Analytical Report 2006-07

सर्व शिक्षा अभियान

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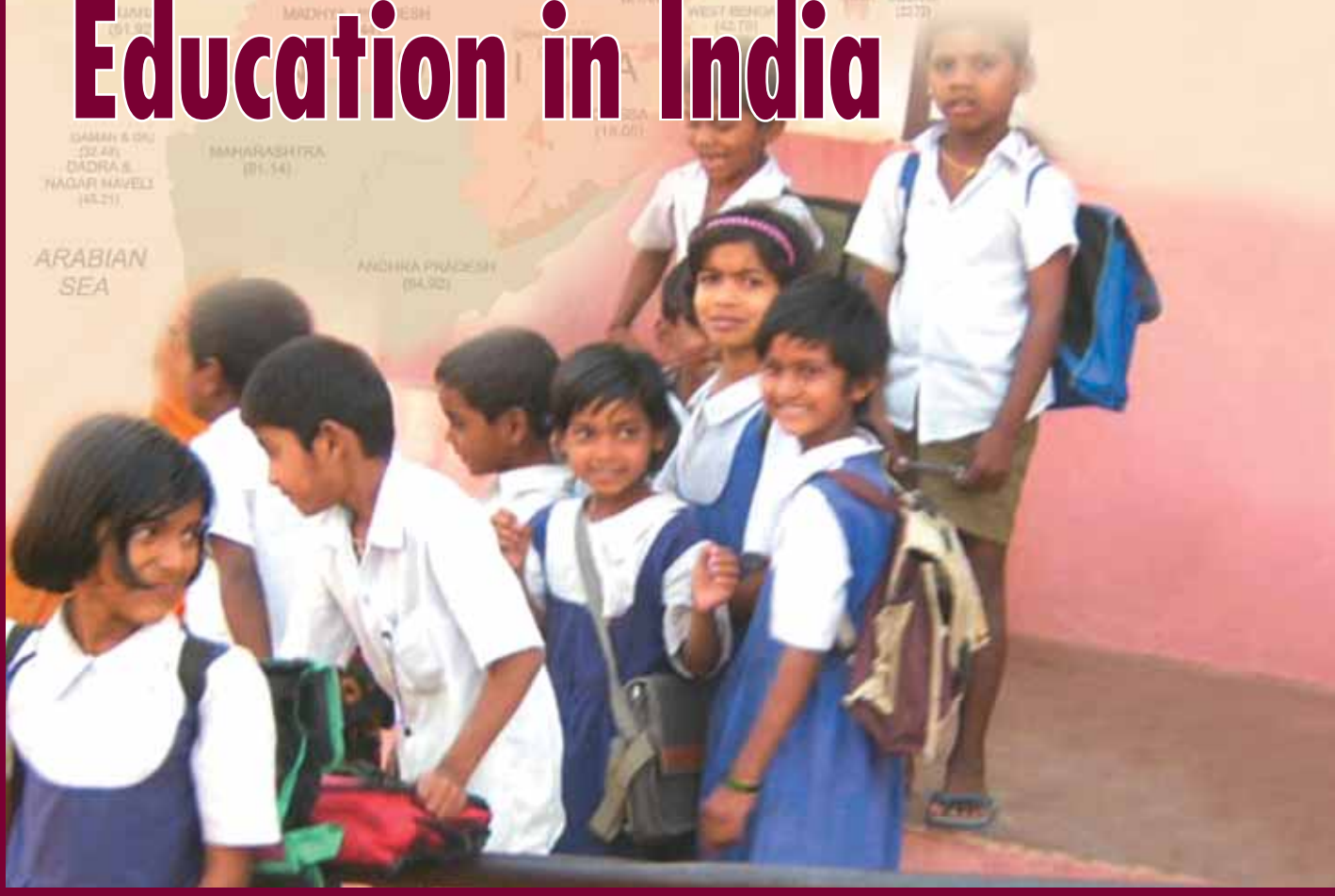
Elementary Education in India



