difficult to provide reliable data on common facilities, for example, infrastructure, equipments, teaching and non-teaching staff. The DISE prior to becoming the part of the Unified-DISE (U-DISE) in 2012-13, was collecting information on a few key aspects of elementary education and was providing the following:

- *School profile,* including their location, management, type, size of school funds, staffing pattern, medium of instructions, number of instructional days, mode of evaluation of learning achievements, etc.;
- *Availability of physical facilities and equipments in the school*, which included information on status of school building and related infrastructure like drinking water and toilet facilities, playgrounds, boundary wall, library, IT infrastructure and computer aided learning facilities, rooms for extracurricular activities and teaching staff, disabled friendly infrastructure, etc.;
- *Mid-day-Meal information*, that included data on availability of noon meal, related infrastructure and staff for effective implementation of the scheme at the school level;
- *Profile of teachers and part-time instructors*, including information on social background of teachers, their employment status, educational and professional qualifications, teaching experience, training status, classes and subjects taught providing a rich database on teachers in elementary education sub-sector; and
- Enrolment, attendance and repeaters by location, age, grade, sex and social category.

Till 2011-12, the DISE database served as the basis for developing the district elementary education plan formulated under the SSA as well as for monitoring and reporting progress in the SSA. With the enforcement of the Right to Education Act since April 2010, the DISE database assumed further importance in planning and monitoring progress with respect to several provisions of the Act   Besides efforts by the state governments, NUEPA made concerted efforts to improve the quality, use and reach of DISE data. Apart from sample checks at the school level to improve the reliability of data, DISE was put in the public domain to facilitate extensive use of both published and raw data, which provided timely feedback from the users on the reliability of the database. A website of the DISE (www.dise.in) was created to increase access to its database and reports, which is maintained by NUEPA. However, till its merger with U-DISE, the DISE database was perceived relatively less reliable and states did not sincerely consider accepting the DISE data as their official statistics. However, the reliability and comparability of DISE data had improved significantly since 2005-06.  Discrepancy in the data for several variables reported under the DISE with that of other sources was a major problem. Some of the major publications (either in soft and hard copies) available under the DISE are:

- Flash Statistics (annual);
- Elementary Education in India (annual);
- Analytical Reports on Elementary Education in India, separate volumes for rural and urban India (annual);
- State Report Cards on Elementary Education (annual);
- District Report Cards on Elementary Education (annual);
- School Report Cards (annual, more than 1.3 million, generated online only); and
- Analytical Tables on Elementary Education in India.

### ii)    The Secondary Management Information System for Education (SEMIS)

Mid-way through the 11th FYP (in 2009), the Government of India went for implementing a country-wide development programme for secondary education in line with the SSA, called the *Rashtriya Madhyamik Siksha Abhiyan* (RMSA). The overall objective of the RMSA is to provide equitable and affordable quality secondary education for all. It aims at improving significantly access to and quality of secondary education by 2016-17, i.e. increasing GER in secondary education to 90%, improving in-school infrastructure, staffing, and teaching-learning facilities and making secondary education relevant. It may, however, be noted that the experience gained from the implementation of the SSA formed the basis for designing the RMSA. One of the important lessons learnt from the SSA was that absence of comprehensive school level data   severely affects the quality of planning and monitoring of large-scale  programmes like the SSA. In fact, the SSA had to struggle hard during its initial years of implementation to gather data and information  for taking policy decisions and effective programme planning ant the district level.  Keeping this in view, the MHRD, Government of india desired to create a district level database on secondary education prior to designing and launching the RMSA. Subsequently,    NUEPA in consultation with the state governments designed and implemented a data collection and management system for secondary education called the Secondary Education Management Information System (SEMIS) in 2007. Data collection under the SEMIS started from 2008-09 and it continued till 2011-12. The SEMIS and the DISE were then merged to create a unified system for the entire school education called the U-DISE in 2012-13 that considered school and not section/level as the unit for data collection.

Like the DISE, the SEMIS was also implemented through the project mode and formed the basis for planning and management of secondary education under the RMSA. Right from the beginning, the MHRD's emphased on evidence based planning taking school as the unit for most interventions under the RMSA. It  gave a fillip to the implementation of the SEMIS. The unique feature of the SEMIS was that it was designed as an online system for data collection and management, and as such, states had no option but to adopt the SEMIS database. NUEPA served as the nodal agency for implementing the SEMIS and *www.semis .in* was the platform for managing the

database. However, the SEMIS had a brief existence and became an offline system in 2011-12, and in 2012-13, formed a part of the U-DISE. The policy decision to make the SEMIS off line was, in fact, largely regressive as it made offline data less reliable and prone to manipulation. However, on the other hand, the decision to create the UDISE also took into consideration the school's access to ICT infrastructure, particularly the internet, that compelled the authorities to take such a decision.  Like the DISE, the SEMIS had also faced problems relating to reliability and comparability. Coverage of secondary and higher secondary level institutions, particularly privately managed institutions was a major challenge of the SEMIS. Lack of IT infrastructure at the school and district levels could not take the SEMIS to its intended level, i.e. the school.

