#  <br> STUDENT FLOW aT PRIMABY LEVEL 

 An Anolysis based on DISE Data
## Arun C. Mehta




# Student Flow at Primary Level An Analysis based on DISE Data 

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The data presented and indicators constructed in the document are entirely based upon the data as received from the States \& UTs as on $30^{\text {th }}$ September 2004 and 2005. The views expressed and conclusions reached are that of the author and should not be attributed to the Government of India or to the National University of Educational Planning and Administration

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## Foreword

At the time of independence, education in India used to be the privilege of a few. Since then, concerted efforts have resulted in manifold increase in schools, teachers and students thereby increasing the outreach of elementary education in the country. In fact, the implementation of the externally funded primary education programmes in the early 1990s gave further fillip to efforts towards achieving the goal of universalisation of elementary education. The Sarva Shiksha Abhiyan (SSA) launched for the Universalisation of Elementary Education (UEE) has been fairly successful, among others, in institutionalizing decentralized planning and monitoring processes. Over the years it has been recognized that even with phenomenal expansion of elementary education, the efficiency of primary and upper primary schools continues to be low across States and UTs, thereby coming in the way of achieving the goal of UEE. Accordingly, the SSA has envisaged a comprehensive monitoring system for all the four components of UEE.


#### Abstract

Although several attempts have been made in the past to assess access, enrolment and learners' achievement, little information is available on the internal efficiency of primary and upper primary schools in the country. Very few studies have attempted to look into all the indicators of internal efficiency, and none of these studies has so far examined the internal efficiency of primary education from a comparative perspective covering all States and UTs. This report on student flow at primary level based on DISE data for 2004-05 and 2005-06, for the first time, attempts to analyze the indicators of internal efficiency covering the entire country. Not only is the report unique in terms of its coverage of indicators but also in providing insights into regional variations in the performance of primary schools. The report acquires further significance in providing baseline performance indicators for the purpose of monitoring the third component of UEE i.e universal retention. I am sure this publication would serve as an important reference material for both research scholars and personnel engaged in planning and management of elementary education in the country.

I would like to appreciate the hard work put in by the DISE Project Team of the National University led by Prof. Arun C. Mehta of the Department of Educational Management Information System in bringing out this publication



(Ved Prakash)
Vice-Chancellor
National University of Educational Planning and Administration

## Preface

In the recent past number of children joined education system and subsequently the number of out-of-school children declined significantly. However, retention rate remained low. It is because of the low retention that the goal of universal primary education has not yet been realised. Without identifying locations having high incidence of drop-out, neither the goal of universal enrolment nor universal retention can be achieved. The present study deals with the presentation of a variety of indicators which are otherwise not used in the recent past. Apparent survival rate, grade-to-grade drop-out, promotion and repetition rate, retention rate, transition rate (from primary to upper primary level of education) and a variety of indicators of internal efficiency of education system, such as, coefficient of efficiency, wastage ratio and average number of years being taken by the system to produce primary graduates have been analysed at the primary level of education all of which are based on DISE 2004-05 and 2005-06 data. Wherever necessary, an attempt has also been made perhaps for the first time to compute and analysed indicators separately in case of the DPEP and Non-DPEP districts. It is hoped that the study would help states in adopting appropriate strategies. Besides efficiency indicators, estimates of out-of-school children generated through the recently conducted national-wide surveys have also been critically analysed.

I take this opportunity and appreciate the efforts made by the states in timely collecting data from as many as 1.12 million schools across 604 districts spread over all the 35 States and Union Territories of the country.

I am thankful to Ms Vrinda Sarup, Joint Secretary for playing crucial role in facilitating the implementation of DISE and; UNICEF, Delhi, for its consistent support to DISE activities.
I am thankful to Prof Ved Prakash, Vice-Chancellor, NUEPA, for his encouragement and support.

I am also thankful to all the colleagues in the MIS Unit of the Technical Support Group, as well as, my own colleagues at the National University for their consistent support.

Suggestions are most welcome.

## Abbreviations

AISES : All India School Education Survey
ASER : Assessment of the Status of Elementary Education in the Rural India
ASR : Apparent Survival Rate
BRC : Block Resource Center
CRC : Cluster Resource Center
DISE : District Information System for Education
DPEP : District Primary Education Programme
DR : Dropout Rate
Ed.CIL : Educational Consultants India Limited
EGS : Education Guarantee Schools
GER : Gross Enrolment Ratio
Gol : Government of India
IMRB : Indian Market Research Bureau
NCERT : National Council of Educational Research and Training
NER : Net Enrolment Ratio
NSSO : National Sample Survey Organization
NUEPA : National University of Educational Planning and Administration

PR : Promotion Rate
RR : Repetition rate
SSA : Sarva Shiksha Abhiyan
TR : Transition Rate
UEE : Universalisation of Elementary Education
UNICEF : United Nations International Children Education Fund
UPE : Universalisation of Primary Education

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## Executive Summary

1. The Government of India has initiated a number of programmes to achieve the goal of Universalisation of Elementary Education among which the Sarva Shiksha Abhiyan is the most recent one. It aims at achieving universal primary education by 2007 and universal elementary education by 2010.
2. Though indicators to monitor progress towards universal access, enrolment and quality are well defined but the general perception about the same is not clear in case of indicators of universal retention and drop-out rates. Keeping in view the availability of data, an attempt has been made in the present study to discuss computation procedure of a variety of drop-out and survival rates based on the DISE data. Survival rate, retention rate, grade-to-grade and average transition rate: promotion, repetition and drop-out rate in primary classes; indicators of internal efficiency of education system and transition from primary to upper primary level of education have been computed at the primary level of education. A detailed analysis is also undertaken with respect to the first objective of SSA, namely all children in school, education guarantee centre, alternate school-to-school camp for which all possible sources of data have been explored. Official statistics as well as surveys conducted by the private agencies have been used to assess quantum of out-of-school children.
3. Apparent Survival Rate is the simplest way through which the efficiency of an education system can be judged. Both the retention as well as survival rates have shown improvement which is also true for average promotion rate. The grade-specific as well as average repetition rate in primary classes shows a decline over the same in the previous year. However, as many as 9.99 million children repeated elementary grades, which is about 5.9 percent of the total elementary enrolment.
4. On the one hand the promotion rate in Grade I is observed to be very low, while on the other hand, the repetition rate in Grade I is also noticed to be very high among the primary grades. The states with high repetition rate should identify reasons and initiate appropriate strategies to check it without which neither the goal of UPE nor UEE can be attained. Analysis of block and district-specific rates may help states in identifying problematic locations where flow rates are not satisfactory.
5. The average drop-out rate in primary classes over the last three cohorts
suggests a consistent decline but the same is still too high to attain the status of universal retention at the primary level of education. The drop-out rate indicates an average drop-out rate of 9.96 percent in primary grades. In many states, drop-out rate in Grade I is noticed to be alarmingly high, and it needs careful examination and appropriate strategies to check it.
6. The transition rate shows consistent improvement over a period of time. However, as it seems, the goal of universal elementary education may not perhaps be realised in the near future if transition rates are not further improved significantly. By conducting studies, the states should find out reasons of low transition, which should be followed by incorporating reason-specific strategies in the annual work plan.
7. The coefficient of efficiency presented reveals that the primary education system is efficient to the tune of only 62.40 percent.
8. It is interesting to note that average drop-out rate in primary classes in case of the non-DPEP districts is lower than the same in case of the DPEP districts. This is also true for transition rate from primary to upper primary level of education and retention rate at primary level. As it seems that the advanced states have benefited the most out of the DPEP programme. Irrespective of the districts being under DPEP or non-DPEP categories, advanced states faired well in both the categories which is not true for developing states.
9. Depending upon the availability of data, an indicator to measure dropout rate should be developed. If resources are available, true-cohort study in which each and every enrolled child is tracked should be undertaken and can be used for assessing the quantum of drop-out as well as the completion rates. To know the root cause of low retention or high drop-out rate, it is essential that the same be calculated and analysed at the disaggregated levels and if data available, separately for boys and girls, rural and urban areas, and for SC and ST children.
10. By just measuring drop-out rate, the situation will not improve automatically. For that the first major exercise is to know reasons of low promotion and high drop-out and repetition rates. This should be necessarily followed by adopting reason and area-specific strategies without which no improvement can be expected. The reasons as well strategies vary from location to location. Still we have three years to optimally and rigorously utilize provisions made under Sarva Shiksha Abhiyan to work towards achieving universal elementary education in general and primary education in particular.

## Student Flow at Primary Level: An Analysis based on DISE Data*

## Introduction

Free and compulsory education for all children up to the age of 14 years is Constitutional commitment in India. The Government of India has initiated a number of programmes to achieve the goal of Universalisation of Elementary Education (UEE) among which the Sarva Shiksha Abhiyan (SSA) is the most recent one. It aims at achieving universal primary education by 2007 and universal elementary education by 2010. Universalisation comprises four components, i.e. universal access, universal enrolment, universal retention and universal quality of education. The flagship Sarva Shiksha Abhiyan (SSA) programme of the Government of India launched in 2001 is now 6 years old. It had the following main objectives:

- All children in school, Education Guarantee Centre, Alternate School-to-School Camp by 2003 (later revised to December 2005);
- All children complete five years of primary schooling by 2007;
- All children complete eight years of elementary schooling by 2010;
- Focus on elementary education of satisfactory quality with emphasis on education for life;
- Bridge all gender and social category gaps at primary stage by 2007 and at elementary education level by 2010; and
- Universal retention by 2010.

Though indicators to monitor progress towards universal access, enrolment and quality are well defined but the general perception about the same is not clear in case of indicators of universal retention and drop-out rates.

[^0]In simple terms, universal retention at primary level means every child entering into the system through Grade I should remain in the system up to Grade V. Universal retention under Sarva Shiksha Abhiyan by 2007 means that all children enrolled in Grade I in 2002-03 should continue in the system and move up to Grade V by 2007. Depending upon the availability of data and understanding of the concept of drop-out, indicators of drop-out are computed and analysed.

Keeping in view the availability of data, an attempt has been made in the present study to discuss computation procedure of a variety of drop-out and survival rates. Since recent data on grade-specific enrolment and repeaters are available only from DISE, the same are used to construct indicators of drop-out. Broadly the following indicators have been discussed in the present study:

1. Survival Rate;
2. Retention Rate;
3. Grade-to-Grade Transition Rate: Promotion, Repetition and Drop-out Rate;
4. Average (Overall) Promotion, Repetition and Drop-out Rate;
5. Re-constructed Cohort Method: Indicators concerning Internal Efficiency of Education System; and
6. Transition from Primary to Upper Primary Level of Education.

Most of the above indicators are constructed at the state as well as allIndia level. In addition, they are also separately constructed for DPEP and non-DPEP districts which present enough evidence about the impact of large scale programme, such as the DPEP on different aspects of universalisation of elementary education. In view of the availability of enrolment and repeaters data, a particular method for assessing drop-out and retention is applied. However, it is the True Cohort Method which presents true picture of retaining capacity of the system. A number of states have initiated child-tracking studies across the country but in view of resource and time constraints, but it is not an easy task to undertake True Cohort Method annually. Each and every enrolled child in a school is tracked/monitored over a period of five years or till he/she remains in the system to measure completion rate; thus it presents percentage of children who complete primary level exactly in five years. This presents an incomplete picture of the completion rate as there is a possibility of a number of children still remaining in the system even after five years
because of repetition. The system should be monitored till the last child remains in the system. If resources are available, child-tracking is the only way through which drop-out, retention, survival and completion rates should be analysed. School registers for five years are used to track a group of those children who enter into the system together. A few states have designed their own formats and even developed software for the purpose. If tracked for different cohorts and separately for boys and girls, the same can help in monitoring progress towards retaining capacity of the system as well as assessing completion rate.

First, a detailed analysis is presented with respect to first objective of SSA, namely all children in school, Education Guarantee Centre, Alternate School-to-School Camp by 2003 which was later revised to December 2005. For this purpose, all possible sources of data on this aspect have been explored. Official statistics as well as surveys conducted by private agencies have been used to assess quantum of out-of-school children.

Status of Elementary Education in the Light of Recently Conducted Nation-wide Surveys
Apart from the Government of India sources, fairly a good amount of information is now available on different aspects of universal elementary education in the country. Most of the recently generated information pertains the year 2005 and thus can be used in assessing the status of elementary education and show impact of SSA. On the one hand, data generated by NUEPA \& GOI through District Information System for Education (DISE) is the latest available for 2005-06 (as on September 30, 2005). On the other hand, two nation-wide sample surveys have been conducted in the recent past; both of them provide reasonably good amount of information about different aspects of universalisation of elementary education in the country. The two surveys conducted are:

- All India Survey of Out-of-School Children in 6-13 Years Age-group; and
- Assessment of the Status of Elementary Education in the Rural India.

Apart from these surveys, partial data collected through the Seventh All India Educational Survey as on September 30, 2002 is also available; however the same cannot be used in assessing the status of UEE in 2007. Similarly, under the aegis of SSA, household surveys were conducted across the country. But because of the methodology, date of reference and coverage, these cannot be used in assessing the status of elementary education in 2007. Most of these surveys were conducted in 2001 at the
time SSA was launched. Needless to mention that in most of the states, activities under SSA picked up much later than in 2001.

The All India Survey of Out-of-School Children is commissioned by the Educational Consultants India Limited on behalf of the Department of School Education and Literacy, Ministry of Human Resource Development, Government of India. The survey was conducted by the Social and Rural Research Institute, a unit of the Indian Market Research Bureau International (IMRB International) during July to December 2005. On the other hand, Assessment of the Status of Elementary Education in the Rural India, was conducted by a Mumbai-based NGO, Pratham (PRATHAM: International). Because of the methodology, coverage and time-frame, all these surveys cannot be compared but the findings give reasonably good amount of information on different aspects of elementary education in the country.

Taking cognizance of the above background, the present study deals with the following issues:

- Comparison of methodologies, coverage, type of survey, time-frame etc. by presenting a comparative statement of all recently conducted surveys;
- Statistics generated through these surveys; and
- In view of available data through the surveys, assess the impact of SSA on its key objectives presented above.

First methodology used across surveys, is briefly presented.

## Methodological Framework: Different Surveys

## District Information System for Education (DISE)

DISE is developed to collect information from all recognized institutions imparting elementary education across the country. Recognized institutions include both government as well as private managed schools. Private managed schools include both private aided and private un-aided schools, and government managed schools include schools run by the Department of Education, Local Body, Social Welfare and Tribal Welfare Departments. Unlike other surveys, DISE is complete enumeration of schools. The unit of data collection is school and district, unit of data dissemination. SchoolHead Master/Head-Teacher is the respondent who is imparted training in filling-up of the formats by BRC and CRC Coordinators. The filled-in formats are thoroughly checked at the cluster level by the Coordinator, Cluster Resource Centre. Data feeding takes place at the district level and the concerned BRC Coordinator is also supposed to be available at that time. All the districts have MIS Unit, which is located in the office of the District Project Coordinator.

At the time SSA was launched in 2001, the coverage of DISE was extended to the entire country. The frequency of data collection under the DISE is annual and date of reference is $30^{\text {th }}$ September each year. About 581 districts across 29 States and UTs of the country representing 99.5 percent of the total population were covered under the DISE till 2004-05. The coverage was further extended to all the remaining districts and states during 2005-06. The published data as on September 30, 2004 (2004-05) are available at the School (www.schoolreportcards.in), District, State and National levels (www.dpepmis.org) and is based on information received from as many as 1.04 million institutions imparting elementary education across the country. Data for the year 2005-06 are likely to be disseminated shortly which are based on the information received from more than 1.12 million institutions imparting elementary education across the country. Comprehensive information on schools, enrolment, facilities in schools and teachers is disseminated through the DISE. However, number
of habitations having schooling facilities does not form part of the DISE data collection. Similarly, there is no scope of conducting learners' achievement tests under DISE, but as a proxy to it, examination results at the terminal Grade IV/V and VII/VIII conducted by the school are made available over a period of time, separately for boys and girls. In many states, these examinations are conducted by the District or State Boards.

## ASER-PRATHAM

Unlike DISE, information collected through the ASER-PRATHAM is on sample basis and unit of data collection is the household. The data under ASERPRATHAM were collected between November 14 and December 20, 2005 through local groups in each district and the major findings were quickly released in January 2006. However, the survey was confined only to rural areas. As many as 485 districts were covered and from each sample district, 20 villages were randomly selected. Further, from each sample village, 20 households were randomly selected. Within a selected household, all children of age group 6-14 were interacted to find out whether they go to school. In addition, their ability to read simple text and basic arithmetic was also tested. The ASER-PRATHAM teams also visited local government schools on a working day to find out availability of teacher, children attendance and facilities in school with regard to drinking water, classrooms and toilets. Through this process, ASER-PRATHAM reached about 333 thousand children in about 191 thousand households across 9,521 villages of the country. The ASER-PRATHAM will be conducted annually till 2010, which is also the terminal year of SSA. Through the survey, estimates of out-of-school, never enrolled and drop-out children, and percentage children in government, private, madrasas and EGS schools are disseminated. In addition to gender differences, and learning and arithmetic ability of children in terms of percentage of children by age group such as, $7-14,7-10$, and 11-14 years who cannot read and solve numerical sums is also disseminated. The all-India estimates presented are based on the data collected from as many as 18 states as in the remaining 17 states, either the survey was not conducted or the coverage was partial.

## IMRB-International

As mentioned above, on behalf of Government of India through the ED.CIL, IMRB-International conducted a nation-wide survey to assess the quantum of out-of-school children in the age-group 6-13 years across the country. The survey was conducted between the period July to December 2005 with following as its main objectives:

- To estimate the proportion and number of out-of-school children in the age group of 5, 6-10, 11-13 and 6-13 years in each state and country as a whole;
- To estimate the proportion and number of school-going children who attend different types of schools and who are enrolled in Grades I to VIII; and
- To estimate the number and percentage of drop-out children who left after completing Grades I, II ...VIII.

The IMRB survey covered the entire country except Leh and Kargil districts of Jammu \& Kashmir and a few villages of Assam, Andaman and Nicobar Islands and Nagaland. The IMRB adopted a two-stage stratified sampling, with villages in rural areas and blocks, in the urban areas being the primary sampling units. In other words, it adopted the NSSO 61th Round sample and the same was used to estimate out-of-school children. In this process, as many as 3,178 villages and 1,823 urban blocks were covered in the survey. A total of 87,874 households were covered in the sample and the head of the household was the respondent.

## Methodology of Different Surveys: A Comparison

The above statement clearly indicates that coverage varies from survey to survey but encompass all aspects of universalisation except indicators of access. It is assumed that by and large schooling facilities are now fairly available across the country; this is also reflected in the Seventh All India Educational Survey (as on September 30, 2002). The DISE data also reveal that across the country more upper primary schooling facilities are now available than 4 years before. The average of all the districts suggests that on an average for every 2.56 primary schools/sections, at least one upper primary school/section is now available. However, Bihar, Goa, Jharkhand, Meghalaya, Sikkim, Uttar Pradesh and West Bengal are a few states where the ratio of primary to upper primary schools/sections is still well above two. The ratio in West Bengal is above five thus indicating that upper primary schooling facilities are not widely available. This is also reflected in the percentage of habitations having access to upper primary schooling facilities in West Bengal, which is only 79 percent. Table 1 presents a comparison of methodologies of different surveys.

