Strengthening of Educational Management Information System In India: District Information System for Education (DISE) Initiatives

MEHTA, Arun C.[1]
National University of Educational Planning and Administration (NUEPA)

Abstract: Indian education system is perhaps the largest system in the world that caters to the need of 1,026 million people. Keeping in view the size of the system, it is obvious that it has limitations that can be distributed into administrative and non-administrative limitations. Keeping in view these limitations, it was felt that a sound information system is essential for successful implementation of programmes concerning elementary education. In the light of the above, at the time of initiating District Primary Education Programme (DPEP) in 1994 it was decided to develop a computerized educational management information system with district as its unit of collection responsibility of which was entrusted to NIEPA. With the UNICEF support, NIEPA initiated district information system for education (DISE) in 1994 in 42 districts spread over 7 DPEP phase one states. The information system has since been expanded to both DPEP as well as non-DPEP states in as many as 581 districts across 29 states. It is expected that remaining states and districts will also be covered under DISE in the present year.

In the districts that are covered under DISE, up-to-date information on more than 450 variables is made available which has become the basis of formulating elementary education plans under the *Sarva Shiksha Abhiyan* (EFA) Programme. The information is made available on the internet (www.dpepmis.org & www.schoolreportcards.in). Raw data as well as State & District Report Cards as well as School Report Cards can be downloaded from the DISE website. Practically information is made available on all aspects of universal elementary education at different levels and time-lag in data is now reduced to less than one year. There are no more data-gaps. The entire set of data can be extracted at different levels.

In the present paper organization and management of DISE and departure from the traditional method of data collection is presented. Evolving DISE in terms of Data collection, coverage, major achievements, features of DISE software, dissemination, limitations etc. is presented in the paper.

Evolving DISE

Free and compulsory education to all children up to the age of fourteen years is our Constitutional commitment. The Government of India initiated a number of programmes to achieve the goal of Universalisation of Elementary Education (UEE) among which the *Sarva Shiksha Abhiyan* (SSA, means Education for All) is the most recent one. It aims at achieving universal primary education by 2007 and universal elementary education by 2010. For successful implementation of any programme concerning elementary education, effective monitoring, coupled with efficient information system, is essential. While monitoring framework under SSA is being developed separately, sincere efforts have been made in strengthening Educational Management Information System (EMIS) in India.

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A number of Government and semi-government agencies are involved in the collection of information on educational variables. Among them the Department of Secondary & Higher Education of the Ministry of Human Resource Development (MHRD), Government of India is the main agency responsible for the collection of numeric information on regular basis. The MHRD collects information from all the recognized institutions of the country annually with 30th September as its reference date and school being the unit of collection. 'Education in India', is the main publication of MHRD in this regard. The latest available volumes of this publication covering various aspects are: 1997-98 - Volume I: Numeric Information; 1996-97 - Volume II: Financial Data; and

1999-2000-Volume III: Examination Results. However, 'Selected Educational Statistics', a provisional publication is latest available for the year 2002-03. On the other hand, the National Council of Educational Research and Training (NCERT) also collect information on special variables through its All India Educational Survey, once in every five to eight years with habitation as its unit of collection. Full results of the Seventh Survey, with September 30, 2002 as its date of reference, are still awaited. The basic purpose of collecting information on special variables through the all-India survey was to provide inputs so as to formulate five-year plans. The 10th Plan has already been developed much before the survey data could be disseminated. Neither the MHRD nor NCERT disseminates full set of district-specific data.

On the other hand, a number of semi-governmental agencies, like the National Sample Survey Organization (NSSO), Census of India, and the International Institute for Population Studies (National Family Health Survey) also from time to time collect information on a few educational variables as part of their household sample surveys. In addition, recently the Government of India has also initiated a nation-wide survey for estimating the out-of-school children of age group 6-14 years.

Limitations in the System

Indian education system is one of the largest education systems in the World; it caters to the needs of more than 1,028 million people. Keeping in view its size, the information system has a few limitations, which can be classified as administrative and non-administrative limitations. Some of these limitations are:

- multiple data collection agencies;
- multiple directorates involved in data collection and lack of coordination among them;
- lack of understanding of the concept and definitions of educational statistics;
- lack of adequate staff at different levels;
- lack of qualified and trained staff, specially at the lower levels;
- problems in distribution and collection of data-capture formats;
- lack of district-specific time-series data;
- time-lag in data;
- reliability of education data;
- data gaps;
- lack of equipments (computers) at lower levels;
- creation of new districts and changes in boundaries of the existing districts;
- poor dissemination and utilization of data; and
- lack of accountability at all levels.