Progress towards UEE

Arun C. Mehta

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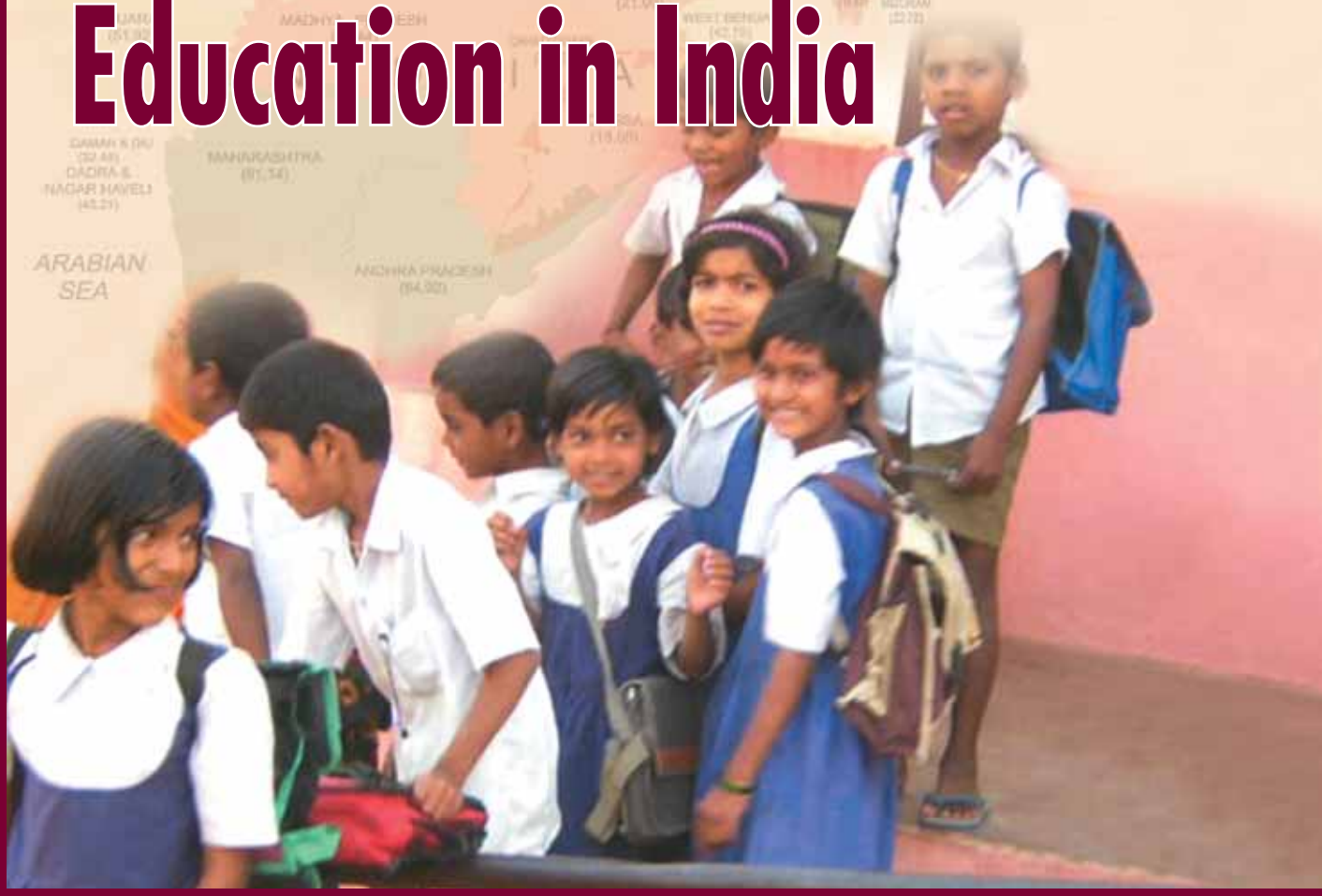

Progress towards UEE

Arun C. Mehta

The data presented and indicators constructed in the document are entirely based upon the data as received from the States & UTs as on 30th September, 2006. The views expressed and conclusions reached are that of the author and should not be attributed to the Goverment of India or to NUEPA.

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FOREWORD

Development of a sound information system is critical for successful monitoring and implementation of any programme, particularly in social sectors. Design of a school information system has, therefore, been accorded priority from the very beginning of the District Primary Education Programme (DPEP) in 1994, as a result of which the District Information System for Education (DISE) was developed by the National University of Educational Planning and Administration (NUEPA).

Importance of an Educational Management Information System (EMIS) was reiterated when *Sarva Shiksha Abhiyan* (SSA) was launched in 2001. SSA guidelines envisage development of a transparent EMIS, and preparatory activities of the programme included substantial strengthening of MIS infrastructure in the States and UTs of the country. I am happy to note that all the States & UTs of the country have adopted DISE and EMIS units have been established both at the state and district levels across the country.

District and State Elementary Education Report Cards as well as Elementary Education in Rural and Urban India have been made available to users. I am happy to present *Elementary Education in India: Analytical Report/Tables for the year 2006-07*. Information presented in the volume is particularly valuable for implementing educational programmes like SSA in the decentralized context. I am confident that this set of data will be used in planning for good quality elementary education, and that data users, researchers and development planners interested in the Indian education system will find the volume useful.

I must take this opportunity to thank UNICEF, Delhi, for consistently supporting EMIS activities since 1994, as well as NUEPA, especially Dr. Arun C. Mehta, Professor and Head, Department of EMIS and his team, for bringing out the present publication.