The scope of the SEMIS was fairly broad to include all key variables on which data are required to plan both at school and district levels. The SEMIS collected information on several aspects of secondary education and provides the following:

- *School profile*, including information on location, management, sources of funding, size of the school in terms of lowest and highest grades, school type, language of instruction, stream-wise courses offered at higher secondary level, composition of SDMC, etc.;
- *Enrolment and repeaters* by grade, study stream, age, sex, social category and minority status, and enrolment and repeaters of physically challenged children;
- *Teacher provision*, including data on sanctioned posts and teachers in position by sex and subject specialisation, distribution of teachers by their highest educational qualifications and training status, etc.;
- *Infrastructure and teaching-learning facilities,* including information on condition of the school building its classrooms and other rooms and ancillary facilities like drinking water and toilets, other infrastructure like boundary wall, playground, common rooms for teachers and staff, activity rooms, science and computer labs, electricity, telephone and internet connectivity, furniture for teachers, staff and students,, etc.;
- *Provision of non-teaching staff*, particularly office staff, lab and library attendants and c watchman;
- *Examination results*, including data on number of regular students appeared and passed out board exams at secondary and higher secondary levels; distribution of secondary and higher secondary level graduates by range of marks secured in the exam, etc.; and
- *Receipts and expenditure at the school level*, which included data on civil works, annual school grants, minor repair/maintenance grants, grants for sports equipment, expenditure on excursion trip for students and study tours outside the state and remedial teaching.

Besides, the online report generation facilities, SEMIS data was disseminated through publications like Flash Statistics of secondary Education (Annual) and State Report Cards on Secondary Education (annual) by NUEPA. NUEPA also brought out an exclusive publication entitled, *Statistics on Secondary Education in India* (based on SEMIS 2009-10 data).  The important shift in the design of the DISE and SEMIS was that they were much more user friendly, and end-use focused. These two systems were designed to support decision-making in education.

iii)     ***The Unified District Information System for Education(U-DISE)***

Following the recommendations of the Sathyam Committee (2008) and the Expert Group headed by R. Govinda (2011), both the DISE and the SEMIS were merged to create U-DISE, which has been implemented since 2012-13. The major difference between the DISE/SEMIS and UDISE is that while the former used to take a given level/section of school education as the unit for data collection, viz., primary, upper primary, secondary and higher secondary, the later took the school/institution as the unit for data collection. U-DISE thus overcame the major issue encountered in the DISE and SEMIS, i.e. how to divide the common infrastructure, TLM facilities and staff between primary, upper primary, secondary, and higher secondary levels in a given school/institution? Besides, the U-DISE also aims at streamlining the school records for improving reliable database in the sub-sector. The U-DISE, it is expected, would facilitate strategic planning in school education in India, which takes the school as the unit for planning of most development interventions. Like DISE and SEMIS, U-DISE is IT savvy though it is yet to become an online system. It covers almost all variables covered under the DISE and the SEMIS for data collection, except the common core facilities and staff of the school, which are not reported under U-DISE by level of school education. Computer software with reporting facilities developed by NUEPA facilitates management of U-DISE. Currently, the U-DISE data for the year 2012-13 are being processed to be disseminated through publications in line with that of the earlier publications of DISE and SEMIS. At this stage, therefore, it is difficult to comment on the quality and reliability of educational statistics generated under U-DISE.

It is important to note that the available database on education hardly fills the gap in the education finance statistics, and such resource allocation decisions in the public sector are often least supported by empirical evidences leading to avoidable mistakes and inefficiencies.

**d)      National Sample Survey Organisation**

National Sample Survey Organisation (NSSO) regularly conducts Social Consumption Surveys based on a large national sample of households and some specific surveys focus on education and health. Table 3 provides information on specific NSSO surveys which focus more on education and related statistics.

**Table 3: NSSO Reports and Data Sets on Education Available on CD-ROM**

| Reports | |
| --- | --- |
| No.412: | Economic Activities and School Attendance by Children in India 1993-94 |
| No.439: | Attending an Educational Institution in India 1995-96 |
| No. 517: | Status of Education and Vocational Training in India, 2004-05 |
| No. 532: | Participation and Expenditure in Education in India: 2007-08 |
| No. 551: | Status of Education and Vocational Training in India, 2009-10 |

The data collected on education in the 35th (1981-82), 42nd (1986-87), 47th round (1991), 50th (1993-94),52nd (1995-96), 61st (2004-05), 64th (2007-08) and 66th (2009-10) rounds were found to be very important. Other rounds also provide important details on education and related characteristics of population. The data collected in the 35th round could not be finally made available due to technical problems. The 47th round focused on literacy. The report giving all-India figures for the 42nd round on participation in education has been published in *Sarvekshana*. The 52nd round was a repeat survey of the 42nd round after a decade. These surveys and the 53rd round helped in estimating literacy rates in India for the period after 1991 and until 1997.