Notwithstanding these limitations, the school statistics form the basis of planning, monitoring and evaluation of various aspects of education, in general, and primary and elementary education, in particular.

Strengthening of EMIS: Recent Initiatives

Sporadic attempts have been made in the past to develop a computerized educational management information system in India. Among these, efforts made under the District Primary Education Programme (DPEP) are apparently one of the sincerest ones. Most of the earlier attempts at the Central and State Governments level failed to sustain and as such the overall situation remained a matter of concern.

At the time of initiating DPEP in 1994, it was felt that a sound information system is essential for successful monitoring and implementation of the programme. It was also realized that to strengthen educational statistical database for planning and management in a decentralized framework, an innovative model was needed. It was expressed that DPEP, with a focus on decentralized planning, required up-to-date and reliable school level information soon after it was collected. It reiterated further, in the context of decentralization of primary education, the imperativeness of more efficient and effective school and community databases so that the signals relating to the trends in critical indicators could be tracked at various levels of decision making. The MHRD, as a part of the DPEP national endeavor, decided to design and develop a school based computerized information system, the main responsibility for which was entrusted to NIEPA, New Delhi.

In this background, a pilot project for revitalization of educational statistics in India was initiated at NIEPA during 1995 with the financial assistance from UNICEF. The project was to examine issues related to identification of data needs, processes and procedures for data collection, developing a framework for data flows and computerization, and facilitating the use of educational indicators in planning, management, monitoring and evaluation. Such a comprehensive and integrated approach was necessitated by the fact that the then existing system could not provide the school level data in time and that it was highly limited in scope and coverage. Similarly, the use of educational statistics for planning and monitoring in the decentralized framework was also minimal. There were no systematic checks on the internal consistency of data. Data on many critical variables was either not collected at all or was not processed to facilitate decision-making.

In tune with the spirit of DPEP, district was selected as a nodal point for collection, computerization, analysis and use of school level data. NIEPA professionals, with the involvement of other experts, designed and developed the core Data-Capture Formats. Accordingly, NIEPA designed the software for implementation at the district level and provided the necessary technical and professional support to DPEP districts.

The first version of the software, named as **DISTRICT INFORMATION SYSTEM FOR EDUCATION** (DISE) was released during the middle of 1995. The district level professionals were assisted and trained in the establishment of EMIS units. The first major review of the DISE was undertaken during 1997-98. The software was later redesigned in 2001 in the light of requirements of the SSA. In view of the state-specific requirements, recently NIEPA conducted a workshop to seek suggestions about DISE formats and software. It is hoped that revised formats as well as software will be made available to DISE users during 2006-07.

DISE 2001: Main Features

The main features of DISE 2001 and major achievements made so far are briefly presented below:

- The system covers eight years of schooling in all primary, upper primary and primary/upper primary sections of the secondary and higher secondary schools.
- The concept and definitions of educational variables involved therein have been standardized at the national level and are uniformally followed by all districts and states.
- Manual aggregation of data at different levels is completely replaced by computerized data entry and report generation system.
- It provides time series data at school, village, cluster, block and district levels.
- It provides village level information on access to educational facilities of various types and helps in identification of habitation without access to primary and upper primary schools based on distance norms. All types of educational institutes, including recognized and unrecognized schools at various levels, are enumerated at the village level. Selected data on the number, enrolment, and teachers/instructors in NFE/Education Guarantee Schools and alternative schools, pre-primary education, is also collected at the village level. Data on age-specific population and out-of-school children generated through household surveys forms part of the village data.
- The system defines core data on school location, management, rural-urban, enrolment, buildings, equipment, teachers, incentives, medium of instruction, children with disabilities, examination results and student flows.
- Detailed data on individual teachers, *para*-teachers and community teachers and their profile, including data on in-service training received, is collected and made available.
- It eliminates the chances of data manipulation at various levels. The school remains responsible for correctness of the data supplied. States need to ensure correctness of the data supplied on five per cent sample basis.
- The states/districts have flexibility of adding supplementary variables depending upon their specific requirements on year-to-year basis. No additional software for computerization and analysis of state/district specific data is required.
- The states/districts can develop their own large database using ‘designer’ module and integrate a variety of school/cluster/block level data with it. The software handles multiple databases at various levels and includes many tools of data analysis and presentation.
- A large number of standardized reports on school-related variables and performance indicators aggregated at the cluster, block and district levels, are generated by the software.
- DISE ensures two-way flow of information. School summary report for each school is generated for sharing with the school and members of Village Education Committee. The school summary report contains key data on school and a summary of indicators which are compared with the cluster, block and the district averages.
- It provides an easy-to-use dynamic graphics facility to enhance the presentation of various types of graphs and data.
- DISE presents multi-user and modular system of software design for better management and security of databases.
- It responds to pre-defined queries on standard aspects, like school list, list of villages without primary and upper primary schools, single-teacher schools, schools without building, schools with high PTR, etc.
- It helps user defined dynamic query on hundreds of variables.