(Arun Kumar Rath)

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Prof. Ved Prakash
Vice-Chancellor

From the Vice-Chancellor's Desk

In the early 1990s when the District Primary Education Programme (DPEP) was launched, a need was felt to develop a computerized Educational Management Information System for facilitating decentralized planning and management. Accordingly, the responsibility to develop the District Information System for Education (DISE) was assigned to NUEPA. I am happy to note that the process that was initiated in 42 districts across 7 DPEP Phase-I states in 1994-95 has now been expanded to all the 35 States and UTs of the country. The database generated through DISE has been significantly contributing towards strengthening evidence-based decentralized planning and monitoring of primary and upper primary education at the district and sub-district levels.

Under its flagship programme, namely DISE, the University has been bringing out a series of publications based on DISE data. Each year NUEPA brings out *State Report Cards and District Report Cards* as well as *Elementary Education in the Rural and Urban India* that attempt to asses and present key performance indicators of primary and upper primary education in the country. Besides one million plus School Report Cards *(www.schoolreportcards.in),* the University has also brought out another publication, namely *DISE Flash Statistics* which aims at assessing the level of development of elementary education in States and UTs by constructing Educational Development Index (EDI). Such publications not only facilitate monitoring of progress towards UEE but also provide a wider scope for participation of the civil society in matters relating to planning and management of education.

In continuation of our series of publications based on the DISE data, it pleases me to present to the users yet another publication titled *Elementary Education in India: Progress towards UEE, Analytical Report/Tables* for the year 2006-07. I hope that the researchers, policy makers, administrators, planners and other stakeholders will find the publication both informative and useful.

I would like to place on record my appreciation for the arduous job carries out by the DISE Team led by Dr. Arun C. Mehta, Professor and Head, Department of Educational Management Information System of the National University in bringing out this publication. We would welcome any comments that users may care to make for the improvement of the publication.

(Ved Prakash)

New Delhi
August, 2008

Acknowledgements

For the last several years, NUEPA has been actively involved in strengthening Educational Management Information System (EMIS) in the country. The *Analytical Report 2006-07* is based on the data received from all the 35 States and Union Territories of the country. The publication presents not only the data up to elementary level but also brings in many new dimensions of elementary education into focus. It incorporates data on children with disabilities, examination results, mediums of instruction, students' flow including transition and retention rates, teachers, utilization of school development and TLM grants, and many other parameters on which not much information is available from other sources.

The *Analytical Report/Tables* is based on the data received from as many as 1.2 million schools spread over 609 districts across 35 States & UTs. The study of this magnitude cannot be completed without the active involvement and participation of the EMIS professionals at the national and sub-national levels. I am extremely thankful to all the State Project Directors, the state level EMIS coordinators and district level programmers and data entry operators for timely supply of data.

I take this opportunity to thank UNICEF, Delhi, for consistently supporting EMIS activities ever since the inception of DISE and Ms Vrinda Sarup, Joint Secretary, Department of School Education & Literacy, Government of India, who played a crucial role in facilitating the implementation of DISE in various states. The contribution of Ms Neelam Rao, Director (SE & L), is also gratefully acknowledged.

I am thankful to Prof Ved Prakash, Vice-Chancellor, NUEPA, for guidance, encouragement and consistent support to DISE activities.

The contribution of Shri Naveen Bhatia, Computer Programmer and Shri Shalender Sharma, Project Senior Systems Analyst, in database management, is gratefully acknowledged.

I am also thankful to Shri P. N. Tyagi for creating maps and Ms Alka Mishra for efficient assistance and colleagues in the Publication Unit, especially Shri Pramod Rawat, Deputy Publication Officer and Ms. Sheeja Biju, Project Publication Officer, for their keen interest in timely bringing out the publication.

We are encouraged by the enormous number of comments received from data users and hope that the present publication will also be received well by education planners, policy formulators and researchers. Any suggestion for improvement is most welcome.

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Disclaimer

Raw data presented in the document or used for calculating indicators are essentially based on data provided by States and UTs through annual data collection (as on 30th September, 2006) under SSA (DISE).

NUEPA is committed to provide professional and software support to all States and UTs as well as for dissemination and analysis of the data as it is provided by the individual States and UTs. In no way, NUEPA is involved in data collection as such and therefore, the acuracy and truthfulness of the data rest with the States/UTs.