## Table 1

Comparative Statement: Different Surveys

| Variable Type | Survey |  |  |
| :---: | :---: | :---: | :---: |
|  | DISE | ASER-PRATHAM | IMRB <br> International |
| Type of Survey | Complete <br> Enumeration | Sample Survey | Sample Survey |
| Unit of Data Collection | School | Household; and schools for provision | Household |
| Respondent | Head-Teacher/ Head-Master | Child of age 6-13 years in a household | Head of the household |
| Date of Reference | As on September 30, 2005 | November 14 to December 20, 2005 | July and December 2005 |
| Location Covered | Rural and urban areas | Only rural areas | Rural and urban areas |
| States Covered | Entire country: 604 districts/ 35 states \& UTs | 28 states of which 10 states were partially covered | All states except a few villages in a few states |
| Name of the States Covered | All states | All-India estimates based on the data received from all states but $J \& K$, Himachal Pradesh, Uttarakhand, Chandigarh Delhi, Lakshadweep, Mizoram, Puducherry, Sikkim and Andaman \& Nicobar Islands | All states |
| Coverage | 1.04 million schools imparting elementary education in 2004-05 and 1.12 million in 2005-06 | 191 thousand housholds across 9,521 villages, 4,918 schools having grades I-IV/V and 3,536 schools having grades I-VIII | 87,874 households |
| Level of Dissemination | District, state and national level | State and national level confined only to rural areas | State and national level |
| Disaggregation by Gender | Yes | Partially Yes | Yes |
| Limited to | Recognized schools including private aided and unaided schools | All schools including private unrecognized, EGS and madrasas schools | All schools private including unrecognized, EGS, madrasas schools, pre-primary etc. |


| Variable Type | Survey |  |  |
| :---: | :---: | :---: | :---: |
|  | DISE | ASER-PRATHAM | IMRB <br> International |
| Enrolment Indicator | GER and NER | Percentage of children enrolled by age in different types of schools in rural areas: agespecific enrolment ratio irrespective of type of school, \%age of children attending school on day of visit and \%age of schools with less than 50 percentage of enrolled children attending school | Percentage of children attending government, private including unrecognize ones, EGS, bridge course centres, madrassas, Sanskrit pathshalas and preprimary class in any school: Age-specific Enrolment Ratio irrespective of type of school both in rural and urban areas |
| Drop-out Indicator | (i) Retention rate at primary level based on the districts having enrolment data over five years: <br> (ii) Grade-to-grade promotion, dropout and repetition rate; and <br> (iii) Transition from primary to upper primary level of education | Percentage of children not enrolled categorized intonever enrolled and drop-out children in 6-10, 11-14 and 6-14 year age group. The same for boys and girls is not made available for the age group 6-14 years. | Percentage of dropouts by classes among children aged 6-13 years |
| Facility Indicators | All including drinking water, common toilets and toilets for girls: number and percentage by type of schools | Percentage of schools having Grades I-V and I-VIII with no water and toilet provision, \%age of schools with water and toilet provision but not useable, and \%age of schools with useable water provision and toilet | Not covered |
| Classrooms | Average number of classrooms and percentage of schools having 2 and more rooms by school type | Average number of rooms available by school enrolment | Not covered |


| Variable Type | Survey |  |  |
| :---: | :---: | :---: | :---: |
|  | DISE | ASER-PRATHAM | IMRB <br> International |
| Teachers | PTR and average number of teachers by school type | Percentage of schools with no teacher and all teachers available, PTR in schools having Grades $\mathrm{I}-\mathrm{V}$ and $\mathrm{I}-\mathrm{VIII}$ based on enrolment and attendance on day of visit | Not covered |
| Learners' Attainment | Examination results in Terminal Grade IV/V and Grade VII/VIII: Pass percentage and percentage children obtained 60 percentage \& above marks | Percentage of children who can read by Grade and \%age of children who can solve written numerical sums by Grade | Not covered |

Because of the variations in the coverage, all the estimates cannot be compared. Enrolment ratio generated through DISE is based on the enrolment obtained from recognized schools but enrolment in unrecognized schools is not considered in calculating the ratio. But in the two householdbased surveys, all the children attending schools including the unrecognized schools, EGS, Madrasas etc. are considered. In the DISE, EGS is also not covered. On the other hand DISE collected information from schools located both in the rural and urban areas, but ASER: PRATHAM survey was confined only to rural areas. The IMRB International survey too collected information from both the rural and urban areas. Therefore, only estimate of out-ofschool children in the rural areas can be compared. However, in view of the variation in coverage, the estimate is not available for all the 35 States \& UTs of the country. The states covered vary from survey to survey. The all-India estimates based on the states covered are not comparable but they individually present reasonably good amount of information about different aspects of UEE. It may be recalled that information under DISE is collected as on September 30, 2005 compared to between July and October 2005 in the case of IMRB International and between October and December 2005 in case of ASER: PRATHAM survey.

While comparing estimates, it may also be noted that Enrolment Ratio based on DISE data presents coverage of child population ( $6-11$ years) in primary classes in schools that reported DISE data; thus children in EGS and unrecognized schools are not considered in calculating the ratio. On
the other hand, estimates generated by the ASER: PRATHAM and IMRBInternational surveys are the Age-specific Enrolment Ratios (ASER) and not the GER and NER reported based on the DISE data. In the ASER, all children enrolled of an age-group, irrespective of the class in which they study, are considered. Thus, children (6-11 years) may not necessarily be enrolled only in primary I-V Grades. On the other hand, in the GER and NER, enrolment in primary Grades I-V only is considered. Therefore, the estimate of children attending schools as reported by the ASER: PRATHAM and IMRB-International is irrespective of the class children attending. Children are attending school but whether they are attending primary or upper primary class is not considered. Those who are not attending are termed as out-of-school children and includes both never enrolled and dropped-out children. The other major difference regarding estimate of out-of-school children is that ASER-PRTHAM reported only in percentage form and no estimate in absolute form is made available, while IMRBInternational reported both.

One of the other important indicators produced by both the ASER: PRATHAM and IMRB-International is the percentage of those children who are not enrolled, bifurcated into never enrolled and dropped-out children. In both the surveys these children are termed as un-enrolled or out-of-school children. The percentage of dropped-out children is calculated in terms of total school-age population (6-13/6-14 years) which is different from the drop-out rate. Drop-out rate is hundred minus ratio of Grade V (minus repeaters) in current year to enrolment in Grade I four years back, which indicates how many children dropped-out from the system before reaching Grade V. On the other hand, percentage of dropped-out children in relation to total school-age children indicate those children who are currently not enrolled but have dropped-out from the system before completing a grade. The number of such children is calculated in terms of total child population of age-group 6-13/14 years. While ASER: PRATHAM estimated percentage of dropped-out out-of-school children separately in the age-groups of 610, 11-14 and 6-14 years, IMRB-International provided the same only for the age-group 6-13 years.

As has already been pointed out that the DISE is the complete enumeration of all schools that impart elementary education, while both the ASERPRATHAM and IMRB-International are based on the household sample surveys. One of the other important aspects that vary from survey to survey is the respondent. While the school Head-Master/Head-Teacher is the respondent in DISE, it is head of the household in the IMRB-International survey on estimating out-of-school children. However, it is children between ages $6-13$ years who are the respondents in case of the ASER:

PRATHM all-India survey of out-of-school children. The other major variation is the number of states that have been covered under different surveys and also the frequency of data collection. While DISE covered all the states, the ASER: PRATHAM survey covered only 28 out of 35 States $\&$ UTs and confined to the rural areas. The un-covered states are: J\& K, Himachal Pradesh, Uttarakhand, Chandigarh, Delhi, Lakshadweep, Mizoram, Puducherry, Sikkim and Andaman \& Nicobar Islands. However, in the IMRB-International survey, both the rural and urban areas of all the States and UTs have been covered.

Before different estimates are compared, it is also important to know how the samples upon which estimates are generated are drawn. On the one hand, DISE estimates are based on data received from more than 1 million institutions, as mentioned above, the other two surveys are household-based surveys. ASER: PRATHAM is based on the data collected from as many as 191 thousand households, and IMRB-International from 87,874 households. However, ASER:PRATHAM estimates concerning facilities in schools, learning attainments and availability of teachers, are based on only 4,918 schools having Grades I-IV/V and 3,536 schools having Grades $\mathrm{I}-\mathrm{VIII}$.

The out-of-school children estimated by IMRB are based upon the projected population (in July 2005) obtained by using the average annual compound growth rate between the census years 1991 and 2001. However, basis of $6-11,11-13,6-13$ and single-age of 5 and 6 years projected population is not provided which has been projected separately in the rural and urban areas as well for boys and girls. Hence, once the more authentic estimates of the clientele population is available; the estimate of out-of-school children both in the percentage and absolute terms would also be changed.

In the backdrop of the above methodological variations, a comparison of different estimates is presented below.

## ASER-PRATHAM: Percentage Children Enrolled \& Not Enrolled

The percentage of children enrolled by type of schools and children not enrolled at the all-India level, estimated by the ASER-PRATHAM, is presented in Table 2. The percentage is obtained in relation to total children in an age-group but confined only to rural areas. Thus, all children in an age-group is divided into two parts, namely those who are enrolled and those who are not enrolled. The statistics generated is based on the data collected between October and December 2005. However, neither the out-of-school children in absolute number is estimated nor total population in an age-group is projected.

Table 2 reveals that of the total 6-14 year old children in the rural areas, about 75.1 percent are enrolled in government managed schools, 16.4 percent in private schools including private un-recognized schools, and 1.0 percent each in Madrasas and Education Guarantee schools. The balance of 6.3 percent children of $6-14$ years age is not enrolled, of which 3.7 percent are never enrolled and 2.9 percent dropped-out.


Separate estimates have also been generated for the age-groups 6-10 and 11-14 years and that too are made available separately for boys and girls. However, without specifying reasons, such estimates in case of boys and girls in the age-group 6-14 are not made available. Of the total 6-10 year old children, about 95.5 percent children are enrolled; corresponding figures being 96.0 percent for boys and 94.9 percent for girls. This otherwise also means that the remaining 3.9 percent boys and 5.1 percent girls are either never enrolled or dropped-out from the system before completing an education cycle. It may also be observed that the enrolled children of age group 6-10 years do not necessarily be in primary classes only. The ASER: PRATHAM collected information about children attending schools irrespective of the class. In view of this, the estimate of children attending schools may be treated as age-specific enrolment which is different from the gross and net enrolment ratio. Like 6-10 years age-group, the percentage of un-enrolled girls is also high for the age-group 11-14 years which means that more than 11 percent girl's of this age-group are not enrolled; among these the percentage of dropped-out girls is as high as 6.3 percent. The corresponding percentage in the age-group 6-10 years for girls is only 1.3 percent compared to 3.9 percent girls of this age-

Table 2
ASER : PRATHAM - Percentage Children Enrolled \& Out-of-School, Rural Areas

| Age Group (In Years) | Percentage Children in Different Types of Schools |  |  |  |  | \%age Children Not in Schools |  |  | $\begin{aligned} & \text { \% Un- } \\ & \text { enrolled } \\ & \text { : IMRB } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Government | Private* | Madarasa | EGS | \% Enrolled | Never Enrolled | Drop-out | $\begin{aligned} & \text { \% Un- } \\ & \text { enrolled } \\ & \text { : ASER } \end{aligned}$ |  |
| 6-14, All | 75.10 | 16.40 | 1.00 | 1.00 | 93.50 | 3.70 | 2.90 | 6.60 | $\begin{aligned} & 7.80 \\ & (6-13 \text { Year }) \end{aligned}$ |
| 6-10, All | 77.80 | 15.50 | 1.00 | 1.20 | 95.50 | 3.40 | 1.20 | 4.60 | 6.92 |
| 6-10, Boys | 76.90 | 17.00 | 1.00 | 1.10 | 96.00 | 2.90 | 1.00 | 3.90 | - |
| 6-10, Girls | 78.90 | 13.70 | 1.10 | 1.20 | 94.90 | 3.90 | 1.30 | 5.20 | - |
| 11-14, All | 71.60 | 17.80 | 0.80 | 0.60 | 90.80 | 3.80 | 5.40 | 9.20 | 9.58 |
| 11-14, Boys | 71.90 | 19.20 | 0.80 | 0.60 | 92.50 | 2.90 | 4.70 | 7.60 | - |
| 11-14, Girls | 71.20 | 16.20 | 0.90 | 0.60 | 88.90 | 4.80 | 6.30 | 11.10 | - |

*: Including private un-recognized.
Source: ASER (2005).

Table 3
Percentage of Enrolled Children (6-13 Years) by Type of Schools: IMRB International \& ASER: PRATHAM

| Location | Gender | Government | Recognised | Unrecognised | EGS | Bridge Courses | Other Madrasas | PrePrimary | \% Enrolled | Total Unenrolled | Total Population |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Rural (1) | Male | 77.69 | 13.18 | 1.80 | 0.30 | 0.04 | 0.15 | 0.06 | 93.22 | 6.78 | 8,26,10,130 |
|  | Female | 77.50 | 11.13 | 1.58 | 0.38 | 0.04 | 0.18 | 0.06 | 90.86 | 9.14 | 6,29,32,700 |
|  | Total | 77.61 | 12.29 | 1.70 | 0.34 | 0.04 | 0.17 | 0.06 | 92.20 | 7.80 | 1,45,54,2890 |
| Urban | Male | 43.24 | 50.07 | 1.73 | 0.28 | 0.06 | 0.20 | 0.09 | 95.67 | 4.33 | 2,70,08,923 |
|  | Female | 46.15 | 46.67 | 1.89 | 0.11 | 0.10 | 0.42 | 0.31 | 95.64 | 4.36 | 2,14,76,830 |
|  | Total | 44.53 | 48.56 | 1.80 | 0.20 | 0.08 | 0.29 | 0.19 | 95.66 | 4.34 | 4,84,85,753 |
| Total | Male | 69.20 | 22.27 | 1.78 | 0.30 | 0.04 | 0.16 | 0.07 | 93.82 | 6.18 | 10,96,19,053 |
|  | Female | 69.52 | 20.17 | 1.66 | 0.31 | 0.05 | 0.24 | 0.12 | 92.08 | 7.92 | 8,44,09,590 |
|  | Total | 69.34 | 21.36 | 1.73 | 0.30 | 0.05 | 0.20 | 0.09 | 93.06 | 6.94 | 19,40,28,643 |
| Rural (2) | Total | 75.10 | 16.40 | 1.00 | - | 1.00 | 93.50 | 6.60 | - | - | - |

(1): IMRB International; (2) ASER: PRATHAM
group found to be never enrolled. Further, it has also been observered that percentage of children enrolled in government schools, in case of the age-group $6-10$ years is a bit higher ( 77.8 percent) than the same in case of the age-group 11-14 years ( 71.6 percent); however the same is not true in case of the private schools. However, not much difference is noticed in case of children enrolled in the Madarasas and Education Guarantee Schools (EGS).


Table 3 reveals that of the total children in the rural areas, ASER: PRATHAM reported that 75.10 percent of them are enrolled in government schools against 77.61 percent reported by the IMRB-International survey. On the other hand, the percentage of children enrolled in private schools is 16.4 percent in case of ASER: PRATHAM survey and 13.99 percent in case of IMRB-International survey which also include children enrolled in unrecognized schools. On the other hand, IMRB International also estimated that about 1.70 percent children in the rural areas are enrolled in the unrecognized schools. The corresponding figures in the urban and all areas are 1.80 and 1.73 percent respectively. The male and female percentages of children enrolled in such schools are also provided which reveal that the percentage of girls ( 1.66 percent) is a bit lower than that of boys (1.78 percent). However, in the urban areas the percentage of girls enrolled in unrecognized schools ( 1.89 percent) is higher than in case of boys ( 1.73 percent). A deviation has also been observed in children enrolled in EGS; IMRB, 0.30 percent and ASER: PRATHAM, 1.00 percent. Almost similar percentages have been reported in case of children enrolled in the

Madarasas. On the other hand, IMRB-International reported that only 0.09 percent of the total 194 million children were found enrolled in pre-primary sections.

Table 4
Estimated Un-Enrolled Children in Rural Areas*

| Age-Group/Population | \% Un- <br> enrolled | Un-enrolled <br> Children <br> (in Million) | \% Un- <br> enrolled | Un-enrolled <br> Children <br> (in Million) |
| :--- | :---: | :---: | :---: | :---: |
|  | 4.60 | 4.48 | 6.92 | 6.74 |
| 6-10 year/ 97.42 million | 9.20 | 4.43 | 9.58 | 4.61 |
| 11-14 year/ 48.12 million | 6.60 | 9.61 | 7.80 | 11.35 |
| 6-14 / 6-13 year / <br> 145.54 million |  |  |  |  |

* Based on the age-specific population estimated by the IMRB International Survey.

IMRB-International: Percentage Children Enrolled \& Not Enrolled Like ASER: PRATHAM, IMRB-International has also estimated percentage of children out-of-school in different age-groups and has made available

the estimate both in the absolute and percentage form. However, bifurcation of out-of-school children into never enrolled and drop-outs is
not made available. Since both these estimates are available for the rural areas, first a comparison is made across age-groups. While IMRB defined 6-13 years age-group as those children who are above 13 years but below 14 years, ASER: PRATHAM produced estimates for 6-14, but has not specified what exactly this means. In this comparison, it is assumed that both estimates are relevant to the same age group. As against 6.6 percent children not enrolled in schools as estimated by ASER: PRATHAM, the corresponding figure reported by IMRB for the age-group 6-14 years is 7.80 percent. Though in percentage terms, the difference is not significant but in absolute terms the same may be wide in view of the size of the child population in the rural areas, which is estimated to be 145.54 million

(total 194.03 million) by IMRB; thus indicating 9.61 million (ASER) and 11.35 million (IMRB) children of 6-13/14 years age-group out-of-school. It may also be noted that total child population projected by the IMRB is very close to the one estimated by the office of the Registrar General of India (193 million). However, significant deviation is noticed separately in both 6-11 and 11-13 years child population. In other words this indicates a difference of 1.75 million, which is 1.20 percent of the total 145.54 million child population. Further, the percentage of un-enrolled children in the age-group 6-10 years in the rural areas suggests that as many as 6.92 percent children are out-of-school as per in the IMRB survey ( 6.74 million) compared to 4.6 percent ( 4.48 million) in case of ASER-PRATHAM survey; this indicates a difference of 2.26 million which is 2.32 percent of total 97.42 million child population of age-group 6-10 years (Table 4).

## Table 5 <br> IMRB-International: Estimated Un-Enrolled Children in Urban \& All Areas

| Age-Group/ <br> Gender | Population <br> (In Million) | Un-enrolled <br> Children |  | Population <br> (In Million) | Un-enrolled <br> Children |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | \% | Number <br> (ln Million) |  | \% |

Further, it has also been observed that the variation in both the estimates is because of the variation in the out-of-school children of the age-group 6-11 years. So far as 11-14 years children are concerned, no significant variation is observed in case of ASER and IMRB estimates as both reported that 9.20 and 9.58 percent children of this age group are not enrolled in schools. In the light of the above discussion, it is observed that no major deviation is noticed in case of un-enrolled children in the rural areas. Hence, the separate estimates in case of the urban areas provided by IMRB are also presented and analyzed (Table 5).

Table 5 reveals that of the total 194.03 million population of $6-13$ year years old children estimated by IMRB-International, about 13.47 million were found to be un-enrolled which is 6.94 percent of the total children. Of the total un-enrolled children, 2.10 million ( 15.59 percent) are located in the urban areas and 9.13 million ( 84.41 percent) in the rural areas. This otherwise also indicates that two out of ten out-of-school children of
Percentage of Enrolled Children (6-13 Years) by Type of Schools: IMRB International \& ASER: PRATHAM

| Location | Gender | Government | Recognised | Un- <br> recognised | EGS | Bridge <br> Courses | Other <br> Madrasas | Pre- <br> Primary | \% <br> Enrolled | Total Un- <br> enrolled | Total <br> Estimated <br> Population |
| :--- | :--- | :--- | :--- | :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Rural (1) | Male | 77.69 | 13.18 | 1.80 | 0.30 | 0.04 | 0.15 | 0.06 | 93.22 | 6.78 | $8,26,10,130$ |
|  | Female | 77.50 | 11.13 | 1.58 | 0.38 | 0.04 | 0.18 | 0.06 | 90.86 | 9.14 | $6,29,32,700$ |
|  | Total | 77.61 | 12.29 | 1.70 | 0.34 | 0.04 | 0.17 | 0.06 | 92.20 | 7.80 | $14,55,42,890$ |
| Urban | Male | 43.24 | 50.07 | 1.73 | 0.28 | 0.06 | 0.20 | 0.09 | 95.67 | 4.33 | $2,70,08,923$ |
|  | Female | 46.15 | 46.67 | 1.89 | 0.11 | 0.10 | 0.42 | 0.31 | 95.64 | 4.36 | $21,47,6,830$ |
|  | Total | 44.53 | 48.56 | 1.80 | 0.20 | 0.08 | 0.29 | 0.19 | 95.66 | 4.34 | $4,84,85,753$ |
| Total | Male | 69.20 | 22.27 | 1.78 | 0.30 | 0.04 | 0.16 | 0.07 | 93.82 | 6.18 | $10,96,19,053$ |
|  | Female | 69.52 | 20.17 | 1.66 | 0.31 | 0.05 | 0.24 | 0.12 | 92.08 | 7.92 | $8,44,09,590$ |
|  | Total | 69.34 | 21.36 | 1.73 | 0.30 | 0.05 | 0.20 | 0.09 | 93.06 | 6.94 | $19,40,28,643$ |
| Rural (2) | Total | 75.10 | 16.40 | 1.00 | - | 1.00 | - | 93.50 | 6.60 | - | - |

(1) IMRB-International, (2) ASER: PRATHAM
this age-group are located in the urban areas and remaining 8 in the rural areas. Of the total 13.47 million out-of-school children, 7.82 million ( 58.08 percent) are of the age-group 6-10 year and remaining 5.64 million ( 41.92 percent) of the age-group 11-13 year. However, if we compare percentage of out-of-school children in each individual age-group, the percentage of such children in the age-group 11-13 years is as high as 8.56 percent compared to 6.10 percent in the $6-10$ years age-group. The number of out-of-school children in the urban areas is only 1.08 million compared to 1.02 million of the age-group 11-13 years. The corresponding figures in the rural areas are 7.74 and 4.61 million in the respective age-groups of 6-10 and 11-13 years.