- It provides facilities for basic statistical analysis, including generation of new variables and their analysis.
- The reports can be shared across a large number of users without full software installation.
- Data can be exported to many other formats for statistical and other analyses by users etc.

Major Outcomes of DISE Efforts

- Through the concerted efforts, MIS Unit is now operational both at the District and State levels and is equipped with necessary hardware and software's.
- The DISE software is now operational in 581 districts in 29 States & UTs of the country and is providing vital information for policy formulation and preparation of district elementary education plans.
- DISE has completely eliminated time lag in educational statistics. At the national level, time lag in educational data is reduced to less than one year from the earlier 7-8 years. Gap between collection and dissemination of data stands reduced dramatically. Time lag within the state is reduced to few months. Data (as on September 30, 2004) for 2005 is available in 29 states in ready-to-use form.
- DISE has also eliminated data gaps as comprehensive information is now available on different aspects of universal elementary education across the country.
- It is for the first time that time-series data is made available at the school level. The trend analysis of DISE data helps in identifying major block and district-specific issues for being used in developing perspective and annual plans. The present publication is second in the series which disseminates comprehensive state-specific data on different aspects of universal elementary education.
- For the first time, a District Report Card on elementary education is being released annually as part of DISE dissemination activities, which contain time-series and cross-sectional data on more than four hundred and fifty variables at the district level. State Report Cards have also been developed and are being disseminated for the last three years. The Analytical Report is also being published annually. Efforts will be made to develop Country Report Card once all the States & UTs get covered under DISE.
- DISE helps develop a national level system, which integrates district and state systems into a hierarchical database. Every effort is made to promote the use of DISE data for planning, management and monitoring of SSA through case studies, orientation and training workshops of educational planners and administrators. It has now become a regular feature to share the DISE data at different levels every year. A number of states have recently conducted data sharing workshops. At the national level, major findings of DISE data are being shared every year with planners, administrators, policy makers, educationists and other data users.
- Official website of DISE (http://dpepmis.org) has been developed and is being updated frequently. District Report Cards and raw data in case of each of the district covered under DISE is uploaded. Data Capture Formats, software patches etc. are also made available to users. Analytical Reports are also made available on the Internet. Efforts will be made soon to make DISE web enable software.
- District Report Cards and Analytical Repots have also been made available to users in a Compact Disk.
- As an online help to users, DISE group of users is formed on the Internet, which is very active. Users can now post problems of common interest to group for their solutions.

Despite all these significant achievements, inadequate utilization of DISE data remains the major area of concern. Though over time, data utilization has improved which is reflected

in the District Elementary Education Plans developed recently under the aegis of *Sarva Shiksha Abhiyan* (EFA) programme, yet there is still scope for further improvement. States have been encouraged to organize sharing workshops at block, district and state levels. During the previous years, efforts have been made to create demand for the DISE data. District Report Cards and Analytical Report have been made available to a large number of university libraries, research and resource institutions, educationists, planners, administrators, policy makers and other data users across the country. This will be further intensified during the current year.