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Abbreviations

AS	:	Alternative Schooling
Avg	:	Average
BAS	:	Baseline Assessment Studies
BRC	:	Block Resource Center
CR	:	Completion Rate
CRC	:	Cluster Resource Center
DIET	:	District Institute of Education and Training
DISE	:	District Information System for Education
DoR	:	Drop out Rate
DPEP	:	District Primary Education Programme
DRC	:	District Report Cards
Ed. CIL	:	Educational Consultants India Limited
EGS	:	Education Guarantee Scheme
EMIS	:	Educational Management Information System
GoI	:	Government of India
Govt.	:	Government
GER	:	Gross Enrolment Ratio
GPI	:	Gender Parity Index
Hr.	:	Higher
M.A.	:	Master of Arts
M. Phil	:	Master of Philosophy
MHRD	:	Ministry of Human Resource Development
NCERT	:	National Council of Educational Research and Training
NER	:	Net Enrolment Ratio
NUEPA	:	National University of Educational Planning and Administration
No.	:	Number
NSSO	:	National Sample Survey Organisation
OBC	:	Other Backward Class
ORC	:	Other Reserved Class
PAB	:	Project Approval Board
Ph.D.	:	Doctor of Philosophy
P + Sec./Hs.	:	Primary with Upper Primary & Secondary/Higher Secondary
P + UP	:	Primary with Upper Primary
P. only	:	Primary only
PR	:	Promotion Rate

PTR	:	Pupil-Teacher Ratio
Pvt.	:	Private
RR	:	Repetition Rate
Recd	:	Received
SC	:	Scheduled Castes
SCR	:	Student-Classroom Ratio
SCERT	:	State Council of Educational Research and Training
SDG	:	School Development Grant
Sec.	:	Secondary
SRC	:	State Report Cards
SSA	:	Sarva Shiksha Abhiyan
ST	:	Scheduled Tribes
TLM	:	Teaching Learning Material
TLM Grant	:	Teaching Learning Material Grant
TR	:	Transition Rate
TSG	:	Technical Support Group
U. Prim./U.P	:	Upper Primary
U.P. Only	:	Upper Primary only
UEE	:	Universalisation of Elementary Education
UP + Sec	:	Upper Primary with Secondary/Higher Secondary
UPE	:	Universalisation of Primary Education
KGBV	:	Kasturba Gandhi Balika Vidyalaya

Executive Summary

1. Introduction

1.1 The National University of Educational Planning and Administration has created a comprehensive database on elementary education in India known as District Information System for Education (DISE), under one of its most prestigious projects. The project covers both primary and upper primary schools/sections of all the districts of the country. The MIS Units are now operational both at the district and state levels and are equipped with necessary hardware and software. The DISE software is also operational in all the districts of the country and is providing vital information for policy formulation and preparation of district elementary education plans. What is more remarkable about DISE is that it has drastically reduced the time-lag in the availability of educational statistics which is now down from 7-8 years to less than a year at the national level and only a few months at the district and state levels.

1.2 The National University has successfully developed School Report Cards (*http://schoolreportcards.in*) of more than 1 million primary and upper primary schools/sections, and are available for 2005-06 and 2006-07. In addition to quantitative information, the Report Cards also provide qualitative information and descriptive reports about individual schools. And, all this information can now be accessed on the click of a mouse. The Report Cards provide the users comprehensive information on all the vital parameters, be it student, teacher or school related variables, in concise, accurate and standard format which is easy to understand and allows meaningful comparisons to be made among schools. Users can also download raw data as per their requirement for further empirical studies. All DISE publications, such as 'district and state report cards', 'elementary education in rural and urban India', 'DISE flash statistics including educational development index', and 'elementary education in India: progress towards UEE, analytical reports', are available at *http://dise.in*.

1.3 Despite significant increase in the number of schools covered, a few schools, largely private un-aided ones, are yet to be covered under DISE. To further improve the quality of data, it has now been made mandatory for all the states to check the data on five percent random sample basis through an independent agency each year. States are advised to initiate corrective measures in the light of the findings of sample checking of data.

2. The Present Publication

2.1 A variety of schools and school-related indicators by school categories along with the average of all states covered under DISE in 2006-07, as also the selected indicators for previous years are presented in the present publication. The tables presented in the document contain information on hundreds of variables, mostly by school category and wherever necessary by rural and urban areas, and management category. Practically, all such indicators on which information is required for formulating reliable elementary education plans are presented *'in ready-to-use form'*. The indicators analyzed and tables presented are divided into the following sections: School and Facility Indicators; Enrolment-Based Indicators; and Teacher-Related Indicators. In addition, a separate section, devoted to Educational Development Index is given. The major highlights of *Elementary Education in India: Progress Towards UEE, Analytical Report 2006-07* are given in the following sections.

3. School-Based Indicators

3.1 With the improved coverage, the number of schools/sections imparting elementary education dealt with under DISE increased many-fold. From 8,53,601 schools in 2002-03, their number has increased to 11,24,033 schools in 2005-06 and further to 11,96,663 schools in 2006-07. Of the total schools, about 87.15 percent schools are located in the rural areas. During the same period, the number of primary schools increased from 6,01,866 to 7,79,482. Category-wise distribution of schools reveals that majority of the schools (65.14 percent) are independent primary schools. The increase in the number of schools is also reflected in the ratio of primary to upper primary schools/sections which clearly shows the impact of *Sarva Shiksha Abhiyan* under which a large number of schools have been opened in the recent past. This ratio for the year 2006-07 is one upper primary school/section for every set of 2.45 primary schools/sections compared to 2.57 in 2005-06 and 2.68 schools/sections in 2004-05. It is noticed that in about 22 states, the ratio of primary to upper primary schools/sections is better than the national average of 2.45. Many of the states have the ratio equivalent to almost two, all of which suggests that by and large schooling facilities have been created and are available across the country. Despite significant improvement in the ratio, there are a few states, such as Arunachal Pradesh, Assam, Bihar, Jharkhand and West Bengal, where the ratio still needs to be improved.