One of the interesting findings of the IMRB-International survey is that almost equal number of boys and girls are out-of-school which is true for both the 6-10 and 11-13 years age-groups. In fact, if all the children of age-group 6-14 years are considered together, the number of boys (6.77 million) out-of-school is a bit higher than the number of girls ( 6.69 million) which is also true for the urban areas. In the urban areas, as against 1.17 million out-of-school boys, the corresponding number of girls of age-group $6-14$ years is only 0.94 million. It is also true separately in case of the 610 and 11-13 years age-groups. However, in the rural areas, more girls of age-group 6-14 years ( 57.51 million) are found out-of-school as compared to 56.02 million boys. However, in relation to corresponding population, irrespective of the age-groups, the percentage of out-of-school girls is a bit higher than the same in case of boys (Table 6).

## Enrolment \& GER: DISE

The coverage of districts and states as well as number of schools under DISE increased significantly over a period of time. In the year 2005-06 during which all the districts of the country across 35 States and UTs were covered under DISE and information from more than 1.12 million institutions was received; more than 738 thousand were independent primary schools. As per the DISE 2005-06 data, GER at primary level is estimated to be 103.77 percent, corresponding to 84.53 percent NER (Table 7). The enrolment at primary (Grades I-V/6-11 year) level, when subtracted from the estimated 6-11 population, may provide estimated number of out-of-school children of that age-group. Because of the methodological differences, this cannot be compared with the other estimates of out-ofschool children reported above as information from only recognised schools is considered in the DISE. Hence, the estimated out-of-school children is bound to be much higher than the other estimates of similar nature.

On the other hand, the household surveys reveal that both in the percentage and absolute terms, the number of out-of-school children is low (13.47 million of 6-14 years age-group) and is much below the general perception.

Table 7
Enrolment and GER at Primary Level: DISE

| Year | Number of <br> Districts <br> Covered | Number of <br> States <br> Covered | Number of <br> Schools <br> Covered <br> (in Million) | Enrolment <br> in Primary <br> Grades I-V | Gross <br> Enrolment <br> Ratio | Net <br> Enrolment <br> Ratio |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $2002-03$ | 459 | 18 | $8,56,301$ | 101.16 | - | - |
| $2003-04$ | 539 | 25 | $9,31,471$ | 110.39 | 89.83 | - |
| $2004-05$ | 581 | 29 | $10,37,813$ | 118.30 | 97.82 | - |
| $2005-06^{*}$ | 604 | 35 | $11,24,033$ | 124.62 | 103.77 | 84.53 |

* Complete coverage. Estimated 6-11 age population is around 120.09 million. Enrolment is provisional in nature. The balance of 18.57 million children of 6-11 age-group are not enrolled in schools as per DISE data but who may either be out-of-school or enrolled in EGS, unrecognized schools, alternative schools and other schools not covered under DISE. This number is much higher than the estimated number of out-of-school children reported by IMRB and ASER Pratham: International Surveys which have covered children from all schools. Of the 18.57 million children, 9.04 million are boys ( 48.67 percent) and 9.53 million are girls (51.33 percent).

Figure 5
Enrolment and GER at Primary Level: 2002-03 to 2005-06


The estimates of out-of-school children should also be viewed in the light of revised estimates of 6-14 year population provided by the Office of the Registrar General of India which has come down to 194 million from the earlier 205 million. The enrolment both at primary and upper primary
levels of education has shown consistent increase in the recent past. This shows the impact of recent initiatives like the Sarva Shiksha Abhiyan Programme. Average attendance rate, if available would throw light on how many children actually are attending schools. Schools are the best place where children should be counted than at home. Needless to mention that correct picture would never emerge unless all the schools, including the unrecognized, ones are considered in such estimation. For out-ofschool children, appropriate strategies need to be framed out. It would be rather difficult to bring all the left out children under the umbrella of education and for that purpose child-specific and age-specific strategies with involvement of community need to be developed and administered.

## Retaining Capacity of the System

The country has made significant advancement towards achieving goal of universal access. Almost 94 and 89 percent habitations respectively have got access to primary and upper primary schooling facilities (Seventh AllIndia Education Survey, NCERT). However, it is equally important to know the retaining capacity of the education system for which a variety of efficiency related indicators can be used. In the light of this, a number of indicators have been constructed and analysed, both at the state level and national level, comprising all districts, all of which present fairly a good amount of information about the efficiency of the education system across states (for methodological details, refer District-wise Drop-Out Rates: Concept, Methods of Calculation and Cohort Drop-out Rates derived by Reconstructed Cohort Method, Research, Evaluation and Studies Unit, Technical Support Group, Educational Consultants India Limited, NOIDA, 2005; and Indicators of Educational Development: Concept and Definitions, by Arun C. Mehta, National University of Educational Planning and Administration, New Delhi, 2006).

## Apparent Survival Rate

Apparent Survival Rate is the simplest way through which the efficiency of an education system can be judged. Share of enrolment in Grade II and subsequent primary grades in relation to the enrolment in Grade I in a year is worked out. The rate thus arrived at is considered crude as it is based upon the enrolment data of only one year but reveals interesting and useful information about the retaining capacity of the system. The Apparent Survival Rate at the all-India level presented in Table 8 reveals that over a period of time the same has improved which is true for both boys and girls. At the all-India level, it has improved from 63 percent in 2003-04 to 67 percent in 2004-05 and further to 70 percent in 2005-06. Almost similar trend is observed in case of boys and girls; however it is seen that

Table 8
Apparent Survival Rate, Primary Grades (2003-04 to 2005-06)

| Gender | Cohort | Grade I | Grade II | Grade III | Grade IV | Grade V |
| :--- | :--- | :---: | :---: | :---: | :---: | :---: |
|  | $2005-06$ | 100 | 84 | 79 | 74 | 71 |
|  | $2004-05$ | 100 | 83 | 80 | 73 | 68 |
| Girls | $2003-04$ | 100 | 84 | 76 | 69 | 65 |
|  | $2005-06$ | 100 | 84 | 79 | 81 | 68 |
|  | $2004-05$ | 100 | 84 | 81 | 80 | 66 |
|  | $2003-04$ | 100 | 84 | 76 | 75 | 62 |
|  | $2005-06$ | 100 | 84 | 79 | 74 | 70 |
|  | $2004-05$ | 100 | 84 | 80 | 72 | 67 |
|  | $2003-04$ | 100 | 84 | 76 | 68 | 63 |

more boys survived up to Grade V than their counterpart girls. A look at the Apparent Survival Rate in rural ( 66 percent) and urban ( 86 percent) areas reveals a significant difference which is also separately true for

boys and girls. The state-specific Apparent Survival Rate for 2005-06 presented in Table 9 reveals that in a number of states from the northern part of the country the same is very low to attain the status of universal retention. On the other hand, states in the southern region, such as Andhra Pradesh, Kerala, Karnataka and Tamil Nadu, have a very high Apparent

Table 9
Apparent Survival Rate: Primary Grades (2005-06)

| State/UT |  | Apparent Survival Rate (\%) |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | Grade I | Grade II | Grade III | Grade IV | Grade V |  |
| Andaman \& Nicobar Islands | 100 | 101 | 111 | 105 | 104 |  |
| Andhra Pradesh | 100 | 87 | 87 | 89 | 90 |  |
| Arunachal Pradesh | 100 | 56 | 47 | 39 | 35 |  |
| Assam | 100 | 91 | 90 | 88 | 64 |  |
| Bihar | 100 | 69 | 61 | 54 | 46 |  |
| Chandigarh | 100 | 100 | 98 | 98 | 96 |  |
| Chhattisgarh | 100 | 78 | 73 | 67 | 59 |  |
| Dadra \& Nagar Haveli | 100 | 80 | 79 | 65 | 55 |  |
| Daman \& Diu | 100 | 88 | 93 | 89 | 91 |  |
| Delhi | 100 | 84 | 82 | 81 | 79 |  |
| Goa | 100 | 90 | 86 | 66 | 89 |  |
| Gujarat | 100 | 86 | 82 | 78 | 74 |  |
| Haryana | 100 | 94 | 100 | 96 | 88 |  |
| Himachal Pradesh | 100 | 102 | 104 | 108 | 101 |  |
| Jammu \& Kashmir | 100 | 91 | 93 | 86 | 83 |  |
| Jharkhand | 100 | 69 | 60 | 47 | 39 |  |
| Karnataka | 100 | 92 | 96 | 96 | 99 |  |
| Kerala | 100 | 106 | 111 | 112 | 113 |  |
| Lakshadweep | 100 | 75 | 69 | 73 | 80 |  |
| Madhya Pradesh | 100 | 89 | 80 | 72 | 72 |  |
| Maharashtra | 100 | 90 | 90 | 87 | 87 |  |
| Manipur | 100 | 61 | 47 | 42 | 40 |  |
| Meghalaya | 100 | 65 | 54 | 44 | 38 |  |
| Mizoram | 100 | 77 | 68 | 63 | 71 |  |
| Nagaland | 100 | 91 | 84 | 73 | 56 |  |
| Orissa | 100 | 90 | 94 | 89 | 82 |  |
| Puducherry | 100 | 90 | 89 | 90 | 97 |  |
| Punjab | 100 | 98 | 104 | 101 | 94 |  |
| Rajasthan | 100 | 72 | 62 | 58 | 54 |  |
| Sikkim | Tamil Nadu | 100 | 93 | 93 | 81 | 66 |
| Tripura | 100 | 92 | 94 | 99 | 97 |  |
| Uttar Pradesh | 100 | 84 | 86 | 79 | 71 |  |
| Uttarakhand | 100 | 91 | 82 | 74 | 62 |  |
| West Bengal | 100 | 84 | 81 | 74 | 67 |  |
| All Districts | 100 | 76 | 77 | 72 | 80 |  |
|  | 100 | 84 | 79 | 74 | 70 |  |

Note: A few states reported survival rate above 100 which is technically not possible or may be because of the migration and hence need further probe. This is more specifically true in case of states having Grades I to IV as component of the primary structure.

Survival Rate which is also true in the smaller states, such as Chandigarh, Daman and Diu, Goa and Lakshadweep. Unless, all the states attain a high survival rate, the goal of universal retention at the primary level cannot be realised. Though Apparent Survival Rate produces quick estimate, if fails to present any information about the internal dynamics of the education system. For that purpose retention as well as drop-out, repetition and promotion rates should have to be analysed.

## Retention Rate

There are a number of ways through which drop-out and retention rates can be measured. In the most commonly used method of assessing retaining capacity of the system, enrolment in Grade V in a year (say 2005-06) is linked to enrolment in Grade I four years back (say 2001-02). Hundred minus retention rate is termed as drop-out rate which can be computed both at the primary as well as upper primary levels of education. If the number of repeaters is not considered in calculation, the rate obtained is known as Gross Retention Rate, and the corresponding drop-out rate as the Gross Drop-out Rate. Retention rate is also known as Survival Rate which is different than the Apparent Survival Rate presented above. Needless to mention that Retention Rate is based on enrolment data over a period of five years where as Apparent Survival Rate, a stock statistics, is based on enrolment data of only one year. Retention Rate is being used in India for assessing retaining capacity of the system as well as to measure the quantum of drop-out over the last more than 50 years. However, the calculation procedure fails to take notice of enrolment in other grades, i.e. Grade II, III and IV and also the repeaters in these grades as it is based on enrolment data of Grade I and Grade V only in respective years.

Depending upon the requirement and if data available, retention as well as drop-out rate can be worked-out at different levels such as block, district, state and national levels. Within these levels, the same should also be analyzed for rural and urban areas, and separately for boys and girls. The following data set is required for measuring retention rate at the primary level of education:

- Enrolment of Grade V in an year, say ' $\mathrm{t}+4$ '
- Repeaters in Grade V in the year ' $\mathrm{t}+4$ ' ; and
- Enrolment in Grade I in the year ' t '.

The formula for calculating retention rate is given below. Retention rate, if subtracted from 100 gives drop-out rate at primary level.

Enrolment in Grade $V$ in Year ' $t+4$ ' - Repeaters in Grade $V$ in Year ' $t+4$ '
$R R(t+4)=$ Enrolment in Grade I in Year ' t '

Table 10
Retention Rate at the Primary Level (2003-04 to 2005-06)

| State/UT | Education Cycle | Year |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 2003-04 |  | 2004-05 |  | 2005-06 |  |
|  |  | Number of Districts | Retention Rate | Number of Districts | Retention Rate | Number of Districts | Retention Rate |
| Andhra Pradesh | I-V | - | - | 18 | 61.49 | 23 | 76.75 |
| Assam | I-IV | 9 | 35.73 | 9 | 48.98 | 23 | 70.16 |
| Bihar | I-V | 8 | 35.33 | 11 | 36.86 | 11 | 42.34 |
| Gujarat | I-IV | 3 | 42.89 | 3 | 41.13 | 9 | 62.54 |
| Haryana | I-V | 7 | 64.30 | 6 | 66.29 | 7 | 85.58 |
| Himachal Pradesh | I-V | 4 | 87.69 | 4 | 82.36 | 4 | 81.38 |
| Jharkhand | I-V | 5 | 40.86 | 6 | 36.50 | 6 | 59.38 |
| Karnataka | I-IV | 11 | 63.10 | 16 | 84.06 | 27 | 78.13 |
| Kerala | I-IV | 6 | 98.66 | 6 | 84.83 | 14 | 95.37 |
| Madhya Pradesh | I-V | 27 | 68.51 | 28 | 81.39 | 31 | 95.50 |
| Maharashtra | I-IV | 7 | 67.22 | 16 | 84.06 | 30 | 89.87 |
| Orissa | I-V | 8 | 53.99 | 8 | 58.61 | 8 | 62.03 |
| Rajasthan | I-V | - | - | - | - | 10 | 51.74 |
| Tamil Nadu | I-V | 4 | 90.05 | 4 | 93.54 | 4 | 110.23 |
| Uttar Pradesh | I-V | 14 | 51.12 | 48 | 61.65 | 54 | 71.15 |
| Uttarakhand | I-V | - | - | 5 | 54.07 | 5 | 52.31 |
| West Bengal | I-IV | 10 | 47.47 | 10 | 49.29 | 20 | 58.26 |
| Average of All Districts* | I-V | 123 | 53.43 | 184 | 58.11 | 286 | 71.01 |

* Enrolment in Grade V is considered in calculating average of all districts. Average in 2005-06 is based on 286 districts.

Similarly, retention rate can also be worked out at the upper primary level of education.

As has been mentioned that over a period of time both the number of districts and schools in a district covered under the District Information System for Education (DISE) have increased significantly. Therefore, the number of states as well as districts covered under DISE varies from year to year. The process was initiated in 42 districts across 7 DPEP Phase I states in 1994-95. In the year 2004-05, DISE data was available for 581

districts across 29 states \& UTs against 539 districts across 25 states \& UTs during 2003-04. During the latest year 2005-06, a few of the remaining states and districts are also covered under DISE. With this, DISE is now made operational across the country. In view of the varying coverage, it is not possible to calculate retention rate at the national level based on data of all districts. However, the same can be calculated in such states which have got enrolment data available over a period of five years. But in any of the 35 states covered under DISE, grade-specific enrolment at primary level is not available over a period of five years for the entire state. However, there are a few districts in each state, which have got grade-specific enrolment data over a period of five years. Based on the enrolment data of such districts, retention rate at the primary level of education is calculated and the same is presented in Table 10. The retention rate presented does not apply to the entire state or a country as a whole but fairly indicates retaining capacity of primary education system in a state. Many districts in the DPEP states have the enrolment data available over a period of five or more years.

The retention rate at the primary level for the years 2003-04, 2004-05 and 2005-06 presented in Table 10 is based upon the enrolment data of 123, 184 and 286 districts. For the year 2005-06, it is based upon the data of every second district of the country; thus fairly being a representative sample of the entire country. The retention rate shows gradual improvement ( 58.11 percent) in 2004-05 over the year 2003-04 (53.43 percent). It has further significantly improved to 71.01 percent in 200506. Though an improvement of about 20 percentage points is achieved during the period 2004-05 to 2005-06, still it is too low from the goal of
universal retention at the primary level. A retention rate of 71 percent indicates that about 29 percent children dropped-out from the system before reaching Grade V. However, a few states have much higher retention rate at primary level than the average ( 71.01 percent) of 286 districts. Tamil Nadu (around 100 percent), Kerala ( 95.37 percent), Himachal Pradesh ( 81.38 percent) and Madhya Pradesh ( 95.50 percent) are such states. Except Kerala, retention rate in these states is not based on the entire state data. It seems that with a little more effort, these states can easily move towards achieving the goal of universal retention at the primary level of education. Retention rate in Kerala is based upon the data of all of its 14 districts. Though the retention rate in some of the states has significantly improved over the previous year, the situation in rest of the states included in the analysis is not encouraging. In Bihar and Jharkhand, it is low at 42.34 and 59.38 percent respectively, compared to 52.31 percent in Uttarakhand and 58.26 percent in West Bengal. Without much improvement, neither these states nor the country as a whole can achieve the goal of universal retention at the primary level of education. Clearer picture will emerge when enrolment data over a period of five years for the entire country becomes available.

## Grade-to-Grade Flow Rates

The retention rate presents retaining capacity of the system but it fails to identify problems in the system. Therefore, it would be better to analyse grade-to-grade flow rates between the primary grades. If calculated separately for boys and girls at disaggregated levels, such as district, the same would help in identifying districts and grades where there is high incidence of repetition and drop-outs. With the help of enrolment and repeaters, first the number of promotees, repeaters and drop-outs across the primary grades is obtained which in turn is linked to the enrolment in the previous grade in the previous year, to obtain grade-to-grade transition rates, such as, promotion, repetition and drop-out rates. If number of repeaters is not considered, promotion rate is termed as grade ratio and is treated as a crude indicator. Transition rates, also known as flow rates, can answer a variety of typical questions, such as 'at which grade in the cycle is the repetition or dropout rate highest'; 'who tends to drop out and repeat more frequently, boys or girls'; and 'what is the total accumulated loss of students through drop out'. The answers to these questions can be obtained, if flow rates for different target groups and for each grade are computed. The following set of data is required for calculating flow rates at primary level:

- Grade-specific enrolment for Grades I, II, III, IV, V and VI (for 2005-06 only) for at least two consecutive years, say 2004-05 and 2005-06;
and
- Grade-specific repeaters for Grades I, II, III, IV, V and VI in the latest year, say 2005-06.

The rates can be computed by using the following formulae:

## Promotion Rate

$$
=\frac{\text { Number of student's promoted to Grade ' } \mathrm{g}+1 \text { ' in year ' } \mathrm{t}+1^{\prime}}{\text { Total number of students in Grade ' } \mathrm{g} \text { ' in year ' } \mathrm{t} \text { ' }} \times 100
$$

In notations, it is expressed by the following equation:

$$
\left(p_{g}^{t}\right)=\frac{P_{g+1}^{t+1}}{E_{g}^{t}} \times 100
$$

## Repetition Rate

$$
\begin{gathered}
=\frac{\text { Number of repeaters in Grade 'g' in year ' } \mathrm{t}+1^{\prime}}{\mathrm{E}_{\mathrm{g}}^{\mathrm{t}}} \times 100 \\
\left(\mathrm{r}_{\mathrm{g}}^{\mathrm{t}}\right)=\frac{\mathrm{R}_{\mathrm{g}}^{\mathrm{t+1}}}{\mathrm{E}_{\mathrm{g}}^{\mathrm{t}}} \times 100
\end{gathered}
$$

## Drop-out Rate

$$
\begin{gathered}
=\frac{\text { Number of student's dropping-out from Grade 'g' in year 't' }}{E_{g}^{t}} \times 100 \\
\left(d_{g}^{t}\right)=\frac{D_{g}^{t}}{E_{g}^{t}} \times 100
\end{gathered}
$$

By using two year's enrolment data not only grade-to-grade repetition, drop-out and promotion rates can be obtained, but average of these rates at primary level of education can also be worked out. The average indicates value of these rates during the intermediary period, i.e. between two years on the basis of which grade-to-grade rates are worked out. The average rates are also known as overall rates. The computational procedure is presented below.

Let enrolment and repeaters in Grades I, II, III, IV, V and VI in an year be
 (see Table 11). The promotees in a grade are obtained by subtracting repeaters from the enrolment in subsequent grade the following year. Number of drop-out children is obtained by subtracting repeaters and promotees from enrolment of a particular grade. Number of promotees and drop-outs is obtained for all the grades in an education cycle, say primary level. Similarly, grade-specific promotion (PR), repetition (RR) and drop-out (DR) rates in year ' $t$ ' (say 2004-05) are denoted and the following formulae are used to compute average of these rates.