In the 61st round (Report No. 517), apart from the information on education collected in earlier rounds, information on some new items such as type of institution for those attending educational institutions, particulars on vocational training received by household members were collected. Besides, information on current attendance in educational institutions was collected for persons of age below 30 years. For formal vocational training received, information on field of training, duration of training, source of degree/diploma/certificate received were also collected (NSSO, 2006). In the 64th round (Report No. 532), important information on household profile, distance to various levels of schooling facilities, status of current enrolment and attendance, type of institution attended, students getting free education and educational incentives, average annual private expenditure per student on education by level and type of education and major components of private expenditure and their shares in the total expenditure, major reasons for non-enrolment and major reasons for dropping out of the school were collected. The 64th round on participation and expenditure in education was broadly similar to that of the 52nd round (1994-95). However, some of the key new additions to the 64th round are as follows:

- Detailed information on education for persons in the age group 5-29 years were collected compared to data on 5-24 years in the 52nd round;

- Besides general and technical education covered in 52$^{nd}$ round, the 64$^{th}$ round covered vocational education;
- Information was collected on distance to various schooling provisions rather than distance to primary, upper primary and secondary schools as was the case in 52$^{nd}$ round;
- Information on expenditure on education was collected for at least two courses instead of one course;
- Relevant data for estimating repetition rates were collected; and
- For class X and below, questions on grade completed before dropping out/discontinuance and type of school last attended were introduced (NSSO, 2010).

In the 66$^{th}$ round that focused on assessing the status of education and vocational training in India, information on literacy, attainment of general and technical education, current attendance in educational institutions, vocational training received, etc. was collected. In this round, information on 'whether receiving/received any vocational training' was collected for persons of age 15-59 years instead of age 15-29 years as it was in 61$^{st}$ round (NSSO, 2013)

The NSSO surveys on education provide valuable information on a number of characteristics:

- Children currently attending schools in various age-groups,
- Children who are never and ever enrolled in schools,
- Data on working children,
- Reasons for non/never enrolment and drop-outs,
- Population by the status of literacy,
- General and vocational educational attainment of population,
- Educational attainment of workforce,
- Workforce participation by educational levels,
- Employment/unemployment status of educated persons,
- Household expenditure on education,
- Socio-economic profile of students, etc.

An important feature of data provided by NSSO is that many educational characteristics of the population are available not only by gender and social background (caste), but also by economic levels of households (household expenditure levels). Such information at national level is very scarce and in this sense, the NSSO fills a major gap. Since many such dimensions of education and related aspects are not available from other sources, NSSO data complement other data sets.

In contrast to the data collected by the MHRD and also the NCERT, the data generated by the NSSO are based on household surveys (like the Census reports), and hence they are generally believed to be yielding more realistic estimates of enrolment/non-enrolment status of children and other aspects of education situation in the country.

An important problem with NSSO data on education is its periodicity.  It is important that surveys, like the 42$^{nd}$ round, the 52$^{nd}$ round, and 64$^{th}$ round are made a regular activity of NSSO, to be launched at regular intervals, so that data would be available at regular intervals for inter-temporal analysis.  Secondly, access to original data sets of the NSSO is not regarded to be easy by the educational planners and researchers, though efforts are on recently to make the data available to the users through electronic media.  The data sets and reports on education that have now become available on CD-ROMs are given below in Table 3.

**e)        Planning Commission**

Planning Commission does not actually collect much data.  However, one of its statistical publications provides important data on plan allocation and expenditures on education in the annual and five-year plans.    The publication entitled *Analysis of Annual and Five-year Plan: Education Sector* provides details on progress in plan expenditures on education during a given five-year plan period, outlays and actual expenditures under major heads by states, and also progress in enrolments and other important targets of the Plan.

Though it concentrates largely on plan expenditures only, the publication is useful as it provides some important details like approved and revised outlays and actual expenditures by sectors of education, by states and by years in a five-year Plan period.

So far, very few issues of this publication were brought out, though one expects them to be published every year, corresponding to every annual plan.  They are brought out more as occasional publications rather than as regular annual publications of the Education Division of the Planning Commission, though the intention of the Planning Commission seemed to be to bring it out as an annual publication regularly**.**

**f)        University Grants Commission**

For a long time the UGC used to publish *University Development in India* on an annual basis, which used to give several details on universities, enrolment, teachers etc.  Only limited data on expenditure on higher education were provided.  It used to be confined to grants made by the UGC. The publication altogether ceased in early 1980s.

Further, in the mid-eighties, it was decided that *Education in India* should be published separately for higher education.  Consequently, the UGC was entrusted with the responsibility of collecting and publishing statistics regarding higher education institutions.  However, UGC has not been able to publish data until now.  Subsequently, it was decided that the DOE of the MHRD would

resume publication of *Education in India* covering both school education and higher education. But volumes on higher education are yet to be resumed. All this has created a total gap in statistics on higher education, particularly on expenditure and income aspects. Special efforts are needed to fill the vacuum.