3.2 Obtaining data from all the private schools is a challenging task. Concerted efforts made by the National University have resulted in a significant increase in the number of such schools covered under DISE over a period of time. This is important to assess the true picture of universalisation of elementary education in the country. As many as 69,473 and 1,56,162 schools in 2006-07 were respectively being managed by the Private Aided and Private Unaided managements. DISE data also suggests that majority of the private schools are un-aided schools (69.21 percent). The percentage of government and government aided schools is as high as 86.63 which shows that nine out of every ten schools imparting elementary education in the country are funded by the government.

3.3 A significant achievement is that most of the new schools have a school building. As many as 3,82,271 new schools have been opened since 1994-95 majority of which are located in the rural areas and 92 percent of these schools have been provided a school building. During the period 1994-95 to 2006-07, as many as 2,58,780 primary schools have been opened which is 33.20 percent of total primary schools in the country. About 91 percent of such schools have been provided school building.

3.4 Not only the number of schools and schools with buildings has increased but the average number of instructional rooms has also increased across the country. This is essential for smooth teaching-learning transaction. Irrespective of the school type, schools imparting elementary education across 609 districts in 2006-07 had an average of 4.1 classrooms, compared to 3.5 in 2002-03. However, a significant difference is noticed in average number of instructional rooms in primary schools located in rural areas (2.7 classrooms) and urban areas (4.6 classrooms) and also in government (2.6 classrooms) and private (4.8 classrooms) managed schools. About 68 percent classrooms in primary schools are in good condition and remaining 32 percent need either minor or major repairs.

3.5 Schools imparting elementary education across the country vary in size. There are about 7.91 and 16.01 percent schools which respectively have enrolment between 1-25 and 26-50. In view of there being a large number of small schools, there is a need to have separate programme for these schools. In view of the large number of such schools (about 24 percent of 1.20 million schools), the National University has undertaken a research study, based on the DISE data. It is hoped that the outcome of the study will help NUEPA in developing planning methodology for small schools.

3.6 Some of the salient highlights with regard to school-based indicators are as follows:

3.6.1 The distribution of schools by type of building shows that 70.12 percent primary schools have *pucca* (permanent) buildings as compared to 9.08 percent having partially *pucca* and another 3.38 percent having *kuchcha* (temporary) building. Efforts should be made to provide all schools a *pucca* school building.

3.6.2 The percentage of single-classroom schools during 2002-03 to 2006-07 declined from 12.08 percent to 9.71 percent. Despite the decline in percentage of single-classroom schools, there number in absolute terms is significant, which needs intervention without delay.

3.6.3 Over a period of time, the student-classroom ratio has shown improvement. On an average about 40 students are sitting in one classroom in primary schools. However, in case of primary schools, the student-classroom ratio in states of Bihar (92), Jharkhand (79) and Uttar Pradesh (53) is still very high.

4. Facility Indicators

4.1 Like number of schools, instructional rooms and ratio of primary to upper primary sections/schools, facilities in schools have also improved significantly which is true for physical, ancillary and teaching-learning facilities. DISE data clearly shows significant improvement in such facilities in schools which is largely because of the government's initiatives like SSA. Availability of basic facilities in schools not only attract more children to schools but also help in improving retention rate. More than 85 percent schools had drinking water facility available in 2006-07 compared to 83 percent in 2005-06. A little less than 50 percent of the total schools had water hand pumps, and 23 percent of schools had tap water facility in school. Like drinking water facility, more schools now have common toilets and separate toilets for girls. About 58 percent schools had common toilets in schools in 2006-07, compared to 42 percent schools in 2003-04; and 43 percent schools in 2006-07 had separate toilets for girls compared to only 28 percent in 2003-04.

4.2 Some of the other major facilities available in schools are:

4.2.1 During the period 2002-03 to 2006-07, the number of schools with computers increased impressively. As many as 1,60,749 schools reported to have a computer, which is 13.43 percent of the total schools. In absolute terms, Maharashtra has the highest number of schools (28,882 schools, 33.42 percent) with computers. The percentage of primary schools with computers is 6.51 percent compared to 11.05 percent in case of independent upper primary schools.

4.2.2 The percentage of schools with ramps increased significantly from 4.63 percent in 2002-03 to 26.61 percent in 2006-07; this may help in attracting more physically challenged children to schools. Together with enrolment by nature of disability, DISE is perhaps the only source that provides comprehensive information about physically challenged children in schools.