Average (Overall) Repetition Rate

$$
\begin{equation*}
=\frac{\left(R_{1}+R_{I I}+R_{I I I}+R_{I V}+R_{V}\right)_{\text {in year 'tt+1"' }} \times 100}{\left(E_{1}+E_{I I}+E_{I I I}+E_{I V}+E_{V}\right)_{\text {in year 't' }}} \times 10 \tag{i}
\end{equation*}
$$

Average (Overall) Promotion Rate

$$
\begin{equation*}
=\frac{\left(P_{1}+P_{I I}+P_{I I I}+P_{I V}+P_{V v} \text { in year ' } t\right. \text { ' }}{\left(E_{1}+E_{I I}+E_{I I I}+E_{\text {IV }}+E_{v}\right) \text { in year 't' }} \times 100 \tag{ii}
\end{equation*}
$$

Table 11
Denotations: Calculation of Average Flow Rates

| Parameter | Grades |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Enrolment in first year ' t ', say 2004-05 | $\mathrm{E}_{1}$ | $\mathrm{E}_{\text {II }}$ | $\mathrm{E}_{\text {III }}$ | $\mathrm{E}_{\text {IV }}$ | $E_{v}$ | $\mathrm{E}_{\mathrm{VI}}$ |
| Enrolment in second year ' $\mathrm{t}+1$ ' say 2005-06 | $\mathrm{E}_{1}$ | $\mathrm{E}_{\text {II }}$ | $\mathrm{E}_{\text {III }}$ | $\mathrm{E}_{\text {IV }}$ | $\mathrm{E}_{\mathrm{v}}$ | $\mathrm{E}_{\mathrm{VI}}$ |
| Number of Repeaters in year ' $\mathrm{t}+1$ ', say 2005-06 | $\mathrm{R}_{1}$ | $\mathrm{R}_{\text {II }}$ | $\mathrm{R}_{\text {III }}$ | $\mathrm{R}_{\text {IV }}$ | $\mathrm{R}_{\mathrm{v}}$ | $\mathrm{R}_{\mathrm{VI}}$ |
| Number of students promoted, in year ' t ', 2004-05 | $\mathrm{P}_{1}$ | $\mathrm{P}_{\text {II }}$ | $\mathrm{P}_{\text {III }}$ | $\mathrm{P}_{\text {IV }}$ | $\mathrm{P}_{\mathrm{v}}$ | $\mathrm{P}_{\mathrm{V} 1}$ |
| Number of drop-out children in year 't', 2004-05 | $\mathrm{D}_{1}$ | $\mathrm{D}_{\text {II }}$ | $\mathrm{D}_{\text {III }}$ | $\mathrm{D}_{\text {IV }}$ | $\mathrm{D}_{\mathrm{V}}$ | $\mathrm{D}_{\mathrm{VI}}$ |

Average (Overall) Drop-out Rate

$$
=[100-\{(\mathrm{i})+(\mathrm{ii})\}]
$$

It may also be noted that while calculating the number of promotees in Grade V in the year 2004-05, enrolment and repeaters of Grade VI in the
year 2005-06 are considered. This is supposed to give slightly a lower promotion and high drop-out rate because it also considers those children who successfully completed primary level but did not transit to Grade VI. It is better to consider the number of successful primary graduates but the same for the year ' $t+1$ ', i.e. year 2005-06, is not available through the DISE data set. DISE collects information on number of graduates each year but of the previous academic year which in the present case is the year 2004-05.

One of the major limitations of the DISE enrolment data (in terms of number of schools covered over time) is its inconsistency which is largely because of the coverage which has got expanded over a period of time. As has already been mentioned that over a period of time, the number of schools covered under DISE increased many-fold. This means that each year new schools were covered under DISE the number of which varied from year to year and also from state to state. This is also true that a few schools covered in a year couldn't be covered in the subsequent year because of one or the other reason. Therefore, in the present exercise, grade-specific flow rates, such as promotion, drop-out and repetition, as well as averages of these rates are calculated based upon the gradespecific enrolment and repeaters data of common schools only. Common schools are the schools which have been covered both in the years 200405 and 2005-06 and have also submitted the enrolment and repeaters data during these years. The number of common schools and percentage of such schools for the years 2004-05 and 2005-06 are presented in Table 12 which suggests that more than 88 percent of the total schools in 200506 are common compared to 83 percent during the previous year, i.e. 2004-05. But in a few states, such as Delhi, Punjab and Sikkim, the percentage of common schools is much lower than the average of all districts which indirectly suggests that these states have re-initialised schools and have given school identification codes afresh. Needless to mention that once the school identification code is given, it is supposed to remain the same forever. Therefore, the flow rates in case of these states do not represent the entire state for the reason mentioned above.

This also suggest that about 9 out of 10 schools imparting elementary education covered under DISE are considered in calculating flow rates. This otherwise means that as many as 914.8 thousand schools are considered in the calculation which is a very large sample of the total elementary schools, and therefore, the findings can easily be generalised. On the other hand, as many as 22 out of 29 states reported percentage of common schools in 2005-06 above 80 percent. The percentage of such schools is as high as 99.57 percent in Tripura and 98.26 percent in Himachal

Table 12
Percentage of Common Schools: 2004-05 and 2005-06

| SI |  |  |  |  |  |
| :--- | :--- | ---: | ---: | ---: | ---: |
| No. | State/UT | Number of <br> Schools in <br> $2004-05$ | Common <br> Schools in <br> $2005-06$ | Percentage of <br> Common |  |

Pradesh and 97.34 percent in Uttar Pradesh. In 2005-06, as many as $11,24,033$ schools reported data under DISE against $10,37,813$ schools in the previous year which indicates an increase of 86,220 schools, or 8.31 percent over of the total schools covered during the previous year 200405 . Thus, of the $1,23,013$ uncommon schools observed during 2005-06, as many as $1,06,341$ schools ( 70.09 percent) are the new schools added during 2005-06. Hence, as it seems, only 36,793 schools are uncommon in both the years which is 3.27 percent of the total schools that impart elementary education in the country. Efforts are being made to maintain consistency in coverage so that all the schools covered in a year are also covered the following year. States are advised to update and prepare complete list of all the recognised schools at disaggregated levels by management, such as cluster, block, district and state levels. In addition, CRC Coordinators have also been made accountable to ensure complete coverage as well as check the consistency of data in the filled-in formats falling under his/ her jurisdiction.

## Analysis of Flow Rates

The state-specific promotion, repetition and drop-out rates for cohorts 2003-04 and 2004-05 have been presented in Tables 13 to 21.

## Promotion Rate

The grade-specific as well as average of Grades I-V promotion, repetition and drop-out rates have been computed separately for boys, girls as also the total enrolment and the same are presented in Tables 13 to 21. It is observed that average promotion rate in Grades I-V for cohort 2004-05 has improved to 83.76 percent from its previous level of 81.53 percent in 2003-04; the corresponding figures being 83.57 percent for boys, and 83.96 percent for girls for cohort 2004-05. Barring Delhi, no significant difference is noticed in average promotion rate for boys and girls. It may also be noted that as many as 11 states have reported a lower promotion rate than the average of all districts together ( 83.76 percent). Arunachal Pradesh ( 68.35 percent), Bihar ( 75.10 percent), Chhattisgarh ( 78.20 percent), Jharkhand ( 77.21 percent) and Rajasthan ( 74.27 percent) are such states. On the other hand, Meghalaya ( 69.17 percent), Sikkim (72.71 percent) and Tripura ( 80.70 percent) also reported lower average promotion rates; all of these states are from the north-eastern part of the country. In a few states, such as Kerala ( 95.66 percent), Himachal Pradesh ( 92.82 percent) and Tamil Nadu ( 96.40 percent) almost all the children in primary Grades I-V were promoted to next Grade. Consequently
average repetition and drop-out rates in these states are much lower than the same in the other states.


Further, it is observed that only 77.61 percent children in Grade I were promoted to next grade in 2004-05 compared to only 74.05 percent in case of Grade V which is also true for 2003-04. Low promotion rate in Grade V may be because of Grade VI enrolment having been considered in calculating flow rates instead of number of graduates (in the current year), which is not available through the DISE data. Rest of the primary grades has above 88 percent promotion rate. The promotion rate is low despite the policy of no detention generally being followed across the country. Very low promotion rate in Grade I in a number of states need careful examination. Without improving promotion rate in Grade I, efforts being made through ongoing programmes in attaining the goal of universal primary education are not likely to be realised in the near future. The states with very low promotion rate in Grade I are Arunachal Pradesh ( 56.63 percent), Bihar ( 59.84 percent), Chhattisgarh ( 71.96 percent), Jharkhand ( 62.59 percent), Meghalaya ( 57.69 percent), Rajasthan ( 60.60 percent), Sikkim ( 72.60 percent), Tripura ( 73.07 percent), Uttarakhand ( 70.54 percent) and West Bengal ( 64.22 percent). The most populous state of the country, namely Uttar Pradesh reported a high 86.81 percent promotion rate in Grade I in 2004-05 and Kerala, the most educationally advanced state, 99.41 percent. Himachal Pradesh, another educationally

## Table 13

Promotion Rate: Cohort 2003-04
(Based on Common Schools for the Years 2003-04 and 2004-05)

| $\begin{aligned} & \text { SI } \\ & \text { No. } \end{aligned}$ | State/UT | Grade I | Grade II | Grade III | Grade IV | Grade V | Average <br> Primary Grades I-V |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | Andhra Pradesh | 76.33 | 80.43 | 81.25 | 84.22 | 38.04 | 72.55 |
| 2 | Assam | 81.76 | 92.85 | 94.30 | 96.06 | 82.75 | 88.96 |
| 3 | Bihar | 60.59 | 86.30 | 89.64 | 97.68 | 64.72 | 76.98 |
| 4 | Chandigarh | 97.32 | 94.98 | 97.69 | 92.58 | 87.30 | 93.91 |
| 5 | Chhattisgarh | 68.19 | 80.45 | 75.90 | 78.24 | 71.67 | 74.63 |
| 6 | Gujarat | 75.31 | 82.81 | 81.29 | 82.71 | 81.34 | 80.51 |
| 7 | Haryana | 75.73 | 80.51 | 77.88 | 80.15 | 45.08 | 72.74 |
| 8 | Himachal Pradesh | 84.96 | 91.11 | 92.06 | 90.14 | 81.51 | 87.95 |
| 9 | Jharkhand | 64.57 | 87.02 | 87.84 | 90.91 | 74.15 | 78.68 |
| 10 | Karnataka | 91.06 | 93.29 | 93.26 | 93.60 | 87.22 | 91.71 |
| 11 | Kerala | 97.48 | 93.56 | 93.87 | 91.96 | 94.97 | 94.34 |
| 12 | Madhya Pradesh | 80.20 | 84.21 | 80.04 | 85.49 | 64.41 | 79.01 |
| 13 | Maharashtra | 85.36 | 89.67 | 88.98 | 79.18 | 87.71 | 86.20 |
| 14 | Meghalaya | 52.12 | 77.05 | 76.91 | 77.10 | 76.83 | 67.86 |
| 15 | Mizoram | 77.94 | 109.07 | 98.79 | 107.22 | 91.62 | 94.82 |
| 16 | Nagaland | 94.53 | 94.80 | 90.63 | 79.04 | 91.33 | 90.57 |
| 17 | Orissa | 82.90 | 91.39 | 91.23 | 92.48 | 76.04 | 87.04 |
| 18 | Punjab | 88.17 | 91.13 | 90.72 | 92.29 | 53.50 | 83.64 |
| 19 | Rajasthan | 54.78 | 73.83 | 81.85 | 91.06 | 81.32 | 73.05 |
| 20 | Sikkim | 71.77 | 75.76 | 68.05 | 70.76 | 66.71 | 70.87 |
| 21 | Tamil Nadu | 90.81 | 94.55 | 95.46 | 95.63 | 93.41 | 93.97 |
| 22 | Tripura | 69.67 | 83.13 | 68.70 | 72.97 | 75.45 | 73.59 |
| 23 | Uttar Pradesh | 84.72 | 89.41 | 86.54 | 88.75 | 50.49 | 82.05 |
| 24 | Uttarakhand | 68.94 | 85.93 | 84.80 | 88.28 | 68.75 | 78.84 |
| 25 | West Bengal | 63.13 | 89.12 | 89.72 | 77.53 | 61.51 | 75.10 |
|  | All Districts | 75.49 | 87.54 | 87.22 | 87.54 | 69.65 | 81.53 |

Table 14
Promotion Rate in Primary Grades: Cohort 2004-05 (Based on Common Schools for the Years 2004-05 and 2005-06)

| $\begin{aligned} & \text { SI } \\ & \text { No. } \end{aligned}$ | State/UT | Grade I | Grade I | II Grade III | Grade IV | Grade V | Average Primary Grades I-V |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | Andhra Pradesh | 80.91 | 87.81 | 86.88 | 90.92 | 79.67 | 85.16 |
| 2 | Arunachal Pradesh | 56.63 | 71.62 | 72.27 | 77.24 | 74.05 | 68.35 |
| 3 | Assam | 82.19 | 88.07 | 87.41 | 86.19 | 89.15 | 86.32 |
| 4 | Bihar | 59.84 | 83.95 | 85.86 | 91.54 | 64.21 | 75.10 |
| 5 | Chandigarh | 109.69 | 103.72 | 102.41 | 98.60 | 99.23 |  |
| 6 | Chhattisgarh | 71.96 | 84.91 | 80.88 | 82.30 | 71.73 | 78.20 |
| 7 | Delhi | 78.30 | 87.83 | 86.46 | 87.32 | 139.53 |  |
| 8 | Gujarat | 80.24 | 86.56 | 85.73 | 86.55 | 84.75 | 84.61 |
| 9 | Haryana* | 92.02 | 96.91 | 90.49 | 89.73 | 64.59 | 87.34 |
| 10 | Himachal Pradesh | 90.39 | 94.40 | 96.27 | 92.95 | 89.94 | 92.82 |
| 11 | Jammu \& Kashmir | 79.09 | 91.53 | 93.30 | 95.48 | 92.72 | 89.82 |
| 12 | Jharkhand | 62.59 | 85.32 | 86.30 | 89.52 | 72.93 | 77.21 |
| 13 | Karnataka | 93.38 | 96.02 | 96.15 | 95.45 | 89.34 | 94.10 |
| 14 | Kerala | 99.41 | 95.96 | 95.64 | 93.20 | 94.36 | 95.66 |
| 15 | Madhya Pradesh | 87.34 | 96.93 | 94.63 | 103.34 | 68.13 | 90.07 |
| 16 | Maharashtra | 85.33 | 89.86 | 90.07 | 84.86 | 88.32 | 87.68 |
| 17 | Meghalaya | 57.69 | 76.15 | 74.16 | 74.05 | 75.37 | 69.17 |
| 18 | Mizoram | 67.93 | 84.61 | 87.94 | 115.88 | 117.57 | 91.21 |
| 19 | Nagaland | 89.23 | 88.37 | 84.48 | 74.02 | 89.79 | 85.36 |
| 20 | Orissa | 83.56 | 88.22 | 90.20 | 90.95 | 80.09 | 86.78 |
| 21 | Puducherry | 108.54 | 100.26 | 108.96 | 118.81 | 109.97 |  |
| 22 | Punjab | 85.61 | 87.43 | 86.45 | 85.83 | 67.77 | 82.85 |
| 23 | Rajasthan | 60.60 | 74.25 | 78.89 | 88.92 | 78.44 | 74.27 |
| 24 | Sikkim | 72.60 | 78.17 | 72.07 | 67.85 | 72.12 | 72.71 |
| 25 | Tamil Nadu | 94.79 | 96.66 | 97.29 | 97.45 | 95.75 | 96.40 |
| 26 | Tripura | 73.07 | 91.04 | 78.66 | 81.66 | 81.74 | 80.70 |
| 27 | Uttarakhand | 70.54 | 86.30 | 84.88 | 87.96 | 55.04 | 81.04 |
| 28 | Uttar Pradesh | 86.81 | 91.99 | 88.05 | 89.53 | 78.80 | 84.07 |
| 29 | West Bengal | 64.22 | 86.93 | 86.78 | 78.38 | 61.62 | 74.82 |
|  | All Districts | 77.61 | 89.06 | 88.46 | 89.87 | 74.05 | 83.76 |

[^1]forward state reported a promotion rate of 90.39 percent in Grade I compared to only 78.30 percent in the national capital Delhi. One of the other interesting features is that Himachal Pradesh, Kerala and Tamil Nadu reported above 90 percent promotion rate which is true for all primary grades. On the other hand promotion rate in Grade V in Bihar is as low as 64.21 percent compared to 72.93 percent in Jharkhand and 68.13 percent in the state of Madhya Pradesh. The promotion rate in other primary grades in Madhya Pradesh is quite high. The state should look into reasons of lower promotion rate and adopt appropriate strategies. The increase in enrolment in primary classes in general and Grade I in particular in recent years is clearly a reflection on the programme like, mid-day meal scheme and enrolment drives carried out under the Sarva Shiksha Abhiyan programme but the data available for the last 3 years do not suggest significant decline in drop-out rate which is still very high.

## Repetition Rate

The grade-specific as well as average repetition rate in primary classes presented in Table 15 for 2004-05 shows a decline over the same in the previous year. However, DISE data suggests that as many as 9.99 million

children repeated elementary grades in 2005-06 which is about 5.9 percent of total elementary enrolment. About 85 percent of the total repeaters were located in the rural areas and the balance 15 percent in the urban areas. Of the total repeaters, 53 percent were boys and the remaining 47
percent girls (Table 17). The distribution of repeaters by reasons further reveals that 6 out of 10 repeaters repeat just because of failure ( 56.94 percent). On the other hand, 27.42 percent repeat because of the long absenteeism and another 15.74 percent because of re-admissions.

The state-specific repetition rate further reveals that as many as 6.29 percent children repeated primary classes in 2004-05 compared to 7.83 percent in the year 2003-04. No difference is noticed between boys (6.28 percent) and girls ( 6.29 percent) repeating primary grades in 2004-05. The average repetition rate in a few states, such as, Arunachal Pradesh ( 15.72 percent), Bihar ( 13.54 percent), Chhattisgarh ( 12.14 percent), Gujarat (11.09 percent), Sikkim (21.59 percent), Tripura ( 15.25 percent) and West Bengal ( 13.63 percent) is observed to be very high and above the national average ( 6.29 percent); hence immediate attention is required in this respect. High repetition rate among primary grades in these states is because of very high repetition rate in Grade I. Most of the major states have reasonably lower repetition rate in primary grades. In as many as 14 states, the average repetition rate reported in primary classes is lower than the average of all districts ( 6.29 percent).