Secondly, in case of higher education, it would be useful to collect and publish statistical information university-wise. Except for a few random publications of the Association of Indian Universities (AIU) and National University of Educational Planning and Administration (NUEPA), which also concentrated on a few universities only, no information is available at national level on each university. Attempts are now being made under the All-India Survey of Higher Education for improving the coverage of the database on higher education and its time lag.

**g)       Office of the Registrar General of India (Census of India)**

The population census is the most comprehensive source of information on a few important educational aspects of the population.  The census is based on a national survey conducted once every ten years of all the households in the country, and information is available at village, district, and state levels.  Now a days the data are also made available through electronic media and hence even data at different disaggregated levels could be accessed,[12] important aspects on which information is available in census reports include the following:

- ♦   Distribution of population  by singe year age,
- ♦   Number of literates and literacy (and also illiterates and illiteracy) rates
- ♦   Levels of educational attainment of population
- ♦   Work force participation of educated manpower
- ♦   Participation of children in schooling (and other activities)
- ♦   Selected data on number of schools (and other amenities) by villages, etc.

Data on educational characteristics of population are available by gender and caste/religion categories as well.  In addition, the survey of degree holders and technical personnel, processed by the Council for Scientific and Industrial Research (CSIR) provides valuable information on the size and characteristics of scientific and technical manpower in the country and its utilisation in various activities of the economy.        .

Sizeable differences in the estimates of enrolments based on census and those provided by the MHRD are also noted.[13] It is regarded that the census provides most reliable data, as it collects

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12  See Premi (2001)  for more details.

13  For example see Agricultural Economics Research Centre (1972) and Kaurrien (1982).

data from each and every household in the country. However, frequent changes in the concepts and terms are found to be causing problems of inter-temporal comparisons.

Processing and publication of the census reports involve a lot of time and as a result many reports are released with considerable delay. Some of the census data are computerised and are being made available in computer disks, which should help planners and researchers the timely use of the data.

**h)      Institute of Applied Manpower Research**

The Institute of Applied Manpower Research (IAMR) used to publish *Fact Book on Manpower*, giving a good compilation of data on a variety of aspects of scientific and technical manpower. This publication was discontinued and in the recent years another title, *Manpower Profile of India* is published. It is largely a compilation of statistics from different sources, with a focus on technical manpower, giving details on the size of the manpower, the activities the manpower is employed in and other aspects. Department of Science and Technology (DST) also compiles such statistics and publishes them regularly in their annual statistical handbook and pocket book.

**i)      Others**

As mentioned earlier, there are several other organisations that collect and publish education statistics. Among them, two organisations that have recently conducted extensive household surveys at the national level and collected data on education (and health) may be mentioned. The International Institute of Population Studies (IIPS) has conducted in the recent past three rounds of National Family and Health Survey (NFHS) which yielded valuable data on education to estimate enrolment/non-enrolment rates of children in schools and educational attainment of population in major states and India as a whole.[14] The first survey was conducted in 1992-93. Encouraged by the success of the efforts and the usefulness of the data generated, a second round was conducted in 1998-99, and the third survey in 2005-06. Similarly the National Council of Applied Economic Research (NCAER) conducted a human development survey in rural India and produced valuable data sets on education status of rural children in India, and repeated in 2004-05. UNICEF

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14. See several papers in the *Economic and Political Weekly* (October 16-29, 1999) for a detailed discussion on the survey.

15. A major report was published giving a large set of state level data. See Shariff (1999). Complete data set is available on CD-ROM.

has recently launched a major sample survey of primary and upper primary schools and households in as many as eight states. The data, when available, are expected to provide valuable insights into quite a few important dimensions of participation and non-participation in schooling. Since the survey covers schools as well as households in the same villages, one may be able to make in-depth analyses of several closely related dimensions. Besides, NGOs like *Pratham* also bring out sample based survey reports annually on school education. The latest survey of *Pratham* entitled, *Annual Status of Education Report* is available for the year 2012-13. Table 4 gives a short list of important organisations and their publications.

**Table 4:** **Important Organisations (other than MHRD) and Their Important Statistical Publications on Education**

| Sl. No. | Organisation | Publications |
|---|---|---|
| 1. | National Council of Educational Research and Training (NCERT) | *All-India Education Surveys* |
| 2. | Planning Commission | *Analysis of Five Year Plan and Annual Plan: Education Sector* |
| 3. | Registrar General of India (RGI) | *Census Reports* |
| 4. | Institute of Applied Manpower Research (IAMR) | *Fact Book on Manpower* (discontinued) *Manpower Profile, India* |
| 5. | National University of Educational Planning and Administration (NUEPA) | ▪ *Surveys of Educational Administration in States* <br> ▪ District Information System for Education (DISE) <br> ▪ Secondary Management Information System (SEMIS) <br> ▪ Unified District Information System for Education (UDISE) |
| 6. | National Sample Survey Organisation (NSSO) | ▪ 35$^{th}$ Round <br> ▪ 42$^{nd}$ Round <br> ▪ 47$^{th}$ Round <br> ▪ 50$^{th}$ Round <br> ▪ 52$^{nd}$ Round <br> ▪ 53$^{rd}$ Round <br> ▪ 61$^{st}$ Round <br> ▪ 64$^{th}$ Round <br> ▪ 66$^{th}$ Round <br> ▪ Most of the statistics are generally published in *Sarvekshana* <br><br> Other important reports are: <br> ▪ Report No.394: *Literacy in India* (47$^{th}$ Round) |