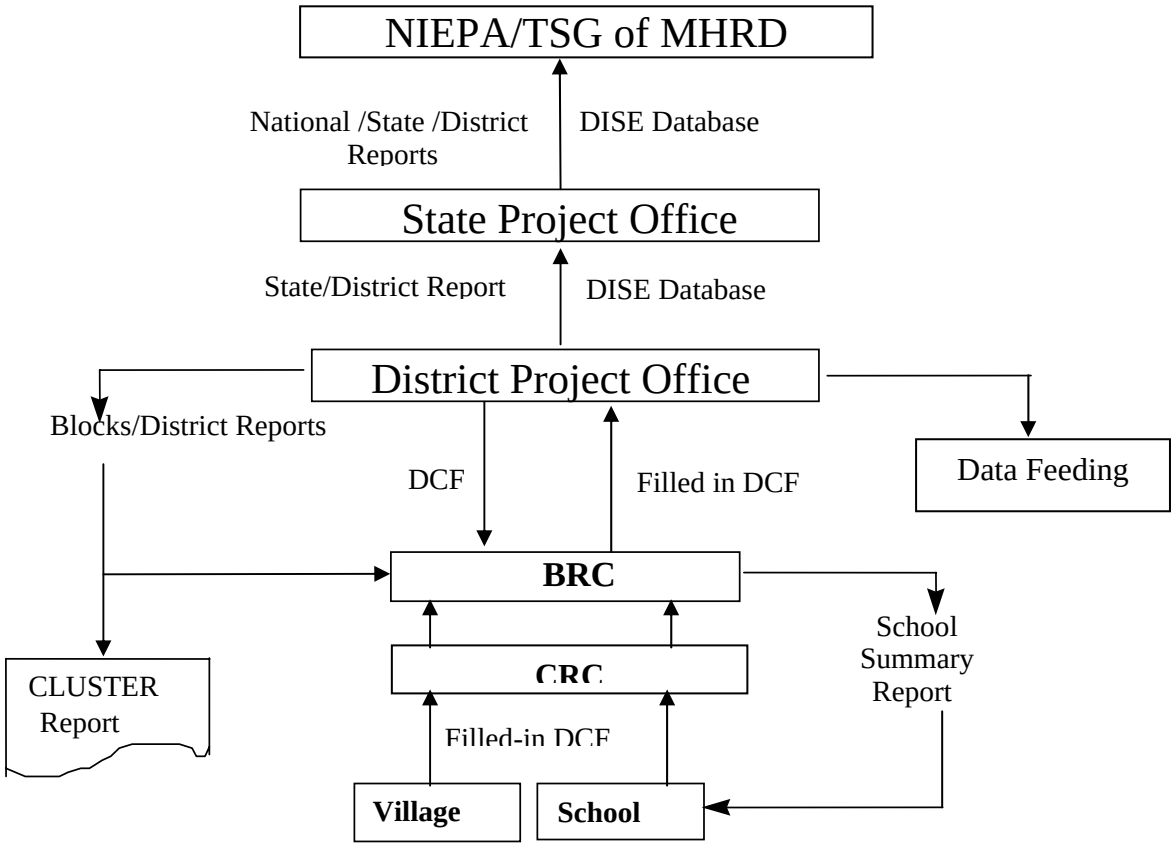
DISE 2004: Coverage

Initially, 42 districts across seven DPEP phase-one states, namely Assam, Haryana, Karnataka, Kerala, Madhya Pradesh, Maharashtra and Tamil Nadu, were covered under DISE. The number of districts covered has gradually increased with the expansion of the DPEP as the districts covered under phase-two and-three have also been covered. At the end of 2001, more than 270 districts spread over 18 states of the country adopted DISE. Information on key indicators in these districts was generated through the DISE, which has been extensively utilized in formulating district elementary education plans.

DISTRICT INFORMATION SYSTEM FOR EDUCATION

(D I S E)