On the one hand the promotion rate ( 77.61 percent) in Grade I is observed to be very low compared to the other primary grades, while on the other

hand, the repetition rate in Grade I is also noticed to be very high (10.51 percent) among the primary grades. However, the same has significantly declined to 10.51 percent in 2004-05 from 12.34 percent in 2003-04 which is an encouraging signal. However, clearer trend will emerge when flow

Table 15
Repetition Rate: Cohort 2003-04
(Based on Common Schools for the Years 2003-04 and 2004-05)

| State/UT | Grade I | Grade II | Grade III | Grade IV | Grade V | Average Primary Grades I-V |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Andhra Pradesh | 11.32 | 4.50 | 3.60 | 2.77 | 2.81 | 5.02 |
| Assam | 4.88 | 2.62 | 2.44 | 1.87 | 7.62 | 3.81 |
| Bihar | 24.97 | 9.86 | 7.62 | 6.19 | 5.11 | 13.66 |
| Chandigarh | 4.01 | 3.49 | 3.58 | 3.82 | 7.37 | 4.48 |
| Chhattisgarh | 22.28 | 15.33 | 17.08 | 14.83 | 11.21 | 16.68 |
| Gujarat | 18.90 | 14.24 | 15.03 | 12.08 | 12.34 | 14.72 |
| Haryana | 9.18 | 12.12 | 16.77 | 15.29 | 10.23 | 12.67 |
| Himachal Pradesh | 10.27 | 6.75 | 6.05 | 6.96 | 2.69 | 6.60 |
| Jharkhand | 26.16 | 10.71 | 8.18 | 6.77 | 5.81 | 14.33 |
| Karnataka | 2.66 | 2.47 | 2.59 | 2.47 | 3.21 | 2.68 |
| Kerala | 0.34 | 3.99 | 3.96 | 4.12 | 4.29 | 3.36 |
| Madhya Pradesh | 11.74 | 8.89 | 10.33 | 10.16 | 13.18 | 10.86 |
| Maharashtra | 9.28 | 7.07 | 7.36 | 5.52 | 7.61 | 7.42 |
| Meghalaya | 37.75 | 13.37 | 13.66 | 14.60 | 11.36 | 9.84 |
| Mizoram | 6.39 | 2.81 | 3.67 | 2.42 | 2.82 | 3.95 |
| Nagaland | 7.44 | 7.22 | 7.44 | 6.76 | 7.04 | 7.21 |
| Orissa | 1.89 | 1.07 | 0.93 | 0.81 | 0.74 | 1.15 |
| Punjab | 11.93 | 10.13 | 10.30 | 9.38 | 8.09 | 10.02 |
| Rajasthan | 20.25 | 14.14 | 7.94 | 4.21 | 3.08 | 11.93 |
| Sikkim | 21.16 | 24.21 | 27.66 | 26.83 | 25.48 | 24.87 |
| Tamil Nadu | 3.41 | 2.68 | 2.73 | 2.71 | 2.76 | 2.86 |
| Tripura | 22.97 | 16.00 | 27.78 | 22.33 | 16.48 | 21.55 |
| Uttar Pradesh | 3.65 | 2.25 | 2.24 | 1.84 | 1.60 | 2.45 |
| Uttarakhand | 16.69 | 8.87 | 7.95 | 5.56 | 1.73 | 9.10 |
| West Bengal | 18.63 | 7.13 | 5.94 | 6.26 | 25.02 | 13.12 |
| All Districts | 12.34 | 6.45 | 6.03 | 5.18 | 7.47 | 7.83 |

Table 16
Repetition Rate : Cohort 2004-05
(Based on Common Schools for the Years 2004-05 and 2005-06)

| State/UT | Grade I | Grade II | Grade III | Grade IV | Grade V | Average Primary Grades I-V |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Andhra Pradesh | 11.43 | 4.77 | 3.80 | 3.07 | 2.90 | 5.22 |
| Arunachal Pradesh | 19.17 | 15.92 | 15.72 | 12.43 | 11.52 | 15.72 |
| Assam | 4.22 | 2.04 | 1.57 | 1.56 | 2.37 | 2.44 |
| Bihar | 24.94 | 10.76 | 8.05 | 6.46 | 5.40 | 13.54 |
| Chandigarh | 2.90 | 2.72 | 2.80 | 2.52 | 5.12 | 2.91 |
| Chhattisgarh | 16.32 | 11.50 | 12.15 | 10.66 | 7.79 | 12.14 |
| Delhi | 8.61 | 10.14 | 10.16 | 11.69 | 4.94 | - |
| Gujarat | 15.13 | 10.69 | 10.79 | 8.68 | 9.20 | 11.09 |
| Haryana* | - | - | - | - | - | - |
| Himachal Pradesh | 6.80 | 3.90 | 3.32 | 4.97 | 2.58 | 4.34 |
| Jammu \& Kashmir | 1.67 | 1.64 | 1.61 | 1.37 | 2.00 | 1.66 |
| Jharkhand | 9.87 | 4.77 | 3.91 | 3.23 | 2.86 | 5.81 |
| Karnataka | 3.82 | 3.69 | 3.81 | 3.43 | 4.50 | 3.85 |
| Kerala | 0.24 | 3.64 | 3.58 | 3.61 | 3.72 | 3.00 |
| Madhya Pradesh | 0.13 | 0.11 | 0.10 | 0.09 | 0.16 | 0.12 |
| Maharashtra | 8.29 | 5.96 | 5.68 | 4.36 | 6.13 | 6.14 |
| Meghalaya | 9.02 | 8.00 | 7.63 | 7.07 | 9.28 | 8.30 |
| Mizoram | 9.63 | 4.53 | 4.50 | 2.35 | 4.77 | 5.63 |
| Nagaland | 6.48 | 5.63 | 5.61 | 4.95 | 5.79 | 5.73 |
| Orissa | 11.10 | 6.05 | 5.36 | 4.28 | 3.63 | 6.27 |
| Puducherry | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Punjab | 10.05 | 9.35 | 9.50 | 8.42 | 3.52 | 8.24 |
| Rajasthan | 18.77 | 12.56 | 8.29 | 4.52 | 3.31 | 10.83 |
| Sikkim | 21.44 | 21.10 | 22.91 | 22.06 | 20.19 | 21.59 |
| Tamil Nadu | 1.98 | 1.56 | 1.40 | 1.48 | 1.60 | 1.60 |
| Tripura | 20.44 | 11.21 | 17.07 | 13.63 | 11.52 | 15.25 |
| Uttarakhand | 12.85 | 7.93 | 6.80 | 4.81 | 1.33 | 1.83 |
| Uttar Pradesh | 2.51 | 1.78 | 1.72 | 1.42 | 1.71 | 7.43 |
| West Bengal | 19.48 | 7.75 | 6.64 | 6.44 | 25.48 | 13.63 |
| All Districts | 10.51 | 5.45 | 4.66 | 3.83 | 5.58 | 6.29 |

[^2]Table 17
Grade-specific Number of Repeaters along with Reasons of Repetition 2005-06

| Grade | Failures | Long <br> Absentees | Re-Admission | \% to Total <br> Repeaters | Total <br> Repeaters |
| :--- | :---: | :---: | :---: | :---: | :---: |
| I | 47.07 | 35.68 | 17.25 | 31.16 | $31,14,701$ |
| II | 48.00 | 35.99 | 16.01 | 13.74 | $13,73,846$ |
| III | 52.81 | 31.65 | 15.54 | 11.23 | $11,22,975$ |
| IV | 54.37 | 29.25 | 16.38 | 8.32 | $8,31,165$ |
| V | 64.64 | 18.70 | 16.66 | 10.86 | $10,86,002$ |
| VI | 72.41 | 14.80 | 12.80 | 9.96 | $9,95,700$ |
| VII | 71.84 | 14.93 | 13.23 | 7.68 | $7,67,281$ |
| VIII | 77.71 | 10.18 | 12.11 | 7.04 | $7,03,956$ |
| TOTAL | 56.94 | 27.42 | 15.64 | 100.00 | $99,95,626$ |

rates during the next 2 to 3 years would be available. In rest of the primary grades, repetition rate varies between 4 to 6 percent. The state-specific repetition rate in Grade I further reveals that a few states reported a

very high rate compared to average of all-districts ( 6.29 percent). The states of Bihar (24.94 percent), Gujarat (15.13 percent), Sikkim (21.44

Table 18
Drop-out Rate: Cohort 2003-04
(Based on Common Schools for the Years 2003-04 and 2004-05)

| State/ UT | Grade I | Grade II | Grade III | Grade IV | Grade V | Average Primary Grades I-V |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Andhra Pradesh | 12.34 | 15.06 | 15.15 | 13.01 | 59.15 | 22.43 |
| Assam | 13.37 | 4.53 | 3.26 | 2.07 | 9.63 | 7.22 |
| Bihar | 14.44 | 3.84 | 2.75 | - | 30.17 | 9.36 |
| Chandigarh | - | 1.52 | - | 3.60 | 5.33 | 1.61 |
| Chhattisgarh | 9.53 | 4.23 | 7.02 | 6.93 | 17.12 | 8.69 |
| Gujarat | 5.79 | 2.95 | 3.68 | 5.20 | 6.32 | 4.77 |
| Haryana | 15.08 | 7.37 | 5.35 | 4.56 | 44.69 | 14.60 |
| Himachal Pradesh | 4.77 | 2.15 | 1.89 | 2.90 | 15.80 | 5.44 |
| Jharkhand | 9.27 | 2.28 | 3.98 | 2.33 | 20.04 | 6.99 |
| Karnataka | 6.28 | 4.24 | 4.14 | 3.93 | 9.56 | 5.61 |
| Kerala | 2.18 | 2.45 | 2.18 | 3.91 | 0.75 | 2.30 |
| Madhya Pradesh | 8.06 | 6.90 | 9.64 | 4.36 | 22.41 | 10.13 |
| Maharashtra | 5.36 | 3.27 | 3.65 | 15.30 | 4.68 | 6.38 |
| Meghalaya | 37.75 | 13.37 | 13.66 | 14.60 | 11.36 | 22.29 |
| Mizoram | 15.67 | - | - | - | 5.56 | 1.23 |
| Nagaland | - | - | 1.94 | 14.20 | 1.63 | 2.22 |
| Orissa | 15.21 | 7.54 | 7.84 | 6.72 | 23.22 | 11.80 |
| Punjab | - | - | - | - | 38.40 | 6.33 |
| Rajasthan | 24.97 | 12.03 | 10.21 | 4.74 | 15.60 | 15.02 |
| Sikkim | 7.07 | 0.03 | 4.29 | 2.41 | 7.81 | 4.26 |
| Tamil Nadu | 5.78 | 2.77 | 1.82 | 1.66 | 3.82 | 3.17 |
| Tripura | 7.36 | 0.87 | 3.51 | 4.71 | 8.07 | 4.86 |
| Uttar Pradesh | 11.63 | 8.34 | 11.22 | 9.41 | 47.91 | 15.50 |
| Uttarakhand | 14.38 | 5.19 | 7.25 | 6.16 | 29.52 | 12.06 |
| West Bengal | 18.24 | 3.75 | 4.34 | 16.20 | 13.47 | 11.78 |
| All Districts | 12.17 | 6.01 | 6.76 | 7.27 | 22.87 | 10.64 |

Note: States having negative drop-out rates indicate inconsistent grade-specific enrolment data, most of which are small and new states covered under DISE. Drop-out rate in such states are not reported.

Table 19
Drop-out Rate: Cohort 2004-05
(Based on Common Schools for the Years 2004-05 and 2005-06)

| State/UT | Grade I | Grade II | Grade III | Grade IV | Grade V | Average Primary Grades I-V |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Andhra Pradesh | 7.66 | 7.42 | 9.32 | 6.01 | 17.43 | 9.62 |
| Arunachal Pradesh | 24.20 | 12.47 | 12.01 | 10.34 | 14.43 | 15.93 |
| Assam | 13.59 | 9.89 | 11.03 | 12.25 | 8.48 | 11.25 |
| Bihar | 15.22 | 5.30 | 6.09 | 2.00 | 30.39 | 11.36 |
| Chhattisgarh | 11.72 | 3.60 | 6.96 | 7.05 | 20.48 | 9.66 |
| Delhi | 13.09 | 2.03 | 3.38 | 0.99 | - | - |
| Gujarat | 4.62 | 2.75 | 3.48 | 4.77 | 6.06 | 4.30 |
| Haryana | 7.98 | 3.09 | 9.51 | 10.27 | 35.41 | 12.66 |
| Himachal Pradesh | 2.81 | 1.70 | 0.41 | 2.08 | 7.48 | 2.85 |
| Jammu \& Kashmir | 19.24 | 6.83 | 5.09 | 3.15 | 5.29 | 8.52 |
| Jharkhand | 27.55 | 9.91 | 9.80 | 7.25 | 24.21 | 16.98 |
| Karnataka | 2.80 | 0.30 | 0.03 | 1.12 | 6.16 | 2.06 |
| Kerala | 0.36 | 0.39 | 0.78 | 3.19 | 1.93 | 1.34 |
| Madhya Pradesh | 12.53 | 2.96 | 5.27 | - | 31.71 | 9.81 |
| Maharashtra | 6.38 | 4.18 | 4.25 | 10.78 | 5.55 | 6.18 |
| Meghalaya | 33.29 | 15.85 | 18.21 | 18.88 | 15.35 | 22.53 |
| Mizoram | 22.45 | 10.85 | 7.56 | - | - | 3.16 |
| Nagaland | 4.29 | 6.00 | 9.92 | 21.02 | 4.43 | 8.91 |
| Orissa | 5.34 | 5.73 | 4.44 | 4.77 | 16.28 | 6.95 |
| Punjab | 4.33 | 3.22 | 4.05 | 5.75 | 28.71 | 8.92 |
| Rajasthan | 20.63 | 13.19 | 12.82 | 6.55 | 18.25 | 14.90 |
| Sikkim | 5.96 | 0.74 | 5.02 | 10.09 | 7.69 | 5.70 |
| Tamil Nadu | 3.24 | 1.78 | 1.31 | 1.07 | 2.65 | 2.00 |
| Tripura | 6.48 | - | 4.26 | 4.71 | 6.74 | 4.05 |
| Uttarakhand | 16.61 | 5.76 | 8.32 | 7.23 | 43.62 | 14.10 |
| Uttar Pradesh | 10.68 | 6.23 | 10.23 | 9.06 | 19.50 | 11.53 |
| West Bengal | 16.29 | 5.32 | 6.58 | 15.18 | 12.90 | 11.55 |
| All Districts | 11.89 | 5.49 | 6.88 | 6.30 | 20.37 | 9.96 |

Note: States having negative drop-out rates indicate inconsistent grade-specific enrolment data most of which are small and new states covered under DISE. Drop-out rate in such states are not reported
percent) and West Bengal (19.48 percent) all reported a very high repetition rate in Grade I; thus causing inefficiency to the system. On the other hand, in a few states such as Kerala ( 0.24 percent) and Tamil Nadu (1.98 percent), very less number of children (in percentage terms) repeated Grade I in 2004-05 which is also true for other primary grades. Sikkim (20.19 percent) and West Bengal ( 25.48 percent) too reported a very high repetition rate in Grade V . The states with high repetition rate should immediately identify the reasons and initiate appropriate strategies to check it without which neither the goal of UPE nor UEE can be attained. Analysis of block and district-specific rates may help states in identifying problematic locations where flow rates are not satisfactory. Suggestions made by a recent study conduced in the states of Gujarat, Haryana and Himachal Pradesh on grade repetition at primary stage may be useful in this regard. The repetition rate obtained in this study is in conformity with the rates based on the DISE data analysed in the present study (for details see Grade Repetition at Primary Stage in Gujarat, Haryana and Himachal Pradesh, Research, Evaluation and Studies Unit, Technical Support Group, Educational Consultants India Limited, New Delhi, 2006).

## Drop-out Rate

The average drop-out rate in primary classes over the last three cohorts (2002-03 to 2004-05) suggests a consistent decline but the same is still too high to attain the status of universal retention at the primary level of education. As has already been mentioned above, the drop-out rate computed in the present study does not present the true picture of retention as it is just based on enrolment data of only 2 years instead of 5 years used in computing conventional retention rate at primary level. However, the rate calculated presents enough indication about the quantum of children dropping out from the primary grades during the intermediary years i.e. between two years. While calculating retention rate, the focus centered on a group of children (cohort) who entered education system together in a year. This group of children (from the same cohort) is then observed over a period of time to see how many of them reach Grade V and also how many of them drop-out before reaching Grade V. Unlike this, grade-specific drop-out rate is based on enrolment data of only 2 years; thus indicating that children in Grades I, II, III, IV and V are from different cohorts and have entered into the education system 1, 2, 3, 4 or more than 5 years back. These rates fail to provide any indication about the retaining capacity of the system but shows the number of children in each primary grade who dropped out from the system before completion of a primary grade.

Table 20

## Average Flow Rates: Primary Grades I-V <br> Cohorts 2003-04 \& 2004-05*

| $\begin{aligned} & \text { SI } \\ & \text { No. } \end{aligned}$ | State/UT | Average Flow Rates |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Drop-out Rate |  | Repetition Rate |  | Promotion Rate |  |
|  |  | 2003-04 | 2004-05 | 2003-04 | 2004-05 | 2003-04 | 2004-05 |
| 1 | Andhra Pradesh | 22.43 | 9.62 | 5.02 | 5.22 | 72.55 | 85.16 |
| 2 | Arunachal Pradesh | - | 15.93 | - | 15.72 | - | 68.35 |
| 3 | Assam | 7.22 | 11.25 | 3.81 | 2.44 | 88.96 | 86.32 |
| 4 | Bihar | 9.36 | 11.36 | 13.66 | 13.54 | 76.98 | 75.10 |
| 5 | Chandigarh | 1.61 | - | 4.48 | - | 93.91 | - |
| 6 | Chhattisgarh | 8.69 | 9.66 | 16.68 | 12.14 | 74.63 | 78.20 |
| 7 | Gujarat | 4.77 | 4.3 | 14.72 | 11.09 | 80.51 | 84.61 |
| 8 | Haryana | 14.60 | 12.66 | 12.67 | 0.00 | 72.74 | 87.34 |
| 9 | Himachal Pradesh | 5.44 | 2.85 | 6.60 | 4.34 | 87.95 | 92.82 |
| 10 | Jammu \& Kashmir | - | 8.52 | - | 1.66 | - | 89.82 |
| 11 | Jharkhand | 6.99 | 16.98 | 14.33 | 5.81 | 78.68 | 77.21 |
| 12 | Karnataka | 5.61 | 2.06 | 2.68 | 3.85 | 91.71 | 94.10 |
| 13 | Kerala | 2.30 | 1.34 | 3.36 | 3.00 | 94.34 | 95.66 |
| 14 | Madhya Pradesh | 10.13 | 9.81 | 10.86 | 0.12 | 79.01 | 90.07 |
| 15 | Maharashtra | 6.38 | 6.18 | 7.42 | 6.14 | 86.20 | 87.68 |
| 16 | Meghalaya | 22.29 | 22.53 | 9.84 | 8.30 | 67.86 | 69.17 |
| 17 | Mizoram | 1.23 | 3.16 | 3.95 | 5.63 | 94.82 | 91.21 |
| 18 | Nagaland | 2.22 | 8.91 | 7.21 | 5.73 | 90.57 | 85.36 |
| 19 | Orissa | 11.80 | 6.95 | 1.15 | 6.27 | 87.04 | 86.78 |
| 20 | Punjab | 6.33 | 8.92 | 10.02 | 8.24 | 83.64 | 82.85 |
| 21 | Rajasthan | 15.02 | 14.90 | 11.93 | 10.83 | 73.05 | 74.27 |
| 22 | Sikkim | 4.26 | 5.70 | 24.87 | 21.59 | 70.87 | 72.71 |
| 23 | Tamil Nadu | 3.17 | 2.00 | 2.86 | 1.60 | 93.97 | 96.40 |
| 24 | Tripura | 4.86 | 4.05 | 21.55 | 15.25 | 73.59 | 80.70 |
| 25 | Uttar Pradesh | 15.50 | 14.10 | 2.45 | 1.83 | 82.05 | 84.07 |
| 26 | Uttarakhand | 12.06 | 11.53 | 9.10 | 7.43 | 78.84 | 81.04 |
| 27 | West Bengal | 11.78 | 11.55 | 13.12 | 13.63 | 75.10 | 74.82 |
|  | All Districts | 10.64 | 9.96 | 7.83 | 6.29 | 81.53 | 83.76 |

* Based on Common Schools for the years 2003-04 \& 2004-05 and 2004-05 \& 2005-06.

Table 21
Gender-specific Average Flow Rates: Primary Grades I-V Cohort 2004-05*

| $\begin{aligned} & \text { SL. } \\ & \text { No. } \end{aligned}$ | State/UT | Promotion Rate |  | Repetition Rate |  | Drop-out Rate |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Boys | Girls | Boys | Girls | Boys | Girls |
| 1 | Andhra Pradesh | 85.46 | 84.85 | 5.18 | 5.26 | 9.36 | 9.89 |
| 2 | Arunachal Pradesh | 66.88 | 70.03 | 15.88 | 15.53 | 17.24 | 14.44 |
| 3 | Assam | 85.72 | 86.93 | 2.51 | 2.37 | 11.77 | 10.70 |
| 4 | Bihar | 75.87 | 74.12 | 13.13 | 14.06 | 11.00 | 11.83 |
| 5 | Chandigarh | 101.77 | 103.80 | 3.57 | 2.76 | - | - |
| 6 | Chhattisgarh | 78.56 | 77.81 | 12.10 | 12.18 | 9.34 | 10.00 |
| 7 | Delhi | 85.75 | 104.99 | 8.44 | 9.94 | 5.81 | - |
| 8 | Gujarat | 84.37 | 84.89 | 11.36 | 10.77 | 4.27 | 4.33 |
| 9 | Haryana** | 86.72 | 88.03 | - | - | 13.28 | 11.97 |
| 10 | Himachal Pradesh | 92.48 | 93.19 | 4.58 | 4.07 | 2.95 | 2.73 |
| 11 | Jammu \& Kashmir | 90.01 | 89.60 | 1.63 | 1.69 | 8.36 | 8.71 |
| 12 | Jharkhand | 76.99 | 77.47 | 5.71 | 5.92 | 17.30 | 16.61 |
| 13 | Karnataka | 94.05 | 94.14 | 3.90 | 3.79 | 2.05 | 2.07 |
| 14 | Kerala | 95.16 | 96.17 | 3.54 | 2.45 | 1.30 | 1.38 |
| 15 | Madhya Pradesh | 88.73 | 91.56 | 0.12 | 0.12 | 11.16 | 8.31 |
| 16 | Maharashtra | 87.29 | 88.11 | 6.32 | 5.93 | 6.39 | 5.96 |
| 17 | Meghalaya | 67.70 | 70.62 | 8.92 | 7.69 | 23.38 | 21.69 |
| 18 | Mizoram | 90.76 | 91.69 | 5.95 | 5.29 | 3.29 | 3.02 |
| 19 | Nagaland | 84.49 | 86.28 | 5.81 | 5.65 | 9.70 | 8.07 |
| 20 | Orissa | 86.93 | 86.62 | 6.14 | 6.41 | 6.94 | 6.97 |
| 21 | Puducherry | 104.92 | 113.46 | - | - | - | - |
| 22 | Punjab | 82.01 | 83.80 | 9.00 | 7.37 | 8.99 | 8.84 |
| 23 | Rajasthan | 75.78 | 72.54 | 9.85 | 11.97 | 14.37 | 15.50 |
| 24 | Sikkim | 70.58 | 74.89 | 21.61 | 21.57 | 7.81 | 3.54 |
| 25 | Tamil Nadu | 96.25 | 96.57 | 1.68 | 1.52 | 2.08 | 1.91 |
| 26 | Tripura | 80.03 | 81.44 | 15.50 | 14.97 | 4.47 | 3.59 |
| 27 | Uttar Pradesh | 83.70 | 84.48 | 1.85 | 1.81 | 14.45 | 13.71 |
| 28 | Uttarakhand | 80.62 | 81.47 | 7.22 | 7.64 | 12.16 | 10.90 |
| 29 | West Bengal | 74.54 | 75.10 | 13.75 | 13.51 | 11.71 | 11.38 |
|  | All Districts | 83.57 | 83.96 | 6.28 | 6.29 | 10.15 | 9.75 |

[^3]The drop-out rate presented in Table 19 for cohort 2004-05 indicates an average drop-out rate of 9.96 percent in primary grades against 10.64 percent during the previous cohort i.e. 2003-04. This shows that during the intermediary years 2004-05 and 2005-06, as many as 9.96 percent children enrolled in Grades I to V dropped out from the system before completing the primary grades as against 10.64 percent during intermediary years 2003-04 and 2004-05, and 11.27 percent during 2002-03 and 200304. The high incidence of drop-out in the primary grades is also evident in the Apparent Survival Rates presented above (Table 8). An average dropout rate of 9.96 percent in primary grades during intermediary years 200405 and 2005-06 indirectly indicates a very high drop-out rate at primary level over a period of five year. Consequently, it also indicates a low retention rate at the primary level of education. On the one hand, a few states reported low average drop-out rate than the average of all districts, while the other hand other states reported higher drop-out rates. Arunachal Pradesh reported a high drop-out rate of 15.93 percent followed by 14.90 percent in Rajasthan, 14.10 percent in Uttarakhand, 12.66 in Haryana, 11.55 percent in West Bengal, 11.53 percent in Uttar Pradesh and 11.36 percent in Bihar. Except Arunachal Pradesh, all these states are big states and crucial for the country to attain the status of universal retention at the primary level of education. Kerala with 1.34 percent, Tamil Nadu with 2.00 percent and Himachal Pradesh with 2.85 percent drop-out rate have almost achieved the goal of universal retention at primary level. Experience of these states may be useful to other states as how they have achieved it and also the strategies adopted by them to attain this stature.