4.2.3 Providing nutritious food to all children under the mid-day meal scheme is one of the ambitious programmes of the government. For the first time, a variable on availability of kitchen-shed in school was added to DISE during 2006-07. It reveals that 29 percent of schools managed by the government and aided schools have kitchen shed in school. The percentage of such schools is 30 and 23 respectively in the rural and urban areas. The percentage of schools with kitchen-shed varies from 80 in Tamil Nadu to 3 in Jammu & Kashmir.

4.2.4 The percentage of primary schools having attached pre-primary section increased from 14.27 in 2002-03 to 26.69 in 2006-07. The number of such schools is more in urban areas than in rural areas.

4.2.5 Over a period of time, the number of schools receiving school development and TLM grants increased impressively (mostly government run schools). Compared to 3,60,892 schools that received school development grant in 2001-02, the corresponding figure in 2005-06 was as high as 8,52,920 schools (71.27 percent). The number of schools that received TLM grant has been as many as 8,12,349 (67.88 percent) of all types of schools. Majority of the states have utilised more than 90 percent of these funds.

5. Enrolment-Based Indicators

5.1 With the increased coverage of schools under DISE, enrolment both at the primary and upper primary level of education has also increased significantly. The enrolment increased from 101.16 million in 2002-03 to 124.62 million in 2005-06 and further to 131.85 million in 2006-07. The GER at primary level, based on the DISE data is estimated to be 110.86 percent, corresponding to 92.75 percent NER. A few states are near achieving the goal of universal primary enrolment. Over a period of time, enrolment in upper primary classes has also shown consistent increase. From a low of 37.72 million in 2004-05, it has increased to 47.49 million in 2006-07 (GER 64.72 percent).

5.2 Gender Parity Index (GPI) and percentage of girls' enrolment in primary and upper primary classes reveal that there is consistent improvement both in GPI and girls' share in enrolment. The average of 609 districts in 2006-07 indicates a GPI of 0.93 in primary classes and 0.87 in case of upper primary classes. In 2004-05, GPI respectively in primary and upper primary enrolment was 0.91 and 0.83. GPI in primary enrolment indicates that the index is above 0.90 in 28 states. Meghalaya has the highest GPI of one and Chandigarh, the lowest at 0.80.

5.3 The improvement in girls' enrolment is also reflected in girls share to total enrolment. In primary classes, the share of girls' enrolment in 2006-07 was 48.09 percent compared to 47.79 percent in the previous year. Girls share in total enrolment at upper primary level is 46.51 percent; it was 45.80 percent in 2005-06 and 45.02 percent in 2003-04. The percentage of girls' enrolment in government managed schools was found to be higher than in private managed schools for both primary and upper primary enrolment.

5.4 At the primary level, the share of SC and ST enrolment with respect to total enrolment works out to 20.11 and 11.36 percent respectively. Notably, at all levels, government schools are the main providers of educational needs of both SC and ST children. SC and ST enrolment together had a share of 78.50 and 84.55 percent respectively, in government run primary and upper primary schools. The share of OBC enrolment in the primary and upper primary classes is 42.18 and 41.23 percent respectively.

5.5 During 2006-07 DISE data collection, an attempt was made to collect information on enrolment of Muslim children for the first time. The percentage of Muslim enrolment at primary level is reported to be 9.39 against 7.52 at upper primary level. However, being the first year for such data collection, data was not reported from all schools in many district/states. Within these limitations, the percentage of girls' enrolment is as high as 48.65 (GPI, 0.95) and 49.33 (GPI, 0.97) at primary and upper primary levels. Preliminary analysis of data suggests that there are about 40 districts in the country which have 25 percent or more Muslim students in primary classes. Most of these districts are from the states of Assam, Bihar, Jammu & Kashmir, Karnataka, Uttar Pradesh and West Bengal. It is hoped that coverage in terms of Muslim enrolment under DISE would further improve in the following year.

5.6 Much emphasis is being given to inclusive education. DISE is perhaps the only source that collects information on disabled children in elementary classes on regular basis. In 2006-07, about 1.42 million disabled children were enrolled in elementary classes across the country, of which 1.04 million were in primary and 0.38 million in upper primary classes.

5.7 One of the essential requirements to achieve UEE is to retain students in the education system. The apparent survival rate has improved to 73 percent in 2006-07 from 63 in 2004-05. This is also reflected in retention rate at primary level which is estimated to be 70 percent. States like Himachal Pradesh, Karnataka, Kerala, Madhya Pradesh and Tamil Nadu reported above 90 percent retention rate at primary level.

5.8 With improvement in the number of schools, facilities in schools and enrolment, the dropout rate for cohort 2005-06 indicates an average rate of 8.61 percent in primary grades against 9.96 percent during the previous cohort. Kerala with dropout rate of 1.80 percent, Tamil Nadu with 1.54 percent, and Himachal Pradesh with 1.85 percent have almost achieved the goal of universal retention at primary level.