Flow of Information



BRC : Block Resource Centre

CRC : Cluster Resource Centre

TSG : Technical Support Group

DCF : Data Capture Format

Table 1: *DISE 2005: Coverage*

S. No	State/UT	Education Cycle		Number of Districts 2001 Census	Number of Districts Reported Data		
		Primary	Upper Primary		2003	2004	2005@
1	Arunachal Pradesh	I-V	VI-VIII	15	-	-	15
2	Andhra Pradesh	I-V	VI-VIII	23	23	23	23
3	Assam	I-IV	V-VII	23	23	23	23
4	Bihar	I-V	VI-VIII	37	37	37	37
5	Chandigarh	I-V	VI-VIII	1	-	1	1
6	Chhattisgarh	I-V	VI-VIII	16	16	16	16
7	Delhi	I-V	VI-VIII	9	-	-	9
8	Gujarat	I-IV	V-VII	25	9	25	25
9	Haryana+	I-V	VI-VIII	19	9	17	19
10	Himachal Pradesh	I-V	VI-VIII	12	12	12	12
11	J & K+	I-V	VI-VIII	14	-	-	12
12	Jharkhand	I-V	VI-VIII	18	22*	22*	22
13	Karnataka	I-IV	V-VII	27	27	27	27
14	Kerala	I-IV	V-VII	14	14	14	14
15	Madhya Pradesh	I-V	VI-VIII	45	45	45	45
16	Maharashtra	I-IV	V-VII	35	30	35	35
17	Meghalaya	I-IV	V-VII	7	-	7	7
18	Mizoram	I-IV	V-VII	8	-	8	8
19	Nagaland	I-V	VI-VIII	8	-	8	8
20	Orissa	I-V	VI-VII	30	30	30	30
21	Pondicherry	I-V	VI-VII	4	-	-	4
22	Punjab	I-V	VI-VIII	17	-	17	17
23	Rajasthan	I-V	VI-VIII	32	32	32	32
24	Sikkim	I-V	VI-VIII	4	-	4	4
25	Tamil Nadu	I-V	VI-VIII	30	29**	29**	29
26	Tripura	I-V	VI-VIII	4	-	4	4
27	Uttar Pradesh	I-V	VI-VIII	70	70	70	70
28	Uttaranchal	I-V	VI-VIII	13	13	13	13
29	West Bengal	I-IV	V-VIII	18	20*	20*	20
30	**Total Districts**	**-**	**-**	**535**	**461**	**539***	**581**

* Including bifurcated districts.
\+ Data for all districts not reported.
** One district was later merged with another district.
@ Data under compilation.

At the time when the *Sarva Shiksha Abhiyan* was launched in 2001, the scope of DISE was extended to the entire elementary level of education and coverage was also spread to all the districts of the country. It is worth here to mention that one of the important pre- project activities under the *Sarva Shiksha Abhiyan Programme* was to strengthen the management information system, for which funds were provided to districts covered under SSA. In view of this, a number of DPEP states have expanded the coverage of DISE to the non-DPEP districts of their state. The Government of India too decided to gradually replace the manual system of data collection in case of elementary education by the DISE and to accord the

statistics generated through it the status of the Official Statistics. In 2002-03, the coverage was further expanded to 461 districts across 18 states. However, the coverage was confined only to DPEP states. During 2003-04, the coverage was further widened to cover as many as 539 districts (including bifurcated

Table 2: *States/UTs yet to be Covered Under DISE*

S. No	State/UT	Education Cycle		Number of Districts, 2001 Census
		Primary	Upper Primary	
1	A & N Islands	I-V	VI-VIII	2
2	Daman & Diu	I-IV	V-VII	2
3	D & N Haveli	I-IV	V-VII	1
4	Goa	I-IV	V-VII	2
5	Lakshadweep	I-IV	V-VII	1
6	Manipur	I-V	VI-VIII	9
	Total Uncovered Districts	**-**	**-**	**17**

districts) across 25 States & UTs of the country (Table 1). Further, during the year 2004-05 the coverage is extended to 581 districts across 29 States & UTs. These states have more than 98 per cent of the total population of the country. Except Jammu & Kashmir, the coverage in all other states in terms of districts is complete. Jammu and Kashmir could supply data of only 12 out of its 14 districts. On the other hand, Punjab submitted data only in case of government schools.