A cursory look at grade-specific drop-out rates indicates that about 11.89 percent children enrolled in Grade I in 2004-05 dropped out before the completion of Grade I between 2004-05 and 2005-06, compared to 12.17 percent during the previous cohort. In many states, drop-out rate in Grade I is noticed to be alarmingly high, and it needs careful examination and appropriate strategies to check it. Among the major states, Rajasthan reported a very high ( 20.63 percent compared to 24.97 percent during previous year) drop-out rate in Grade I. Bihar ( 15.22 percent against 14.44 percent in previous year), Jammu and Kashmir (19.24 percent), Jharkhand ( 27.55 percent), Meghalaya ( 33.29 percent), Uttarakhand ( 16.61 percent), Uttar Pradesh ( 10.68 percent) and West Bengal ( 16.29 percent) also reported a very high drop-out rate in Grade I. Unlike Grade I, Grades II, III and IV have lower drop-out rates and the same varies between 5.49 to 6.88 percent. However, a few states, such as Meghalaya (Grades II, III and
IV), Rajasthan (Grades II and III), Uttar Pradesh (Grade III), Maharashtra (Grade IV) and West Bengal (Grade IV) reported high drop-out rates even in rest of the primary grades. But it is Grade V which has reported the highest ( 20.27 percent) drop-out rate among the primary grades. In Bihar, it is high at 30.39 percent compared to 20.48 percent in Chhattisgarh, 35.41 percent in Haryana, 31.71 percent in Madhya Pradesh, 28.71 percent in Rajasthan, 43.62 percent in Uttarakhand and 19.20 percent in Uttar

Table 22
Distribution of States by Average Drop-out and Repetition Rate Cohort 2003-04

| Repetition Rate | Drop-out Rate |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Below 5 \% | 5 to 10 \% | 10-15 \% | 15-20 \% | Above 20 \% |
| Below 5 \% | Tamil Nadu Kerala Chandigarh Mizoram | Assam Karnataka | Orissa | Uttar Pradesh | - |
| 5 to 10 \% | Nagaland | Maharashtra <br> Himachal <br> Pradesh | Uttaranchal | - | Andhra Pradesh Meghalaya |
| 10-15 \% | Gujarat | Bihar Jharkhand Punjab | Haryana West Bengal Madhya Pradesh | Rajasthan | - |
| 15-20\% | - | Chhattisgarh | - | - | - |
| Above 20 \% | Tripura Sikkim | - | - | - | - |

Pradesh. Kerala with 1.93 percent reported the lowest drop-out rate in Grade V compared to an over-all average of 1.34 percent in its primary grades which is also the lowest across the 29 States and UTs considered in the analysis.

Grade-specific promotion, repetition and drop-out rates separately for boys, girls and total enrolment for cohorts 2003-04 and 2004-05 are given in Annexure A (Table A1 to A5).

## States Grouped by High \& Low Drop-out \& Repetition Rates

The States and UTs distributed according to high and low drop-out and

## Table 23 <br> Distribution of States by Average Drop-out and Repetition Rate Cohort 2004-05

| Repetition | Drop-out Rate |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Rate | Below 5 \% | 5 to 10 \% | 10-15 \% | 15-20 \% | Above 20 \% |
| Below 5 \% | Himachal <br> Pradesh <br> Kerala <br> Karnataka <br> Tamil Nadu | Jammu \& Kashmir Madhya Pradesh | Assam <br> Uttar Pradesh | - | - |
| 5 to $10 \%$ | Mizoram | Andhra <br> Pradesh <br> Maharashtra <br> Nagaland <br> Orissa <br> Punjab | Uttarakhand | Jharkhand | Meghalaya |
| 10-15 \% | Gujarat | Chhattisgarh | Bihar <br> Rajasthan <br> Haryana <br> West Bengal | - | - |
| 15-20\% | Tripura | - | - | Arunachal Pradesh | - |
| Above 20 \% | - | Sikkim | - |  | - |

repetition rates for cohorts 2003-04 and 2004-05 are presented in Tables 22 and 23 respectively. The states are distributed according to below 5 percent, 5 to 10 percent, 10 to 15 percent, 15 to 20 percent and above 20 percent drop-out and repetition rates. The Tables reveal that many states improved their respective positions in 2004-05 over their positions in the previous 2003-04 cohort.

Table 23 shows that Tamil Nadu, Kerala, Himachal Pradesh and Karnataka fall in the group having below 5 percent drop-out and repetition rates. Tamil Nadu and Kerala are in the same group during the previous cohort 2003-04 also, meaning that they have retained their respective positions. They are comfortable with regard to drop-out rate in primary grades which is also reflected in the retention rate presented in Table 10. These states are required to sustain their efforts as both repetition as well as drop-out rate is quite satisfactory. It is Himachal Pradesh and Karnataka which have replaced Chandigarh and Mizoram in this group. Average repetition rate in primary classes in Mizoram has increased from below 5 percent in 2003-04 to between 5 to 10 percent in 2004-05. On the other hand a few states, namely, Gujarat and Tripura too have below 5 percent drop-out
rate in primary classes but repetition rate in these states is above 5 percent. Tripura even reported above 15 percent repetition rate, while Gujarat retained its position in the group having below 5 percent dropout rate and repetition rate between 10 to 15 percent. On the other hand Sikkim shifted from below 5 percent drop-out rate in 2003-04 to between 5 to 10 percent during the next cohort i.e. 2004-05.

A number of other states have average drop-out rate between 5 to 10 percent and also the repetition rate below 5 percent or between 5 to 10 percent. Jammu \& Kashmir and Madhya Pradesh fall under the category of those states which have drop-out and repetition rates between 5 to 10 percent and below 5 percent respectively. On the other hand, Andhra Pradesh, Maharashtra, Nagaland, Orissa and Punjab fall under the category having both drop-out and repetition rates between 5 to 10 percent. Chhattisgarh is the only other state having drop-out rate between 5 to 10 percent but the repetition rate between 10 to 15 percent. Among the rest of the states, Assam, Bihar, Haryana, Rajasthan, Uttar Pradesh, Uttarakhand and West Bengal reported drop-out rate between 10-15 percent in primary classes. Among these Assam and Uttar Pradesh reported a below 5 percent repetition rate. Except Uttarakhand, the remaining states in this category have a high repetition rate of 10 to 15 percent. Uttarakhand reported an average repetition rate between 5 to 10 percent. Out of 29 states covered, only three states have an average drop-out rate of above 15 percent in primary classes. These states are Jharkhand, Arunachal Pradesh and Meghalaya. However, Jharkhand has a low repetition rate of 5.81 percent. Except Jharkhand, the other two states are small in size.

The distribution of states by average drop-out rate and repetition rate for the cohorts 2003-04 and 2004-05 further reveals that eight states have improved their positions in 2004-05 over their respective positions during the previous cohort i.e. 2003-04. These states are Himachal Pradesh, Karnataka, Madhya Pradesh, Andhra Pradesh, Punjab, Chhattisgarh, Uttar Pradesh and Rajasthan, many of which are large in size and crucial for the country to attain the status of universal retention. On the other hand, states such as, Kerala, Tamil Nadu, Gujarat, Maharashtra, Uttarakhand, Haryana, West Bengal and Meghalaya retained their respective positions in 2004-05 over the previous cohort i.e. 2003-04. Mizoram, Tripura, Nagaland, Orissa, Sikkim, Assam, Bihar and Jharkhand, however, lost their respective positions in 2004-05, thus meaning that either the average drop-out rate or the repetition rate or both in these states have increased from their previous levels in 2003-04. Bihar and Jharkhand even reported
an increase in drop-out rate in 2004-05. In Jharkhand, it is as high as 16.98 percent compared to 11.36 percent in Bihar. Both these states should immediately initiate necessary steps and adopt appropriate strategies to check the drop-out rate, else because of them, the country may not achieve the goal of universal retention at the primary level within the stipulated time framework.

## Transition Rate

One of the important indicators on which the expansion of upper primary education depends is the transition rate from the primary level to the upper primary level of education. Two years' grade-specific enrolment data along with the number of repeaters in the latest year is required to work out transition rate which is defined below:

$$
\text { Transition Rate }=\frac{\text { New Entrants into Grade VI in year ' } \mathrm{t}+1^{\prime}}{\text { Enrolment in Grade } \mathrm{V} \text { in year ' } \mathrm{t} \text { ' }} \times 100
$$

$$
=\frac{\mathrm{E}_{\mathrm{g}+1}^{\mathrm{t+1}}}{\mathrm{E}_{\mathrm{g}}^{\mathrm{t}}} \times 100
$$

The number of repeaters subtracted from enrolment in Grade VI or V , as the case may be, in 2005-06, divided by enrolment in Grade V or IV in the

## Table 24 <br> Transition Rate from Primary (VI/V) to Upper Primary <br> (V/VI) Level of Education <br> Cohorts: 2003, 2004 and 2005

| Cohort | Number of <br> Districts | Boys | Girls | Total |
| :--- | :---: | :---: | :---: | :---: |
| 2003 | 461 | 76.01 | 71.98 | 74.15 |
| 2004 | 539 | 79.96 | 75.78 | 78.01 |
| 2005, All Areas | 604 | 83.66 | 80.64 | 82.24 |
| Rural Areas | 604 | 79.91 | 76.28 | 78.22 |
| Urban Areas | 604 | 100.35 | 99.07 | 99.74 |

previous year (2004-05) and multiplied by 100 gave the transition rate for cohort 2004-05. Similarly, transition rates can also be worked out for the previous years. Transition rate in the present study has been obtained
separately in case of boys, girls and all children together and presented in Tables 24, 25 and 26.

The transition rate presented in Table 24 shows consistent improvement over a period of time. As many as 82.24 percent children across 29 states \& UTs transited from primary to upper primary level of education compared

## Table 25 <br> Transition Rate from Primary

(IV/V) to Upper Primary (V/VI)* Level of Education: Cohort 2003-04

| State/UT | Boys | Girls | Total |
| :--- | ---: | ---: | ---: |
| Andhra Pradesh | 91.64 | 87.47 | 89.59 |
| Assam** | 102.98 | 100.25 | 101.66 |
| Bihar | 68.21 | 61.61 | 65.56 |
| Chandigarh | 84.19 | 85.08 | 84.57 |
| Chhattisgarh | 75.51 | 66.82 | 71.38 |
| Gujarat | 84.79 | 80.29 | 82.74 |
| Haryana | 65.12 | 66.69 | 65.86 |
| Himachal Pradesh | 92.65 | 88.60 | 90.71 |
| Jharkhand | 73.26 | 68.71 | 71.31 |
| Karnataka | 90.63 | 88.73 | 89.72 |
| Kerala | 87.08 | 86.11 | 86.60 |
| Madhya Pradesh | 73.82 | 64.37 | 89.47 |
| Maharashtra | 75.65 | 73.61 | 74.68 |
| Meghalaya | 97.83 | 100.38 | 99.15 |
| Mizoram** | 112.30 | 111.56 | 11.94 |
| Nagaland | 79.93 | 81.26 | 80.57 |
| Orissa | 78.16 | 76.02 | 77.17 |
| Rajasthan | 98.62 | 83.27 | 92.40 |
| Sikkim | 68.61 | 72.40 | 70.58 |
| Tamil Nadu** | 102.24 | 98.99 | 100.67 |
| Tripura | 76.96 | 77.06 | 77.01 |
| Uttar Pradesh | 59.24 | 55.74 | 57.62 |
| Uttarakhand | 90.58 | 88.63 | 89.63 |
| West Bengal | 80.95 | 77.22 | 79.09 |
| All Districts | 79.96 | 75.78 | 78.01 |
|  |  |  |  |

[^4]Table 26
Transition Rate from Primary (IV/V) to Upper Primary (V/VI)* Level of Education: Cohort 2004-05

| SI. <br> No. | State/UT | Boys | Girls | Total | Rural <br> Areas | Urban <br> Areas |
| :--- | :--- | ---: | ---: | ---: | ---: | ---: |
| 1 | Andhra Pradesh | 88.30 | 84.88 | 86.62 | 81.54 | 104.76 |
| 2 | Arunachal Pradesh | 87.94 | 83.96 | 86.06 | 86.70 | 83.68 |
| 3 | Assam** | 86.10 | 86.65 | 86.36 | 84.30 | 107.43 |
| 4 | Bihar | 65.18 | 60.83 | 63.42 | 62.06 | 79.16 |
| 5 | Chandigarh ** | 104.82 | 107.22 | 105.90 | 69.71 | 114.13 |
| 6 | Chhattisgarh** | 105.82 | 100.02 | 103.06 | 99.88 | 121.80 |
| 7 | Delhi** | 107.10 | 105.54 | 106.39 | 142.81 | 98.87 |
| 8 | Gujarat | 89.46 | 86.53 | 88.11 | 84.47 | 101.51 |
| 9 | Haryana | 80.08 | 80.46 | 80.26 | 78.40 | 96.75 |
| 10 | Himachal Pradesh | 93.89 | 89.93 | 92.01 | 89.70 | 120.16 |
| 11 | J \& K** | 101.84 | 99.05 | 100.58 | 95.64 | 124.18 |
| 12 | Jharkhand | 87.91 | 89.71 | 88.69 | 85.20 | 121.99 |
| 13 | Karnataka | 76.74 | 76.10 | 76.43 | 75.86 | 77.67 |
| 14 | Kerala | 96.55 | 95.91 | 96.23 | 94.25 | 107.22 |
| 15 | Madhya Pradesh | 71.71 | 69.19 | 70.54 | 66.81 | 85.88 |
| 16 | Maharashtra ** | 108.50 | 105.51 | 107.07 | 101.95 | 117.21 |
| 17 | Meghalaya | 68.57 | 71.86 | 70.24 | 67.75 | 81.92 |
| 18 | Mizoram** | 116.50 | 116.34 | 116.42 | 104.20 | 133.40 |
| 19 | Nagaland | 89.62 | 91.29 | 90.44 | 86.28 | 99.05 |
| 20 | Orissa | 81.37 | 79.08 | 80.30 | 79.13 | 86.05 |
| 21 | Puducherry** | 111.00 | 124.11 | 117.32 | 112.62 | 119.32 |
| 22 | Punjab | 79.07 | 75.24 | 77.29 | 77.07 | 80.27 |
| 23 | Rajasthan | 99.25 | 83.79 | 92.66 | 88.25 | 127.21 |
| 24 | Sikkim | 72.07 | 75.35 | 73.80 | 71.18 | 97.26 |
| 25 | Tamil Nadu** | 93.30 | 91.19 | 92.28 | 87.78 | 102.34 |
| 26 | Tripura | 80.41 | 80.62 | 80.51 | 75.70 | 108.62 |
| 27 | Uttar Pradesh | 68.77 | 65.02 | 67.00 | 65.98 | 76.64 |
| 28 | Uttarakhand | 84.38 | 83.56 | 83.98 | 84.05 | 92.04 |
| 29 | West Bengal | 81.01 | 78.19 | 79.60 | 74.90 | 107.00 |
|  | All Districts | 83.66 | 80.64 | 82.24 | 78.22 | 99.74 |
|  |  |  |  |  |  |  |

[^5]to 78.01 percent during the previous year and 74.15 percent in 2003-04. Though transition rate from primary to upper primary level shows improvement but still about 18 percent children have dropped-out in transition. Further, a significant deviation is observed in children transitioning in the rural and urban areas. Almost every child in the urban areas transited from primary to upper primary level but the same is not true for children in the rural areas. As compared to 78.22 percent in the rural areas, 99.74 percent children transited in the urban areas. Further, no significant difference in transition rate is noticed in case of boys and girls and the same has shown improvement from its previous levels. Against 83.66 percent boys and 80.64 percent girls transiting from primary to upper primary level of education in 2004-05, 79.96 percent boys and 75.78 percent girls transited during the previous year i.e. 2003-04.

Further, a significant deviation is noticed when state-specific transition rates are analysed. From Table 25 we find that against a low transition rate of 63.42 percent in Bihar, 67.00 percent in Uttar Pradesh and 70.54 percent in Madhya Pradesh in 2004-05, the same is very high in case of Himachal Pradesh, Assam, Jammu \& Kashmir, Kerala, Mizoram, Rajasthan, Tamil Nadu, Uttarakhand and Andhra Pradesh. In Uttar Pradesh, only 68.77 percent boys (against 59.24 percent in the previous year) and 65.02 percent girls ( 55.74 percent in the previous year) transited from primary to upper primary level of education in 2004-05. As mentioned above, Bihar too reported a low transition rate of 65.18 percent in case of boys and 60.83 percent of girls. Bihar reported a low of 62.06 percent transition rate in rural areas compared to 79.16 percent in the urban areas; which is almost equal to that in the rural and urban areas of Uttar Pradesh. Other major states that need immediate attention of planners are Madhya Pradesh ( 70.54 percent), Karnataka ( 76.43 percent), Punjab ( 77.29 percent) and West Bengal ( 79.60 percent). A few states from the north-eastern part of the country also reported lower transition rates than the average of all districts ( 82.24 percent). As it seems, the goal of universal elementary education in these states may not perhaps be realised in the near future if transition rates are not improved significantly. By conducting studies, the states should find out reasons of low transition, which should be followed by incorporating reasonspecific strategies in the Annual Work Plan. In a few states, such as Rajasthan, significant difference is noticed in case of transition rate of boys and girls. In Rajasthan only 83.79 percent girls transited from primary to upper primary level against 99.25 percent boys, which means a gap of about 15 percentage points. Similarly, states also need to bridge the gap in children transiting from primary to upper primary level in the rural and urban areas which in a few states, such as Bihar, Haryana,

Madhya Pradesh, Rajasthan, Uttar Pradesh and West Bengal is quite wide and significant.

## Internal Efficiency of Primary Education System

The flow rates presented above fail to produce any information about the internal efficiency of the educational system. In simple terms, efficiency can be defined as an optimal relationship between investment in terms of input years and output in terms of number of graduates the system is producing. The best system is one which has both the input and output exactly the same, which is known as a perfect efficient system. If a child remains in the system for two years then it is considered that the system has invested two student years on that child. On the other hand, every successful completer of a particular cycle is termed as the output, which is also known as the 'graduate'.

By using the following assumptions, the Reconstructed Cohort Method is used to obtain indicators of internal efficiency of an education system. Input-Output Ratio, Coefficient of Efficiency and Input per Graduate (in terms of years), have been presented for which two years enrolment and one year repeaters data in the current year are used. Coefficient of Efficiency is defined as the ratio of actual number of pupil-years to the ideal number of pupil-years. Ratio closer to one means better internal efficiency. The input-output ratio is simply the inverse of coefficient of efficiency, and is equal to years put in per graduate divided by five which is length of the primary cycle. The assumptions used are as follows:

- The promotion, repetition and drop-out rates presented above (based on DISE 2004-05 and 2005-06 data) would remain constant throughout the evolution of the cohort;
- A student would not be allowed to continue in the system after he/ she has repeated for three times; thereafter, he/she will either leave the system or would be promoted to the next higher grade; and
- No students other than the original ones would be allowed to enter the cycle in between the system.