| | | <ul><li>Report No. 412: *Economic Activities and School Attendance by Children of India* (50th Round)</li><li>Report No. 439: *Attending an Educational Institution in India: Its Level, Nature and Cost* (52nd Round)</li><li>Report No. 517: Status of Education and Vocational Training in India, 2004-05 (61st Round)</li><li>Report No. 532: Participation and Expenditure in Education in India: 2007-08 (64th Round)</li><li>Report No. 551: Status of Education and Vocational Training in India, 2009-10 (66th Round)</li></ul> |
|---|---|---|
| 7. | University Grants Commission (UGC) | *University Development in India* (discontinued) *Annual Report* |
| 8. | National Council of Applied Economic Research (NCAER) | *Human Development Profile of Rural India* (Oxford University Press, 1999) |
| 9. | International Institute of Population Studies (IIPS) | *National Family and Health Survey* |
| 10. | Directorate General of Employment and Training (DGET) | *Employment Exchange Statistics* |

Note: The list is not an exhaustive one.

The status of some of the major educational statistics can be summed up as in Table 5.

**Table 5: Important Education Statistics, Sources and Major Gaps**

| Statistics | Source | Major Gaps |
|---|---|---|
| *Education Statistics* | | |
| Enrolments | MHRD NCERT NSSO Census | Receipts and expenditure at the school/institution level Learner's achievement levels |
| Institutions: Schools, colleges and universities | MHRD NCERT Census | Unrecognised institutions |
| Teachers | MHRD NCERT | Teachers by educational qualifications and experience (now collected under UDISE) |
| Expenditures Public Expenditure Household Expenditures | MHRD NSSO | Opportunity costs Private costs |
| School Facilities | NCERT | Age of the institution/ buildings |
| *Related Statistics* | | |

| Demography | Census | |
|---|---|---|
| Labour Market | DGET | |
| Scientific and Technical Manpower | Department of Science and Technology (DST) | |
| Economy | Central Statistical Organisation (CSO) Reserve Bank of India (RBI) | |

## 3.    COMPUTERISATION OF EDUCATIONAL STATISTICS

With the widespread use of computers, several efforts are being made for computerisation of educational statistics.  MHRD had initiated efforts to partially computerise educational statistics first in 1986.  The National Informatics Centre (NIC) is actively involved and NICNET services are being used.  First, a project called Computerised Planning for Education (COPE) was launched for collection of data through a computerised system necessary for planing and implementation of universal elementary education.[16] Later it was felt necessary to develop a broad programme of computerisation of educational statistics.  Since mid-1990s, steps have been taken to computerise educational statistics and substantial progress has been achieved in projects like DISE, SEMIS, UDISE, AISES and AISHE that aim at creating database in school and higher education sub-sectors. However, the status of computerisation of officially accepted educational statistics is  very poor in the country.

With the launching of the District Primary Education Programme (DPEP), extensive computerisation was attempted.    The District Information System for Education (DISE) was launched in all DPEP districts.  Subsequently, DISE was expanded to cover all the districts in the country. Besides, SEMIS was launched in project mode in 2007-08 by NUEPA. Currently, U-DISE is being implemented by NUEPA to create database in school education sub-sector. These systems were highly successful in using IT applications for creating and managing database in school education. Besides, IT applications and platforms have been used to disseminate data and information and making raw data accessible to users, particularly researchers and personnel engaged in planning and management of education. For example, NUEPA has developed its own software for DISE (www.dise.in), SEMIS ([www.semisonline.net](http://www.semisonline.net)) and U-DISE ([www.udise.in](http://www.udise.in)) and maintains exclusive web portals for managing the database. Similarly, the NCERT has also created its own web portal for managing and disseminating survey data on school education ([www.aises.nic.in](http://www.aises.nic.in) and        [http://www.ncert.nic.in/programmes/education_survey/index_education.html](http://www.ncert.nic.in/programmes/education_survey/index_education.html)).These

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16.    The project was based in NIEPA.

organisations also make available data on CD-ROM.  Now-a-days, most of the publications on educational statistics by the MHRD, NSSO, Planning Commission, etc. are available online.  But some of the titles relating to earlier years are being removed from teh website.