5.9 One of the other important indicators that are essential to achieve UEE is high transition from primary level to upper primary level of education. It has improved significantly from 64.48 percent in 2002-03 to 83.72 percent in 2005-06.

5.10 Learner's achievement is considered as one of the important indicators of quality of education. Examination results at the terminal grades is a proxy indicator of learner's achievement. About 44.96 percent boys and 45.12 percent girls passed Grade IV/V with a score of 60 percent and above, compared to 38.83 percent boys and 40.06 percent girls scoring 60 percent and above marks in Grade VII/VIII.

6. Teacher-Related Indicators

6.1 Availability of teachers in schools is an important variable for quality education. The total number of teachers in 2006-07 suggests that about 5.22 million teachers are engaged in teaching in schools imparting elementary education in the country. The data also shows appointment of a large number of teachers across the country consequent to the SSA interventions. All the schools in the country now have an average of 2 and more teachers. The all-India average reveals that, on an average, there were 4.4 teachers in a school in 2006-07 that imparts elementary education compared to an average of 2.9 teachers per primary school.

6.2 All schools together had 41.86 percent female teachers. Urban areas had higher percentage of female teachers than the rural areas; this is true for all school types. Irrespective of school types, a significant difference is also noticed in case of female teachers in schools under private and government managements.

6.3 Increase in the number of teachers is also reflected in the pupil-teacher ratio which has shown consistent improvement. PTR, both at primary and upper primary levels, is quite comfortable (primary, 36:1 and upper primary, 32:1) and is below 40:1. At primary level, there are only seven states which reported a PTR above 40. At upper primary level, Bihar reported a high PTR of 67:1, compared to 65:1 at primary level. In Bihar, it is not only PTR that is high but it has also reported a high student-classroom ratio of 91. With the appointment of a large number of teachers in the state, pupil-teacher ratio is expected to improve in the year that follows.

6.4 There are about 514 thousand *para*-teachers, constituting around 10 percent of the total number of teachers. About 70,338 schools have only *para*-teachers. The percentage of such schools is very high in Rajasthan, Madhya Pradesh and Chhattisgarh, these respectively having 17.98, 30.71 and 16.53 percent of the total number of schools in these states. About 53 percent male and 49 percent female *para*-teachers are Graduates and above. About 15.40 percent male and 12.61 percent female *para*-teachers in primary schools have BEd or equivalent degrees.

6.5 The average age of teachers across states suggests that majority of the teachers in primary schools are between 26-45 years, which is also true for other types of schools. The percentage of teachers in the age group 18-25 years across school types has been very low but has shown improvement over the previous year; it indicates newly recruited teachers are joining state education system.

6.6 The percentage of teachers involved in non-teaching assignments has been as low as 11.36 percent which shows that the majority of teachers were not involved in non-teaching assignments during the previous academic year. On an average, a teacher was involved in non-teaching assignments only for 16 days. In rural areas, teachers were involved in such assignments for 16 days compared to 18 days in urban areas.

6.7 DISE data reveals that government is the main employer of both Scheduled Castes and Scheduled Tribes teachers. The share of SC and ST teachers together in government schools is as high as 80 percent. As many as 0.64 million SC and 0.46 million ST teachers are engaged in imparting elementary education, respectively representing 12.20 percent and 8.82 percent of the total teachers.

7. Educational Development Index

7.1 Based on the DISE data, an effort has been made to compute Educational Development Index separately for primary and upper primary levels of education as also the composite index for the entire elementary education. The EDIs can play a significant role in assessing progress towards UEE as well as in deciding the future course of investment on elementary education. About 23 indicators were used which were further re-grouped into four sub-groups, namely access, infrastructure, teachers, and outcome indicators. The major findings of EDI are given below.

7.2 The EDI reveals that Sikkim out-performed the other six states in the north-eastern region which is true for primary and composite primary and upper primary levels of education. Seven states have been grouped under smaller states. May be these states are small in size but a cursory look at EDI values indicates that they are doing much better than a number of bigger states. A look at the EDI values indicates a marked improvement in case of Puducherry in case of composite primary and upper primary levels of education. Not only it is ranked first within the set of smaller states, but is also ranked 2nd with an EDI value of 0.771 amongst all the States and UTs of the country in case of composite primary and upper primary levels of education.

7.3 Amongst 21 major states, the top five ranking states are Kerala (EDI, 0.772), Delhi (EDI, 0.757), Tamil Nadu (EDI, 0.741), Himachal Pradesh (EDI, 0.707) and Karnataka (EDI, 0.680). Kerala and Delhi maintained their first and second positions but Karnataka conceded its fourth position to Himachal Pradesh. The EDI value of Karnataka in 2006-07 was higher than the same in the previous year. However, Tamil Nadu at primary level conceded its second position to Kerala and Karnataka its fourth position at upper primary level to Himachal Pradesh. The EDI in Tamil Nadu, in fact, had improved to 0.724 in 2006-07 from 0.672 in the previous year. These states are generally seen as educationally advanced states. Irrespective of an educational level, the difference in EDI values between the highest and lowest ranked states is significant, showing that states are at different levels of educational development.