The coefficient of efficiency presented above reveals that the primary education system is efficient to the tune of only 62.40 percent. There is, therefore, much scope for further improvement as about 38 percent of the total resources are just going waste. In a few big states (Table 27), such as Bihar ( 51.50 percent), Uttar Pradesh ( 44.78 percent) and Rajasthan ( 53.18 percent), the coefficient of efficiency obtained is much lower than the average of all states. Much of the resources in these states are going

Table 27
Indicators of Internal Efficiency: Cohort 2004-05
(Based on Common Schools for the Year 2004-05 and 2005-06)

| $\begin{aligned} & \text { SI } \\ & \text { No. } \end{aligned}$ | State/UT | Co-efficient of Efficiency | Years Input per Graduate | Input-Output Ratio |
| :---: | :---: | :---: | :---: | :---: |
| 1 | Andhra Pradesh | 65.29 | 8.68 | 1.74 |
| 2 | Arunachal Pradesh | 48.73 | 11.41 | 2.28 |
| 3 | Assam | 68.23 | 8.35 | 1.67 |
| 4 | Bihar | 51.50 | 10.75 | 2.15 |
| 5 | Chandigarh | 110.31 | 5.61 | 1.12 |
| 6 | Chhattisgarh | 57.71 | 9.77 | 1.95 |
| 7 | Delhi | 123.62 | 6.16 | 1.23 |
| 8 | Gujarat | 75.65 | 7.69 | 1.54 |
| 9 | Haryana | 53.84 | 10.29 | 2.06 |
| 10 | Himachal Pradesh | 85.35 | 6.96 | 1.39 |
| 11 | Jammu \& Kashmir | 80.93 | 7.21 | 1.44 |
| 12 | Jharkhand | 53.96 | 10.30 | 2.06 |
| 13 | Karnataka | 88.45 | 6.70 | 1.34 |
| 14 | Kerala | 91.89 | 6.48 | 1.30 |
| 15 | Madhya Pradesh | 65.01 | 8.69 | 1.74 |
| 16 | Maharashtra | 75.20 | 7.71 | 1.54 |
| 17 | Meghalaya | 43.86 | 12.49 | 2.50 |
| 18 | Mizoram | 112.79 | 5.47 | 1.09 |
| 19 | Nagaland | 65.52 | 8.69 | 1.74 |
| 20 | Orissa | 69.69 | 8.20 | 1.64 |
| 21 | Puducherry | 134.29 | 4.72 | 0.94 |
| 22 | Punjab | 57.90 | 9.75 | 1.95 |
| 23 | Rajasthan | 53.18 | 10.49 | 2.10 |
| 24 | Sikkim | 59.20 | 9.74 | 1.95 |
| 25 | Tamil Nadu | 92.81 | 6.44 | 1.29 |
| 26 | Tripura | 71.99 | 8.18 | 1.64 |
| 27 | Uttar Pradesh | 44.78 | 12.18 | 2.44 |
| 28 | Uttarakhand | 60.70 | 9.31 | 1.86 |
| 29 | West Bengal | 54.43 | 10.47 | 2.09 |
|  | All Districts | 62.40 | 9.08 | 1.82 |

waste. In Kerala and a few smaller states, such as Chandigarh, Delhi, Mizoram and Puducherry the primary education system seems to be an efficient one. On an average, a primary graduate is taking 9.08 years to become graduate, compared to ideal of 5 years. Students in Bihar are taking 10.75 years compared to 11.41 years in Arunachal Pradesh and 12.18 years in Uttar Pradesh, which clearly shows that the primary education systems in these states are highly inefficient ones. This is also reflected in the input-output ratio which means a student is taking more than double the time (in terms of years) resources in these states to become primary school graduate. In case of no wastage in the system, a ratio of one is considered to be the ideal one. Most of the states have also reported input-output ratio well above one. Unless the efficiency of education system is improved, the goal of universal primary education in these states, as well as for the country as a whole, may not be realized in the near future.

## Flow Rates in DPEP and Non-DPEP Districts

An attempt has also been made in the present study to separately calculate state-wise average flow rates (based on common schools) and other indicators in case of the primary level of education in DPEP and non-DPEP districts which is presented in Tables 28 to 33. All the districts (272 districts) under DPEP Phase I, II and III have been considered and the remaining districts in a state have been termed as non-DPEP districts. It is interesting to note that average drop-out rate in primary classes I to V in case of the non-DPEP districts ( 8.10 percent) is lower than the same in case of the DPEP districts ( 11.03 percent). Individually also, average drop-out rate in primary classes is lower in non-DPEP districts in most of the states analysed. This is also true for transition rate from primary to upper primary level of education (DPEP districts, 75.19 percent and non-DPEP districts, 87.58 percent) and retention rate at primary level (DPEP districts 66.39 percent; non-DPEP districts, 82.05 percent) (see Table 28 to 33). It reveals a high rate for the non-DPEP districts compared to that for the same with the DPEP districts, all of which justify selection of districts under DPEP (districts having low literacy levels were selected under DPEP). Consequently average promotion rate in non-DPEP districts ( 84.77 percent) is a bit higher than the same in case of the DPEP districts ( 81.14 percent). The non-DPEP districts also have a lower average repetition rate ( 7.12 percent) compared to 7.83 percent in the DPEP districts. Insignificant difference is noticed in case of the average promotion, drop-out and repetition rates for boys and girls which is true for both DPEP and non-DPEP districts. However, drop-out rate in primary classes in case of girls is a bit lower than the counterpart boys both in the DPEP and non-DPEP districts which is an
encouraging signal. However, it is only the Net Enrolment Ratio which is higher in case of DPEP districts than in the case of non-DPEP districts (see forthcoming publication, Elementary Education in India: Progress towards UEE, Analytical Report: 2005-06). At least, the DPEP districts have ensured enrolling children of 6-11 age-group in primary classes but at the same time they couldn't retain all the children till the completion of primary level of education, i.e. Class V. They have been to sustain their efforts through enrolment drives and other strategies even after the project has over, and now under Sarva Shiksha Abhiyan Programme.

The other interesting aspect that has been observed is the DPEP districts in a few educationally advanced states, such as Kerala, Himachal Pradesh, Karnataka, and Tamil Nadu, is that these states faired well compared to the other states covered under DPEP. Many of the other states are termed

as educationally backward states (see DISE Flash Statistics: 2005-06, Elementary Education in India: Progress towards UEE; NUEPA and Government of India, New Delhi, 2007 for state-specific ranking based on Educational Development Index). It is also worthy of interest to note that drop-out rate in primary classes and the corresponding repetition rate in Kerala, Himachal Pradesh, Karnataka and Tamil Nadu in the non-DPEP districts is around 2 percent. On the other hand, a few of the non-DPEP districts in states, such as Assam, Haryana, West Bengal, Bihar, Uttarakhand, Rajasthan and Jharkhand have reported above 10 percent drop-out rate in primary classes during 2004-05 and 2005-06. During this period, about 19 percent children in Jharkhand dropped out from primary classes compared to 12.24 percent in Bihar. Not much difference is noticed
in drop-out rate in non-DPEP districts in these states. As against 1.69 percent in Kerala, the corresponding drop-out rate in Tamil Nadu is 1.88, in Karnataka it is 2.83 and in Himachal Pradesh 4.08 percent. The difference of about 2 percentage points in case of Himachal Pradesh between DPEP and non-DPEP districts is significant one. It may be noted that Himachal Pradesh is a DPEP Phase II state and only 5 out of its 12 districts were covered under DPEP. Among the rest of the states, barring Uttarakhand, no significant difference is noticed in drop-out rate in primary classes in DPEP and non-DPEP districts. As against a drop-out rate of 10.25 percent for its DPEP districts, Uttarakhand has reported a high drop-out rate of 14.10 percent in its non-DPEP districts.

Table 28
Average Flow Rates in DPEP and Non-DPEP Districts 2004-05 (Based on Common Schools: 2004-05 and 2005-06)

| Category | Gender | Promotion <br> Rate | Repetition <br> Rate | Drop-out <br> Rate |
| :---: | :--- | :---: | :---: | :---: |
| DPEP Districts | Boys | 81.05 | 7.75 | 11.20 |
|  | Girls | 81.24 | 7.91 | 10.85 |
|  | Total | 81.14 | 7.83 | 11.03 |
| Non-DPEP Districts | Boys | 84.45 | 7.17 | 8.37 |
|  | Girls | 85.13 | 7.07 | 7.80 |
|  | Total | 84.77 | 7.07 | 8.10 |
|  | Boys | 83.57 | 6.28 | 10.15 |
|  | Girls | 83.96 | 6.29 | 9.75 |
|  | Total | 83.76 | 6.29 | 9.96 |

As it seems from the above analysis, the advanced states have benefited the most out of the DPEP programme. Non-DPEP districts in the educationally advanced states have also faired well. Irrespective of the districts being under DPEP or non-DPEP categories, advanced states faired well in both the categories. Similarly, non-DPEP districts in the educationally not-so-developed states did not fair well as did the districts under DPEP in these states. On the other hand, there are a few small states who do not have any experience of programmes like DPEP but their drop-out rate and other indicators are positive compared to a few other states having experience of such programmes. It may also be observed that both the advanced as well as backward districts (in terms of literacy rates) were selected under the DPEP programme. It is also interesting to note that states that have reported lower drop-out rates are the DPEP Phase I states, except Himachal Pradesh which is the DPEP Phase II state.

It is largely because of these backward districts that in most of the other DPEP states, average drop-out rate is still higher than 10 percent even

## Table 29

Average Flow Rates in DPEP Districts: 2004-05
(Based on Common Schools: 2004-05 and 2005-06)

| SI. <br> No. | State | Promotion Rate |  | Repetition Rate |  | Drop-out Rate |  |  |  |  |
| :--- | :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | :---: |
| 1 | Andhra Pradesh | 85.05 | 84.14 | 84.60 | 5.41 | 5.58 | 5.49 | 9.54 | 10.28 | 9.91 |
| 2 | Assam | 82.97 | 84.46 | 83.71 | 3.72 | 3.56 | 3.64 | 13.31 | 11.97 | 12.65 |
| 3 | Bihar | 76.90 | 75.19 | 76.15 | 13.01 | 13.85 | 13.37 | 10.10 | 10.96 | 10.47 |
| 4 | Chhattisgarh | 78.05 | 77.31 | 77.69 | 11.94 | 12.02 | 11.98 | 10.01 | 10.66 | 10.32 |
| 5 | Gujarat | 82.33 | 82.83 | 82.57 | 13.13 | 12.69 | 12.93 | 4.53 | 4.48 | 4.51 |
| 6 | Haryana | 84.98 | 85.80 | 85.36 | - | - | - | 15.02 | 14.20 | 14.64 |
| 7 | Himachal <br> Pradesh | 89.80 | 89.78 | 89.79 | 6.51 | 5.74 | 6.13 | 3.70 | 4.48 | 4.08 |
| 8 | Jharkhand | 76.68 | 78.23 | 77.41 | 8.46 | 8.57 | 8.51 | 14.86 | 13.20 | 14.08 |
| 9 | Karnataka | 92.49 | 92.12 | 92.31 | 4.85 | 4.86 | 4.86 | 2.66 | 3.02 | 2.83 |
| 10 | Kerala | 92.80 | 94.54 | 93.65 | 5.47 | 3.81 | 4.66 | 1.73 | 1.65 | 1.69 |
| 11 | Madhya Pradesh | 74.75 | 77.67 | 76.12 | 15.64 | 16.37 | 15.98 | 9.61 | 5.96 | 7.89 |
| 12 | Maharashtra | 86.21 | 86.60 | 86.39 | 6.79 | 6.88 | 6.83 | 7.00 | 6.52 | 6.77 |
| 13 | Orissa | 84.76 | 83.48 | 84.15 | 7.03 | 7.70 | 7.35 | 8.21 | 8.82 | 8.50 |
| 14 | Rajasthan | 77.11 | 74.04 | 75.66 | 8.61 | 10.51 | 9.51 | 14.29 | 15.44 | 14.83 |
| 15 | Tamil Nadu | 96.76 | 96.55 | 96.66 | 1.52 | 1.40 | 1.46 | 1.72 | 2.05 | 1.88 |
| 16 | Uttar Pradesh | 82.29 | 82.89 | 82.58 | 1.82 | 1.79 | 1.80 | 15.89 | 15.32 | 15.62 |
| 17 | Uttarakhand | 81.41 | 81.58 | 81.50 | 7.96 | 8.54 | 8.25 | 10.63 | 9.87 | 10.25 |
| 18 | West Bengal | 71.32 | 71.71 | 71.51 | 17.11 | 16.86 | 16.99 | 11.57 | 11.42 | 11.50 |
|  | All Districts | 81.05 | 81.24 | 81.14 | 7.75 | 7.91 | 7.83 | 11.20 | 10.85 | 11.03 |
|  |  |  |  |  |  |  |  |  |  |  |

after more than 10 years of DPEP implementation. Needless to mention that all the districts of the country are covered under the ongoing Sarva Shiksha Abhiyan programme.

Table 30
Average Flow Rates in Non-DPEP Districts: 2004-05
(Based on Common Schools: 2004-05 and 2005-06)

| $\begin{aligned} & \text { SI. } \\ & \text { No. } \end{aligned}$ | State | Promotion Rate |  |  | Repetition Rate |  |  | Drop-out Rate |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Boys | Girls | Total | Boys | Girls | Total | Boys | Girls | Total |
| 1 | Andhra Pradesh | 87.92 | 89.04 | 88.49 | 3.79 | 3.39 | 3.59 | 8.29 | 7.57 | 7.93 |
| 2 | Assam | 87.74 | 88.80 | 88.26 | 1.62 | 1.46 | 1.54 | 10.64 | 9.73 | 10.20 |
| 3 | Bihar | 74.84 | 73.07 | 74.06 | 13.26 | 14.26 | 13.70 | 11.90 | 12.66 | 12.24 |
| 4 | Chhattisga | 82.58 | 81.55 | 82.07 | 13.34 | 13.37 | 13.35 | 4.08 | 5.09 | 4.58 |
| 5 | Gujarat | 86.16 | 86.70 | 86.41 | 9.80 | 9.09 | 9.47 | 4.04 | 4.21 | 4.12 |
| 6 | Haryana* | 88.47 | 90.21 | 89.30 |  |  |  | 11.53 | 9.79 | 10.70 |
| 7 | Himachal Pradesh | 93.36 | 94.37 | 93.84 | 3.94 | 3.49 | 3.73 | 2.70 | 2.13 | 2.43 |
| 8 | Jharkhand | 77.23 | 76.82 | 77 | 3.53 | 3.65 | 3.59 | 19.23 | 19.53 | 19.37 |
| 9 | Karnataka | 97.30 | 98.32 | 97.80 | 1.91 | 1.58 | 1.75 | 0.79 | 0.10 | 0.45 |
| 10 | Kerala | 97.20 | 97.57 | 97.38 | 1.87 | 1.29 | 1.58 | 0.93 | 1.15 | 1.04 |
| 11 | Madhya Pradesh | 76.32 | 78.67 | 77.45 | 16.80 | 16.95 | 16.87 | 6.88 | 4.38 | 5.67 |
| 12 | Maharashtra | 87.75 | 88.74 | 88.22 | 6.12 | 5.54 | 5.85 | 6.13 | 5.72 | 5.94 |
| 13 | Orissa | 88.48 | 88.81 | 88.64 | 5.50 | 5.51 | 5.50 | 6.03 | 5.68 | 5.86 |
| 14 | Rajasthan | 73.79 | 70.11 | 72.11 | 11.72 | 14.31 | 12.90 | 14.49 | 15.58 | 14.99 |
| 15 | Tamil Nadu | 96.08 | 96.57 | 96.32 | 1.73 | 1.56 | 1.65 | 2.19 | 1.87 | 2.04 |
| 16 | Uttar Pradesh | 88.68 | 89.88 | 89.26 | 2.06 | 1.97 | 2.02 | 9.26 | 8.15 | 8.73 |
| 17 | Uttarakhand | 80.03 | 81.37 | 80.69 | 6.67 | 6.94 | 6.80 | 13.31 | 11.69 | 12.50 |
| 18 | West Bengal | 76.70 | 77.64 | 77.17 | 11.02 | 10.84 | 10.93 | 12.28 | 11.52 | 11.90 |
|  | All Districts | 84.45 | 85.13 | 84.77 | 7.17 | 7.07 | 7.12 | 8.37 | 7.80 | 8.10 |

* Repeaters data not reported.


## Table 31 <br> Transition Rate from Primary to Upper Primary Level of Education in DPEP and Non-DPEP Districts: 2004-05

| Category | Boys | Girls | Total |
| :--- | :--- | :--- | :--- |
| DPEP Districts | 76.46 | 73.74 | 75.19 |
| Non-DPEP Districts | 87.62 | 87.54 | 87.58 |
| All Districts | 83.66 | 80.64 | 82.24 |

Table 32
Retention Rate at the Primary Level in DPEP and Non-DPEP
Districts: 2005-06

| SI. <br> No. | State | Primary <br> Cycle | Number <br> of DPE <br> Districts | Retention <br> Rate | Number of <br> Non-DPEP <br> Districts | Retention <br> Rate |
| :---: | :--- | :---: | :---: | :---: | :---: | :---: |
| $\mathbf{1}$ | Andhra Pradesh | I - V | 19 | 74.90 | 4 | 85.29 |
| 2 | Assam | I - IV | 9 | 63.27 | 14 | 76.33 |
| 3 | Bihar | I - V | 11 | 42.34 | - | - |
| 4 | Gujarat | I - V | 7 | 62.54 | - | - |
| 5 | Haryana | I - V | 4 | 81.38 | - | - |
| 6 | Himachal Pradesh | I - V | 6 | 59.38 | - | - |
| 7 | Jharkhand | I - IV | 18 | 74.35 | 9 | 86.98 |
| 8 | Karnataka | I - IV | 6 | 89.34 | 8 | 100.56 |
| 9 | Kerala | I - V | 28 | 75.41 | 3 | 88.19 |
| 10 | Madhya Pradesh | I IV | 12 | 78.24 | 18 | 97.93 |
| 11 | Maharashtra | I - V | 8 | 62.03 | - | - |
| 12 | Orissa | I - V | 10 | 51.74 | - | - |
| 13 | Rajasthan | I - V | 4 | 110.23 | - | - |
| 14 | Tamil Nadu | I - V | 53 | 71.02 | 1 | 86.97 |
| 15 | Uttar Pradesh | I - V | 5 | 52.31 | - | - |
| 16 | Uttarakhand | I - IV | 10 | 52.45 | 10 | 65.15 |
| 17 | West Bengal | I-V | 219 | 66.39 | $\mathbf{6 7}$ | 82.05 |
|  | All Districts |  |  | - | - | - |

Note: Enrolment data over a period of $4 / 5$ year is available only in case of 219 districts.
While preparing Annual Work Plan and Budget under SSA, the states should thoroughly analyse reasons of low promotion, high repetition and dropout rates and adopt appropriate strategies. On the one hand, a large number of children are getting enrolled while on the other hand, 10 out of 100 children enrolled drop-out from primary grades, all of which need serious interventions. This is despite SSA interventions and mid-day meal across the country. However, clearer picture of drop-out rate will emerge when consistency of enrolment data is further improved.