It may be underlined that the online reporting systems need to be further improved under the DISE/UDISE, AISES and AISHE. Besides, putting in place the IT infrastructure at the school/college, sub-district and district levels continues to be a major challenge in the computerisation of educational statistics in the country. While NIC in playing a key role in promoting computerisation of educational statistics, it alone would not be able to address the concerns of the educational institutions and sub-district level organisations. The need is to strengthen district education office in terms of IT infrastructure and personnel for collection, analysis, storage and dissemination of school education statistics in the country. In the same fashion, the state education department should play a key role in collecting and managing database on higher education, where institutions of higher education play a key role in participating in the online system of data collection and management. The key to the slow progress in creating computerised database in education is the rigid institutional perspective on the use of such statistics, i.e. for reporting progress.

## 4.    SUMMARY AND RECOMMENDATIONS

### 4.1    Summary

The importance of a reliable and sound statistical base in education for sound policy making, effective planning and strong research in education needs no emphasis.  The need for a sound statistical base increases in the rapidly changing socio-economic conditions of the country. To assume that the requirements of the researchers and policy makers/planners are totally different is erroneous.  The needs of the planners and researchers are not altogether mutually exclusive.  There are lots of common statistics that are required by both the groups.  In fact, it is difficult to imagine a set of statistics that would be exclusively useful to either the researchers or the planners, and not useful to the others. The statistical base in education in India is vast and diverse; and it is also associated with a few major strengths and weaknesses.  The paper briefly reviewed the current status of educational statistics in the country, identified major gaps and shortcomings and stressed on the need for measures for improvement.

Some improvements have been initiated in the recent past. But some of them have also caused a few problems. To reduce the time lag in production and to make the statistics concise, some of the important details have been sacrificed, which was realised only later. For example, income by sources and expenditures by items, grade-wise learning achievement levels of students by location, sex and social category, etc., are some such statistics. Some more problems also arose relating to time series comparisons. Certain data are available for the earlier years but not for later years. Details on private schools, for example, were available for earlier, but not for later years. Some of the concepts have also changed. For example, the concepts like 'direct' and 'indirect' expenditure were replaced by 'recurring' and 'non- recurring' expenditure, etc., though the new classification does not conform to the standard terminology in economics like 'variable' and 'fixed costs'. But exact time series comparisons become difficult. Whenever there has been a change in the definition and scope of terms, an attempt may have to be made to reconstruct the whole series for the earlier years according to the changed definition, to the extent they are available in records, just as the Central Statistical Organisation does with respect to national economic indicators, whenever the base year of the price index is changed.

The description of current status of educational statistics attempted in the paper, may be summed up as below:

- Vast data relating to education are available.
- Most of these data are collected by different agencies.[18]
- Data collected by different agencies are not strictly comparable due to definitional problems, differences in reference dates, different purposes for which data are compiled, etc.,
- There is no co-ordination between different organisations involved in collection and publication of statistics.
- Inter-temporally also, these data are not strictly comparable even though collected by the same agency, because of different reference dates and changes in definitions and concepts.
- In recent years, educational data, particularly micro level data are getting gradually computerised.
- The gaps in educational statistics are many, some of which can be listed as follows:
    - Age-specific entry rates of children;
    - Mobility/ migration status of students both in rural and urban areas;
    - Educational institutions and pupils affected by civil strife;
    - Educational institutions by location in terms of specific areas like those dominated by tribes, scheduled castes, ethnic minorities, religious minorities, characterized by geo-physical difficulties and frequent natural calamities;
    - Key variables on socio-economic background of pupils;
    - Levels of learning achievement of pupils;
    - Age of the educational institutions, including age of the buildings;
    - Working days of institutions, particularly at the post-compulsory level of education;

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18 Nature and limitations of data collected by individual researchers and research organisations are not reviewed here.

- Private institutions, including self-financing recognised and unrecognised institutions, coaching institutions, etc.;
- In-service training facilities and coverage;
- Income and expenditures at institutional/school level;
- Private sources of finance :
  - household expenditures on education by items;
  - community contribution to education at different stages, regions, etc.,;
  - flow of funds from industries and others;
  - private costs of education, opportunity costs of education at different levels;
  - Other private investment in education in setting up private aided and unaided institutions
- Time-series data about brain drain, by qualification and by age group;
- Waiting period of educated job seekers, by level of education etc.;
- There is a huge time lag in the availability of statistics – time lag between collection, processing, publication and availability to public.
- Three are a good number of missing years for which data, which otherwise were available for continuous years, is missing.
- Besides, there is a need for documenting qualitative information mostly in terms of best practices in planning and management of school and higher education. A repository of such case studies would certainly guide policy planning and programme management in education.