Table 3: *DISE 2004: State Summary*

S. No	State/UT	Data Reported from					
		Districts	Blocks	Villages	Schools	Enrolment	Teachers
1	Andhra Pradesh	23	1129	25833	84579	10238006	317560
2	Assam	23	150	21429	39459	3731663	165415
3	Bihar	37	530	31958	52202	11214817	158944
4	Chandigarh	1	20	20	164	105051	3315
5	Chhattisgarh	16	145	20650	35448	3819067	101168
6	Gujarat	25	228	19476	34786	6601031	181006
7	Haryana[+]	17	110	7308	11342	1811844	46411
8	Himachal Pradesh	12	115	9816	14964	1086819	50931
9	Jharkhand	22*	226	17991	22010	3417412	59740
10	Karnataka	27	184	27344	51546	7932229	237684
11	Kerala	14	157	1607	11988	3656101	121725
12	Madhya Pradesh	45	315	48063	86327	10268008	313881
13	Maharashtra	35	375	42135	77382	13720587	477077
14	Meghalaya	7	41	3971	6229	387589	19120

15	Mizoram	8	34	798	2274	169830	11897
16	Nagaland	8	52	1249	2271	349398	18289
17	Orissa	30	381	36108	49063	5726035	142054
18	Punjab	17	182	7118	9949	1243055	42808
19	Rajasthan	32	349	35637	78158	8734439	260060
20	Sikkim	4	21	498	984	107138	6793
21	Tamil Nadu	29**	412	18946	45952	9108995	228748
22	Tripura	4	45	967	3143	641201	27371
23	Uttar Pradesh	70	965	84743	134225	25348837	399813
24	Uttaranchal	13	102	11293	17471	1281984	48621
25	West Bengal	20*	482	37625	59556	12834925	225242
	Total Districts	**539***	**6750**	**512583**	**931471****	**143536061**	**3665673**

* : Including bifurcated districts.
\+ : Data for all districts not reported.
**: Total number of schools from which data collected during 2005 is about 1.40 million.

It was for the first time that seven non-DPEP states adopted DISE during 2003-04. These states are Chandigarh, Manipur, Meghalaya, Mizoram, Nagaland, Punjab and Tripura. Four additional states, namely Arunachal Pradesh, Delhi, Jammu & Kashmir and Pondicherry were covered during 2005. The system is yet to be adopted by six other non-DPEP States/UTs which together have 17 districts (Table 2). These States/UTs are Andaman & Nicobar Islands, Daman & Diu, Dadra & Nagar Haveli, Goa, Lakshadweep and Manipur. Many of these uncovered states are small in size both in terms of population and number of districts. NIEPA is committed to provide professional and software support to all the States and UTs. Accordingly, it has organized a number of Capacity Building workshops, both in the new and old states. It is expected that all the remaining states and districts will adopt DISE in the year that follows.

District Report Cards (2004) in case of 539 districts and State Report Cards 2004 in case of 25 States & UTs have already been published (*Elementary Education in India: Where do We Stand: District Report Cards: 2004, Volume I & II;* and *Elementary Education in India: Where do We Stand - State Report Cards: 2004,* NIEPA and Government of India, New Delhi, 2005). These are also available on http://dpepmis.org. Report Cards covering 581 districts across 29 States & UTs for year 2005 is being disseminated shortly.

DISE Dissemination

DISE believes that through wider dissemination data utilization can be ensured. It also believe that through rigorous data utilization, quality of data can be improved. With this in mind, DISE data is widely disseminated both in the electronic and print media form. District and State Report Cards and Analytical Reports are being disseminated for the last four years.

The District and State Report Cards contain information on all aspects of UEE at a single place on one sheet. The Report Cards are based on the school level data provided by the State Project/Mission Directors of the Elementary Education Bureau of the MHRD. The data is first cross-checked and validated at the District and then at the State level. After the State is satisfied with the quality and reporting of the data, it is submitted to the national level for

final analysis and reporting to various project management agencies and also for dissemination at the national level. In addition to the DISE data provided by the State Project Offices, the State Report Cards also present selected data from the Census of India (2001). More specifically, the State Report Cards contain information on the following important areas of elementary education:

- Population, decadal growth rate of population, percentage of 0-6 year population, literacy rate (male, female and total), percentage of urbanization, percentage of SC & ST population, and sex ratio.
- Data on number of blocks, CRC's, villages and schools in case of all the States.
- Key data on elementary education in terms of the number of schools, enrolment, and teachers, classified by school category and school management, also in respect of rural areas.
- Grade-wise and level-wise enrolment in each State;
- Examination results for the previous academic session for the terminal classes at primary and upper primary levels of education.
- Classrooms, categorized into good condition, requiring minor and major repairs by school category.
- Number of schools by category and by type of buildings.
- Sex-wise enrolment of children with disabilities at primary and upper primary levels.
- Gender and caste distribution of regular and *para-teachers* and the proportion of teachers undergoing in-service teacher training during the pervious year.
- Distribution of regular and *para-teachers* by educational and professional qualifications and by school category.
- Enrolment by medium of instruction and by school category.
- Sex-wise number of students benefited by various incentive schemes at primary and upper primary levels.
- Performance indicators in terms of school category; ratio of primary to upper primary schools/sections; enrolment distribution: total, Scheduled Castes and Scheduled Tribes, percentage female enrolment; gender-parity index; classrooms; single-teacher schools; schools with attached pre-primary classes; percentage of under-age & over-age children in primary and upper primary classes; apparent survival rate (up to Grade V), retention rate, and transition rate from primary to upper primary level.
- Quality indicators according to category of schools, teacher-pupil ratio; availability of female teachers; schools without female teacher; blackboard and building; percentage schools received school development and TLM grant; students-classroom ratio; availability of drinking water, common toilet and girl's toilet in school, etc.

Major Limitations of Data

Because of DISE interventions, the quality of educational data has started showing improvements. However, despite all significant achievements, DISE data may not necessary be absolutely free from limitations, obviously in view of its large-scale operations. This is largely because of the ad-hoc arrangements that the States have made for the DISE and the MIS Units. Because of the frequent changes in MIS staff, the recently initiated Capacity Building exercises at different levels are of little use. Out- sourcing of data feeding is another major area of concern which has affected quality of data to a large extent.

During 2004, data was collected from more than 931 thousand schools, with a comprehensive profile of more than 3.68 million teachers also being maintained by DISE. However, it may be noted that in a few States, the coverage may not be complete, despite all

efforts to ensure that all the recognized schools imparting elementary education, including the private aided and the unaided ones, are covered under DISE. Schools like *Navodaya Vidyalayas*, *Sainik* Schools, Military Schools, KBGB *Vidyalayas*, Project Schools, *Kendriya Vidyalayas*, Tibetan Schools and other private managed schools are supposed to be covered under DISE but their coverage varies from state to state. A few states have collected data from these schools while others might not have covered all such schools. Similarly, field level functionaries reported that data from a few private recognized schools couldn't be obtained for one or the other reason. We are trying to reach all such schools through the highest level, and are hopeful that these efforts will be reflected in the year that follows. The data presented and indicators constructed in the document are entirely based upon the data as received from the States.

On the other hand, a few schools have not responded to all the classificatory variables like management, year of establishment, rural/urban classification, school category, building status, academic and professional qualifications of teachers, and caste and sex code for teachers. Wherever possible, efforts were made to analyze the data by excluding the no-response values. In some tables, the no-responses are also shown separately. However, in some cases, the 'no-responses' are explicit from the tables and hence the totals may not match across various tables due to different number of no-responses. In cross tabulation analysis, the no-responses are excluded.

For the first time, an attempt has been made to present flow rates in case of States having DISE data for more than two years. While analyzing flow rates, it was noticed that in a few States the same was incorrect, largely because of the inconsistent data. Feedback on data quality was provided at the national level to the majority of States covered under DISE 2004. States are advised to use consistency module of DISE software to identify and remove inconsistencies in the data. In addition, CRC coordinators are being made accountable to ensure that data is consistent and there are no missing values.

A few schools did not report age and grade matrix which is very crucial in knowing the status of elementary education. A few States even did not report enrolment of Grade VIII. Therefore, enrolment in upper primary classes does not present the complete enrolment in Grades VI-VIII. Enrolment, if used in estimating GER and NER, may not present true picture of universalisation.

One of the other important limitations of the data is incomplete reporting of the school age population, which is very crucial in assessing the progress towards universal elementary education. It has been observed that information received on this aspect through the Village Data Capture Format, in most of the cases, is either incomplete or simply not reported. In the absence of reliable information on school-age population, it is not possible to construct dependable crucial indicators, such as GER and NER, both at the primary and upper primary levels of education. An attempt is made to project age specific population and the same is used to construct enrolment ratio. However, despite all these limitations, the indicators presented give enough inference about different aspects of UEE in a particular State and also the country as a whole, as it presents the average of 539 of the 593 districts.

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