7.4 Bihar and Jharkhand are ranked 35 and 34 in case of composite primary and upper primary levels of education with an EDI as low as 0.321 and 0.381 respectively which is much lower than the same compared to the top ranked states. Both states had lower EDI values in 2006-07 than in 2005-06 which is by and large (barring upper primary in Bihar) true for both primary, upper primary and composite

primary and upper primary levels of education. In the overall ranking, West Bengal and Arunachal Pradesh are placed 33rd and 32nd respectively in case of composite EDI at primary and upper primary level which is quite similar to their positions in 2005-06.

7.5 The analysis of EDI clearly reveals that different states are at different levels of educational development in general, and primary and upper primary levels of education in particular. A few states with high EDI values are termed better than the other states but still they may not be well placed with regard to all the four sets of indicators used in computation of EDI. Even if a state is ranked first, still it may need further improvement for which individual EDI values should be critically analyzed. In addition, there is also a need to analyse each indicator separately and identify states that need improvement.

7.6 The states are advised to compute district-specific EDIs and analyse results separately in case of access, infrastructure, teachers and outcome indicators. Even the top ranking states are not perfect in case of all the four sets of indicators which is reflected in individual EDI values. Variables found to have higher weightage than others should be accorded the top most priority while adopting strategies in the year that follows.

8. DISE: The Way Forward

8.1 Through DISE efforts, information on all aspects of universalisation of education is now available at disaggregated levels which can be used in different ways. The present document has highlighted a number of issues which can be tracked by using DISE data at different levels. Up-to-date information is now available at all desired levels in ready-to-use form. Detailed information is available by school category, management, location, type of schools and wherever necessary, is separately available by gender. The same is also separately available for primary and upper primary levels of education. In view of the data now being available at school, cluster, block, district, state and national levels, evidence-based planning can be initiated at any desired level. DISE data now being available over a period of time, trend analysis on areas of concern can be initiated. Studies on girls participation in educational programmes, enrolment, impact of infrastructure on learner's attainment, pupil-teacher ratio, *para*-teachers, impact of in-service training on classroom transaction, schools with high PTR and students-classroom ratio etc. can be undertaken exclusively based on DISE data. Individual schools lacking minimum facilities can be identified and tracked by using DISE data. A few states have computed district and block-specific EDI; DISE data can be used extensively to track their progress. One of the other important variables available under DISE is grade-wise enrolment and repeaters which can be of immense use in initiating internal efficiency of education system related studies. In a number of districts, since DISE data is now available over more than five years, studies concerning retention and transition rates can be undertaken. Perhaps DISE is the only source which disseminates age and grade matrix which can play an important role while planning for school places. Comprehensive profiles of more than 5.2 million teachers is also being maintained under DISE, which can be used for developing meaningful in-service-training programmes.

8.2 Despite overall improvement, there are a few areas of concern which need to be accorded the top most priority in the following year.

8.2.1 States with high ratio of primary to upper primary schools/sections may like to expand upper primary schooling facilities. All schools imparting elementary education across the country should be provided with minimum essential physical, ancillary and teaching-learning facilities. There are

still locations where PTR is not satisfactory and a single classroom has to accommodate a large number of pupils. Possibilities may be explored to provide additional classrooms to schools having high student-classroom ratio.

8.2.2 A good number of schools are single-teacher schools despite availability of an average of four teachers per school, all of which need serious intervention. May be rationalization of teachers is the only solution. Percentage of female teachers has improved but in a few states there number is not satisfactory and hence need improvement. Process of filling-up of vacant positions of teachers across the country may be initiated immediately. Quite a good number of schools are left to *para*-teachers to manage school affairs. Studies should be initiated on the functioning of all such schools.

8.2.3 The average dropout rate being high at primary level, it needs to be checked, without which neither the goal of universal primary education nor elementary education can be achieved. This is also true for transition from primary to upper primary level of education. For that purpose, reason-specific child-centered strategies need to be adopted.

8.2.4 The quality of education in terms of examination results and learners' attainment across the country is not satisfactory. It may be improved through active participation of teachers. Useful in-service programmes can be of great help in improving classroom transaction. Identification of training needs and review of existing in-service programmes may be helpful in making these programmes more effective.

8.2.5 States may be advised to compute district-specific EDIs and analyse EDI values separately in case of access, infrastructure, teachers and outcome indicators. Rather, they may like to analyse all the 23 indicators used in EDI computation district-wise, and within a district, block-wise. This may be followed by adopting appropriate strategies.