It would be clear that though vast data are available relating to education from different sources, most of these data are not comparable. Also data for many aspects of education are not available at all. With regard to the status of computerisation of the available data, it would be obvious that the position need greater attention. Data on education are compiled by the individual state governments also. They are published in their official publications like Annual Reports, State Plan documents, State Statistical Abstracts, etc. The data supplied by these and those in the Government of India publications are also not reconcilable. The state governments memoranda submitted to the Finance Commissions for the purpose of getting central assistance contain yet another type of numbers relating to education, but they are rarely published and are rarely available to researchers. Besides, as a part of programme management information system of several large scale education development programmes like the SSA and the RMSA, data on several important variables particularly process related variables are collected and managed. However, such data are hardly accessible and shared with the key stakeholders in education sector and sub-sectors. Thus, the current position regarding educational database is fairly unsatisfactory and highly confusing, calling for significant efforts for improvement.

## 4.2    Recommendations

The current system of educational statistics requires significant improvement.  Some points of action are outlined below:[19]

1) There are several agencies collecting the educational statistics, the most important among them being, apart from the Departments of School Education & Literacy and Higher Education   in the Ministry of Human Resource Development (Government of India), the National Council of Educational Research and Training (NCERT), the National University of Educational Planning and Administration (NUEPA), the National Sample Survey Organisation, the Census Organisation, the National Council of Applied Economic Research, the Institute of Applied Manpower Research, the University Grants Commission,[20] etc.  There is need for co-ordination between the several agencies that collect educational statistics.   Co-ordination should be made by a nodal organisation as recommended by the Sathyam Committee, i.e. by establishing a National Commission on Educational Statistics/National Centre for Educational Statistics. This would not only resolve several problems relating to coverage, comparability and relevance of educational statistics currently collected by multiple agencies but also make available educational statistics official.

2) As the experience so far reveals that the efficacy of the government in collecting, processing and publishing the statistics has not been very satisfactory, it is necessary to examine the factors responsible and improvements needed.  The main responsibility of collecting the statistics should lie with the Government, but the responsibility of collating the available (once published) information, and constructing the time-series information, etc., could be given to research institutions.

3) When statistics are being collected by different agencies, it is necessary that :
   ♦ uniformly defined terminology and common classifications of various items, are adopted, so that discrepancies between the data collected by different agencies are minimised, and they are made comparable;
   ♦ there is not much duplication in the data collected;
   ♦ quality and reliability of data are of high order and comparable in nature; and
   ♦ to the extent possible, they become additive.
   ♦ Uniform formats of the several forms being used need to be developed for various state governments, and other agencies.

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19. This section is partly drawn from Tilak (1993).

20. Though presently the UGC does not collect/publish much educational statistics, it is important that UGC assumes this responsibility, as this would be useful to the Commission for efficient planning of higher education systems.

4) A 'core information framework' should be developed, on which there cannot be any compromise in the quality, reliability, and timely publication. The core information is, however, not the minimum, not of course, the maximum. We should not end up with just the 'basic' statistics. The core framework should include almost all details that are essential for efficient planning and for good policy relevant research. It should provide micro level specificities, along with macro level aggregate picture.

5) Such core information may consist of two parts: one kind of information may have to be collected every year, and from every institution on a census basis. Such core information should be collected from the education institutions, though if such information is available, it can be collected from the Block/District/State offices. The second kind of information (e.g., socio-economic profile of students, household expenditures on education, and levels of achievement of pupils) may have to be collected on a regular basis, not necessarily every year, may be on a sample basis, and the source of information may be households/education institutions.

6) Government should take the responsibility of collecting, processing and publishing at least the statistics relating to the core information framework efficiently in time. A filtering system in the use and dissemination of educational statistics from district to state and national levels may be adopted in system for data management, particularly in school education, While the district and sub-district level units would be making extensive use of school education statistics, the state and national level organisations would focus on the data on those variables that directly influence policy planning and resource allocation decisions in school education.

7) One can adopt a somewhat flexible approach with respect to 'non-core' information, which is also crucial for planning, but which can be collected not every year, but at regular intervals, which can be collected on a sample basis and not necessarily on a census basis, and all of which need not necessarily be published, but should be available for the planners and researchers as well. Some of the non-core information can also be 'aggregate' information, and not necessarily institution-wise information.

8) In view of the importance being given to decentralised planning in development, it is also necessary that detailed data should be made available at district and sub-district levels for the planners as well as researchers.

9) The most important gaps identified in the present educational statistics, that may fall into the 'core information framework' are:

- attendance of the students,
- income and expenditures and related information of government, aided and unaided private schools,
- statistics on utilisation of financial and physical resources in education,
- learning achievement levels of students by management and location of the school, and by grade, sex, social category, etc. of pupils,
- socio-economic background of the students, and
- students'/households' expenditure on education.

10) When collection of statistics from certain institutions (e.g., unaided but recognised institutions) becomes difficult and time consuming, such statistics may be brought out as a separate publication, rather than delaying the publication of all the statistics.

11) The National Sample Survey Organisation may be required to collect statistics on socio-economic background of the students, household expenditure on education etc., as it does now, but on a more regular basis, at regular intervals, and in more details.

12) One of the important items on which information needs to be collected, though it may form a part of the 'non-core' category, is information on 'formal' unrecognised schools/institutions for higher education, as after all, they also impart education, and the database on the 'total' education system in the country will not be complete without such information. Other items refer to non-formal and adult education, open schools, etc., on which systematic data are not collected. [21]

13) Another important set of indicators on which data need to be collected refers to quality in schooling facilities, availability of text books to the students, including the time of availability, number of text books available in each class, availability of teacher-guides, etc. Such information may, however, be collected by the National Council of Educational Research and Training in its *All-India Educational Surveys* and by the MHRD through its designated Technical Support Groups of large scale school education reform programmes.

14) Care should be taken that if the data collected by different agencies, if they are incomparable in nature, quality, and reliability, are not aggregated together to arrive at the

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21. However, care should be taken to see that mere collection of information on such schools does not automatically bestow recognition on them, nor does it lead to any legal complications.

'totals.' Otherwise, the overall quality and reliability of data may be subject to question.  But efforts should be made by every organisation to collect reliable and accurate information.

15) To reduce the gap in collection of statistics, system level improvements have to be made. First, institutions may be required to maintain records giving detailed statistics (as they maintain statistics on enrolment of Scheduled Castes/Tribes), for the latest 2-3 years.  This will help prompt provision of statistics as and when required, and also help institutional planning. It may be mentioned that the Expert Group on UDISE headed by R. Govinda has made detailed recommendations for improving school levels records, which are supposed to be implemented in schools across the country from 2012/13. Other measures of system level improvement include provision of incentives in terms of making school improvement planning as the basis for resource allocation, provision of training to the machinery at the grassroots levels, besides ensuring timely supply of forms, timely release of funds for printing the forms, etc.  The government may take necessary initiatives in this regard, including increased financial assistance.

16) To reduce the gap in processing the statistics, computer and network facilities should be made available to the block/district/state level statistical offices in the Departments of Education and to all educational institutions at all levels.  Effective co-ordination between several layers of administration and organisations may reduce the time gap in the various stages of collection, processing and publication of statistics. Putting in place an online system of data collection and management would reduce time lag drastically besides promoting effective and sustainable decentralisation including fiscal decentralisation in education.

17) With respect to publication and dissemination, it may be necessary that hard (paper) copies are made available, along with CD-ROMS and online data files in dbase and EXCEL.   CD-ROMS and online data files cannot replace the hard copies, as the latter require the users -- both researchers and planners -- to have easy access to computers with adequate hardware facilities.

18) All the collected/processed (and not necessarily published) statistics need to be made accessible to the researchers and planners.  Researchers may, in fact, be encouraged to use the collected statistics, by providing easy access to the data tapes, rather than compelling the researchers to make their own surveys, thereby saving scarce resources.

19) One should not have a myopic view of the needs relating to educational statistics. After all, statistics are important for short term, medium term, and perspective planning. Short terms considerations, including resource constraints, urgency, reduction in time gap, etc., should give place for long term considerations. It should be noted that it might be impossible to collect certain statistics relating to the past. Hence, while pruning and revising the information formats, care should be taken to see that crucial information is not traded off.

20) All principal agencies involved in collecting/processing/publishing/disseminating educational statistics need to be represented in the high power Standing Committee on Educational Statistics.

21) It may be desirable to organise, at regular intervals, meetings of educational data suppliers and educational data users. Since the government itself is the data supplier and data user in respect of many aspects of educational policy making, it would be useful if concerned departments reveal how actually the data are used.

22) Large amounts of data at the micro level, collected by individual researchers in their research projects, M.Phil/Ph. D studies, etc., remain scattered, though they might prove to be useful in the ultimate analysis for policy making. It is desirable to initiate steps to establish a data bank to compile and critically edit such scattered data systematically in one place according to major issues of education and bring out trend reports at regular intervals. This would make large amount of data collection efforts by individual researchers really fruitful for micro level analysis and policy making. Such a data bank may provide at one place easy access of the data sets to various researchers and planners.

23) There is a need to integrate planning and data collection. Unless data collection is made an integral part of planning process, the procedure for collection may not improve. The complexity of the formats for data collection and the existence of weak machinery for data collection at the state level delay the flow of information. Provisions for training on a regular basis can improve the collection of educational statistics.

Above all, the general approach to statistics needs to be changed. Statistics are not just numbers; they speak volumes. They are numbers, but meaningful statistics provide valuable analytical insights, besides being critical inputs into planning and management. If they are just numbers, they cease to be of any great value. Hence, due importance needs to be accorded to statistics. Further, the importance of statistics gets enhanced if they are actually used for decision making. Now, while

governments at national levels increasingly realise the importance of statistics in policy planning, programme planning, resource allocations, monitoring and evaluation of programme interventions in education, they are yet to shed their stereotyped behaviour directed towards using data primarily for reporting purposes thereby hiding critical information that explain failures in programme implementation. It is high time that the government should make the result oriented policy and programme planning in the country much more evidence based and accountable.

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