Table 33
Transition Rate at Primary Level: DPEP and Non-DPEP Districts, 2004-05

| $\begin{aligned} & \text { SI } \\ & \text { No. } \end{aligned}$ | State | Non-DPEP Districts |  |  | DPEP Districts |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Boys | Girls | Total | Boys | Girls | Total |
| 1 | Andhra Pradesh | 89.13 | 88.06 | 88.58 | 88.12 | 84.50 | 86.35 |
| 2 | Assam | 87.27 | 89.33 | 88.26 | 83.74 | 86.07 | 84.86 |
| 3 | Bihar | 63.84 | 61.68 | 62.98 | 66.62 | 62.99 | 65.14 |
| 4 | Chhattisgarh | 128.66 | 126.67 | 127.68 | 102.34 | 99.16 | 100.83 |
| 5 | Gujarat | 91.04 | 90.46 | 90.78 | 83.83 | 83.66 | 83.75 |
| 6 | Haryana | 81.72 | 84.22 | 82.92 | 78.25 | 76.06 | 77.22 |
| 7 | Himachal Pradesh | 95.58 | 95.49 | 95.53 | 88.80 | 84.78 | 86.88 |
| 8 | Jharkhand | 82.85 | 84.84 | 83.67 | 93.20 | 96.91 | 94.88 |
| 9 | Karnataka | 85.22 | 86.89 | 86.03 | 72.93 | 72.11 | 72.53 |
| 10 | Kerala | 93.53 | 94.97 | 94.24 | 98.41 | 99.79 | 99.08 |
| 11 | Madhya Pradesh | 72.01 | 74.71 | 73.27 | 60.41 | 57.28 | 58.97 |
| 12 | Maharashtra | 117.09 | 116.16 | 116.65 | 99.64 | 99.42 | 99.53 |
| 13 | Orissa | 84.18 | 83.48 | 83.85 | 77.36 | 74.09 | 75.86 |
| 14 | Rajasthan | 96.10 | 85.71 | 91.90 | 101.20 | 91.28 | 96.85 |
| 15 | Tamil Nadu | 99.87 | 99.57 | 99.73 | 85.13 | 84.65 | 84.90 |
| 16 | Uttar Pradesh | 80.90 | 78.37 | 79.69 | 65.45 | 61.62 | 63.65 |
| 17 | Uttarakhand | 84.77 | 88.17 | 86.43 | 83.82 | 79.27 | 81.56 |
| 18 | West Bengal | 62.40 | 63.25 | 62.82 | 60.86 | 60.37 | 60.62 |
|  | All Districts | 87.62 | 87.54 | 87.58 | 76.46 | 73.74 | 75.19 |

Note: More than 100 transition rate may be because of inconsistent enrolment data or migration of children into that state at the Grade VI level.

## Concluding Observations

Depending upon the availability of data, an indicator to measure dropout rate should be developed. If resources are available, true-cohort study in which each and every enrolled child is tracked should be undertaken and can be used for assessing the quantum of drop-out as well as the completion rates. In case the resources are not available but data available, retention rate by using enrolment and repeaters data over a period of five years should only be utilised to assess the retaining capacity of an education system. The retention rate so obtained is subtracted from 100 to obtain drop-out rate for an educational level. To know the root cause of low retention rate or high drop-out rate, it is essential that the same be calculated and analysed at the disaggregated levels and if data
available, separately for boys and girls, rural and urban areas, and for SC and ST children.

The root cause of high incidence of drop-out can easily be identified by calculating the grade-to-grade flow rates, such as promotion, drop-out and repetition rates. This will help a block/district/state in identifying a grade(s) wherein there is high incidence of drop-out and repetition and also in knowing whether the same is predominantly because of boys or girls or SC or ST children. The grade-to-grade drop-out rates can also be used in assessing average drop-out and repetition rates during the intermediary year (between two consecutive years). The average indicates quantum of drop-out rates during intermediary year in relation to total enrolment in primary grades. Average drop-out rate can also be used to examine trends in drop-out and repetition rates over a period of time but the same is different from the retention rate which is based upon the enrolment data over a period of five years compared to which average drop-out rate is simply based upon enrolment and repeaters data of only two years. As has been demonstrated in this study, grade-to-grade transition rates can also be used to develop indicators of internal efficiency of an education system.

By just measuring drop-out rate, the situation will not improve automatically. For that the first major exercise is to know reasons of low promotion and high drop-out and repetition rates. This should be necessarily followed by adopting reason and area-specific strategies without which no improvement can be expected. The reasons as well strategies vary from location to location. This should form part of Annual Work Plan and the Project Approval Board should rigorously monitor it. Year 2010 is approaching fast and we cannot sit hoping that the situation (with regard to drop-out) will improve automatically. Still we have three years to optimally and rigorously utilise provisions made under Sarva Shiksha Abhiyan to work towards achieving universal elementary education in general and primary education in particular. It is better late than never.

Annexure A

## Table A1

Flow Rates Cohort: 2004-05
(Based on Common Schools for the Years 2004-05 and 2005-06)

| State/UT | Grade I |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Promotion Rate |  |  | Repetition Rate |  |  | Drop-out Rate |  |  |
|  | Boys | Girls | Total | Boys | Girls | Total | Boys | Girls | Total |
| Andhra Pradesh | 79.72 | 82.13 | 80.91 | 11.44 | 11.41 | 11.43 | 8.84 | 6.45 | 7.66 |
| Arunachal Pradesh | 53.96 | 59.77 | 56.63 | 19.38 | 18.92 | 19.17 | 26.66 | 21.31 | 24.20 |
| Assam | 81.52 | 82.89 | 82.19 | 4.28 | 4.16 | 4.22 | 14.20 | 12.96 | 13.59 |
| Bihar | 60.32 | 59.27 | 59.84 | 24.48 | 25.48 | 24.94 | 15.20 | 15.25 | 15.22 |
| Chandigarh | 107.20 | 112.86 | 109.69 | 3.10 | 2.64 | 2.90 |  |  |  |
| Chhattisgarh | 71.65 | 72.28 | 71.96 | 16.06 | 16.60 | 16.32 | 12.29 | 11.12 | 11.72 |
| Delhi | 69.81 | 88.09 | 78.30 | 6.72 | 10.80 | 8.61 | 23.47 | 1.11 | 13.09 |
| Gujarat | 79.53 | 81.05 | 80.24 | 15.50 | 14.72 | 15.13 | 4.97 | 4.23 | 4.62 |
| Haryana | 91.32 | 92.81 | 92.02 | - |  |  | 8.68 | 7.19 | 7.98 |
| Himachal Pradesh | 89.69 | 91.15 | 90.39 | 6.96 | 6.63 | 6.80 | 3.36 | 2.22 | 2.81 |
| Jammu \& Kashmir | 79.07 | 79.11 | 79.09 | 1.65 | 1.70 | 1.67 | 19.29 | 19.19 | 19.24 |
| Jharkhand | 62.41 | 62.78 | 62.59 | 9.90 | 9.83 | 9.87 | 27.69 | 27.39 | 27.55 |
| Karnataka | 92.74 | 94.06 | 93.38 | 3.99 | 3.64 | 3.82 | 3.26 | 2.30 | 2.80 |
| Kerala | 99.85 | 98.96 | 99.41 | 0.28 | 0.20 | 0.24 | -0.13 | 0.85 | 0.36 |
| Madhya Pradesh | 85.07 | 89.78 | 87.34 | 0.13 | 0.13 | 0.13 | 14.80 | 10.08 | 12.53 |
| Maharashtra | 84.67 | 86.08 | 85.33 | 8.44 | 8.12 | 8.29 | 6.89 | 5.80 | 6.38 |
| Meghalaya | 56.87 | 58.52 | 57.69 | 9.51 | 8.53 | 9.02 | 33.62 | 32.95 | 33.29 |
| Mizoram | 68.16 | 67.67 | 67.93 | 9.93 | 9.31 | 9.63 | 21.91 | 23.02 | 22.45 |
| Nagaland | 88.35 | 90.17 | 89.23 | 6.46 | 6.50 | 6.48 | 5.18 | 3.33 | 4.29 |
| Orissa | 83.30 | 83.84 | 83.56 | 10.77 | 11.45 | 11.10 | 5.93 | 4.71 | 5.34 |
| Puducherry | 103.11 | 113.63 | 108.54 | 0.00 | 0.00 | 0.00 |  |  |  |
| Punjab | 84.06 | 87.46 | 85.61 | 10.75 | 9.22 | 10.05 | 5.19 | 3.31 | 4.33 |
| Rajasthan | 60.62 | 60.59 | 60.60 | 17.48 | 20.21 | 18.77 | 21.90 | 19.22 | 20.63 |
| Sikkim | 71.18 | 74.17 | 72.60 | 21.81 | 21.04 | 21.44 | 7.01 | 4.79 | 5.96 |
| Tamil Nadu | 94.46 | 95.13 | 94.79 | 2.06 | 1.88 | 1.98 | 3.47 | 2.98 | 3.24 |
| Tripura | 72.36 | 73.86 | 73.07 | 20.73 | 20.13 | 20.44 | 6.91 | 6.01 | 6.48 |
| Uttarakhand | 69.17 | 71.96 | 70.54 | 12.31 | 13.42 | 12.85 | 18.52 | 14.62 | 16.61 |
| Uttar Pradesh | 85.49 | 88.26 | 86.81 | 2.54 | 2.48 | 2.51 | 11.96 | 9.26 | 10.68 |
| West Bengal | 63.47 | 65.00 | 64.22 | 19.81 | 19.14 | 19.48 | 16.71 | 15.86 | 16.29 |
| All Districts | 76.82 | 78.48 | 77.61 | 10.48 | 10.53 | 10.51 | 12.70 | 10.99 | 11.89 |

Note: States having negative drop-out rates indicate inconsistent grade-specific enrolment data; most of these states are small and new states covered under DISE. Drop-out rates in such states are not reported.

Table A2
Flow Rates Cohort: 2004-05
(Based on Common Schools for the Years 2004-05 and 2005-06)

| State/UT | Grade II |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Promotion Rate |  |  | Repetition Rate |  |  | Drop-out Rate |  |  |
|  | Boys | Girls | Total | Boys | Girls | Total | Boys | Girls | Total |
| Andhra Pradesh | 87.86 | 87.75 | 87.81 | 4.74 | 4.81 | 4.77 | 7.40 | 7.44 | 7.42 |
| Arunachal Pradesh | 69.79 | 73.68 | 71.62 | 16.30 | 15.49 | 15.92 | 13.91 | 10.83 | 12.47 |
| Assam | 87.46 | 88.71 | 88.07 | 2.09 | 1.99 | 2.04 | 10.46 | 9.30 | 9.89 |
| Bihar | 84.50 | 83.26 | 83.95 | 10.61 | 10.94 | 10.76 | 4.90 | 5.80 | 5.30 |
| Chandigarh | 104.35 | 102.95 | 103.72 | 3.03 | 2.33 | 2.72 | - | - |  |
| Chhattisgarh | 85.82 | 83.95 | 84.91 | 11.32 | 11.68 | 11.50 | 2.85 | 4.38 | 3.60 |
| Delhi | 79.40 | 97.35 | 87.83 | 9.18 | 11.22 | 10.14 | 11.42 | -8.57 | 2.03 |
| Gujarat | 86.53 | 86.58 | 86.56 | 10.73 | 10.65 | 10.69 | 2.74 | 2.77 | 2.75 |
| Haryana | 96.45 | 97.42 | 96.91 |  | - |  | 3.55 | 2.58 | 3.09 |
| Himachal Pradesh | 94.08 | 94.75 | 94.40 | 4.02 | 3.76 | 3.90 | 1.90 | 1.49 | 1.70 |
| Jammu \& Kashmir | 91.38 | 91.69 | 91.53 | 1.60 | 1.69 | 1.64 | 7.02 | 6.62 | 6.83 |
| Jharkhand | 85.12 | 85.54 | 85.32 | 4.77 | 4.78 | 4.77 | 10.12 | 9.67 | 9.91 |
| Karnataka | 96.15 | 95.88 | 96.02 | 3.64 | 3.74 | 3.69 | 0.21 | 0.38 | 0.30 |
| Kerala | 95.43 | 96.51 | 95.96 | 4.23 | 3.04 | 3.64 | 0.34 | 0.44 | 0.39 |
| Madhya Pradesh | 94.96 | 99.09 | 96.93 | 0.11 | 0.11 | 0.11 | 4.93 | 0.80 | 2.96 |
| Maharashtra | 89.50 | 90.25 | 89.86 | 6.01 | 5.90 | 5.96 | 4.49 | 3.85 | 4.18 |
| Meghalaya | 74.13 | 78.16 | 76.15 | 8.59 | 7.41 | 8.00 | 17.28 | 14.42 | 15.85 |
| Mizoram | 84.08 | 85.17 | 84.61 | 4.80 | 4.26 | 4.53 | 11.12 | 10.57 | 10.85 |
| Nagaland | 87.95 | 88.81 | 88.37 | 5.74 | 5.52 | 5.63 | 6.31 | 5.67 | 6.00 |
| Orissa | 88.47 | 87.95 | 88.22 | 5.85 | 6.26 | 6.05 | 5.68 | 5.79 | 5.73 |
| Puducherry | 91.76 | 109.39 | 100.26 | 0.00 | 0.00 | 0.00 | 8.24 | -9.39 | -0.26 |
| Punjab | 85.91 | 89.20 | 87.43 | 10.11 | 8.47 | 9.35 | 3.98 | 2.34 | 3.22 |
| Rajasthan | 76.04 | 72.33 | 74.25 | 11.41 | 13.80 | 12.56 | 12.55 | 13.87 | 13.19 |
| Sikkim | 76.57 | 79.88 | 78.17 | 20.73 | 21.49 | 21.10 | 2.70 | -1.37 | 0.74 |
| Tamil Nadu | 96.46 | 96.87 | 96.66 | 1.61 | 1.52 | 1.56 | 1.93 | 1.62 | 1.78 |
| Tripura | 91.21 | 90.86 | 91.04 | 11.26 | 11.15 | 11.21 | - | - | - |
| Uttarakhand | 85.89 | 86.71 | 86.30 | 7.75 | 8.11 | 7.93 | 6.35 | 5.18 | 5.76 |
| Uttar Pradesh | 91.51 | 92.50 | 91.99 | 1.81 | 1.75 | 1.78 | 6.68 | 5.75 | 6.23 |
| West Bengal | 86.26 | 87.61 | 86.93 | 7.91 | 7.60 | 7.75 | 5.84 | 4.79 | 5.32 |
| All Districts | 88.83 | 89.32 | 89.06 | 5.42 | 5.48 | 5.45 | 5.75 | 5.20 | 5.49 |

Note: States having negative drop-out rates indicate inconsistent grade-specific enrolment data; most of these states are small and new states covered under DISE. Drop-out rates in such states are not reported.

## Table A3

Flow Rates Cohort: 2004-05
(Based on Common Schools for the Years 2004-05 and 2005-06)

| State/UT | Grade III |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Promotion Rate |  |  | Repetition Rate |  |  | Drop-out Rate |  |  |
|  | Boys | Girls | Total | Boys | Girls | Total | Boys | Girls | Total |
| Andhra Pradesh | 87.08 | 86.67 | 86.88 | 3.73 | 3.88 | 3.80 | 9.19 | 9.45 | 9.32 |
| Arunachal Pradesh | 71.69 | 72.93 | 72.27 | 15.88 | 15.54 | 15.72 | 12.43 | 11.53 | 12.01 |
| Assam | 87.00 | 87.82 | 87.41 | 1.67 | 1.46 | 1.57 | 11.33 | 10.72 | 11.03 |
| Bihar | 86.50 | 85.02 | 85.86 | 7.97 | 8.16 | 8.05 | 5.53 | 6.81 | 6.09 |
| Chandigarh | 101.60 | 103.43 | 102.41 | 3.10 | 2.43 | 2.80 |  |  |  |
| Chhattisgarh | 80.41 | 81.39 | 80.88 | 12.31 | 11.98 | 12.15 | 7.27 | 6.63 | 6.96 |
| Delhi | 80.47 | 93.14 | 86.46 | 9.29 | 11.12 | 10.16 | 10.23 | - | 3.38 |
| Gujarat | 85.61 | 85.86 | 85.73 | 10.97 | 10.60 | 10.79 | 3.42 | 3.55 | 3.48 |
| Haryana | 90.11 | 90.90 | 90.49 | - |  |  | 9.89 | 9.10 | 9.51 |
| Himachal Pradesh | 96.13 | 96.42 | 96.27 | 3.52 | 3.11 | 3.32 | 0.36 | 0.47 | 0.41 |
| Jammu \& Kashmir | 93.32 | 93.28 | 93.30 | 1.57 | 1.65 | 1.61 | 5.10 | 5.07 | 5.09 |
| Jharkhand | 85.65 | 87.08 | 86.30 | 3.78 | 4.05 | 3.91 | 10.57 | 8.87 | 9.80 |
| Karnataka | 96.08 | 96.23 | 96.15 | 3.78 | 3.84 | 3.81 | 0.14 | -0.08 | 0.03 |
| Kerala | 95.19 | 96.12 | 95.64 | 4.16 | 2.97 | 3.58 | 0.65 | 0.91 | 0.78 |
| Madhya Pradesh | 92.65 | 96.83 | 94.63 | 0.10 | 0.11 | 0.10 | 7.25 | 3.07 | 5.27 |
| Maharashtra | 89.31 | 90.90 | 90.07 | 5.84 | 5.51 | 5.68 | 4.85 | 3.58 | 4.25 |
| Meghalaya | 72.52 | 75.79 | 74.16 | 8.45 | 6.82 | 7.63 | 19.02 | 17.40 | 18.21 |
| Mizoram | 87.19 | 88.73 | 87.94 | 4.95 | 4.02 | 4.50 | 7.86 | 7.25 | 7.56 |
| Nagaland | 83.49 | 85.52 | 84.48 | 5.67 | 5.54 | 5.61 | 10.84 | 8.94 | 9.92 |
| Orissa | 90.43 | 89.95 | 90.20 | 5.30 | 5.43 | 5.36 | 4.26 | 4.62 | 4.44 |
| Puducherry | 103.97 | 113.76 | 108.96 | 0.00 | 0.00 | 0.00 | - | - | - |
| Punjab | 85.06 | 88.01 | 86.45 | 10.47 | 8.42 | 9.50 | 4.47 | 3.57 | 4.05 |
| Rajasthan | 80.53 | 77.13 | 78.89 | 7.42 | 9.22 | 8.29 | 12.05 | 13.65 | 12.82 |
| Sikkim | 67.97 | 76.41 | 72.07 | 23.24 | 22.57 | 22.91 | 8.79 | 1.02 | 5.02 |
| Tamil Nadu | 97.15 | 97.44 | 97.29 | 1.46 | 1.34 | 1.40 | 1.39 | 1.22 | 1.31 |
| Tripura | 77.42 | 80.05 | 78.66 | 17.26 | 16.87 | 17.07 | 5.32 | 3.08 | 4.26 |
| Uttarakhand | 84.59 | 85.16 | 84.88 | 6.48 | 7.12 | 6.80 | 8.93 | 7.72 | 8.32 |
| Uttar Pradesh | 87.76 | 88.35 | 88.05 | 1.75 | 1.70 | 1.72 | 10.49 | 9.96 | 10.23 |
| West Bengal | 86.27 | 87.30 | 86.78 | 6.75 | 6.53 | 6.64 | 6.98 | 6.17 | 6.58 |
| All Districts | 88.21 | 88.72 | 88.46 | 4.68 | 4.64 | 4.66 | 7.11 | 6.64 | 6.88 |

Note: States having negative drop-out rates indicate inconsistent grade-specific enrolment data; most of these states are small and new states covered under DISE. Drop-out rates in such states are not reported.

## Table A4

Flow Rates Cohort: 2004-05
(Based on Common Schools for the Years 2004-05 and 2005-06)

| State/UT | Grade IV |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Promotion Rate |  |  | Repetition Rate |  |  | Drop-out Rate |  |  |
|  | Boys | Girls | Total | Boys | Girls | Total | Boys | Girls | Total |
| Andhra Pradesh | 91.25 | 90.59 | 90.92 | 3.00 | 3.13 | 3.07 | 5.74 | 6.29 | 6.01 |
| Arunachal Pradesh | 76.55 | 78.02 | 77.24 | 12.27 | 12.60 | 12.43 | 11.18 | 9.38 | 10.34 |
| Assam | 85.66 | 86.75 | 86.19 | 1.68 | 1.44 | 1.56 | 12.67 | 11.80 | 12.25 |
| Bihar | 92.12 | 90.72 | 91.54 | 6.39 | 6.57 | 6.46 | 1.49 | 2.71 | 2.00 |
| Chandigarh | 98.03 | 99.30 | 98.60 | 2.79 | 2.18 | 2.52 |  |  |  |
| Chhattisgarh | 82.69 | 81.88 | 82.30 | 10.85 | 10.45 | 10.66 | 6.46 | 7.68 | 7.05 |
| Delhi | 80.01 | 95.94 | 87.32 | 11.09 | 12.39 | 11.69 | 8.90 | -8.33 | 0.99 |
| Gujarat | 86.34 | 86.79 | 86.55 | 9.00 | 8.32 | 8.68 | 4.66 | 4.89 | 4.77 |
| Haryana | 89.73 | 89.73 | 89.73 |  | - |  | 10.27 | 10.27 | 10.27 |
| Himachal Pradesh | 92.22 | 93.76 | 92.95 | 5.43 | 4.46 | 4.97 | 2.35 | 1.77 | 2.08 |
| Jammu \& Kashmir | 95.68 | 95.26 | 95.48 | 1.35 | 1.39 | 1.37 | 2.98 | 3.35 | 3.15 |
| Jharkhand | 88.84 | 90.37 | 89.52 | 3.21 | 3.26 | 3.23 | 7.95 | 6.38 | 7.25 |
| Karnataka | 95.51 | 95.39 | 95.45 | 3.45 | 3.40 | 3.43 | 1.04 | 1.21 | 1.12 |
| Kerala | 92.45 | 93.98 | 93.20 | 4.19 | 3.01 | 3.61 | 3.35 | 3.01 | 3.19 |
| Madhya Pradesh | 102.93 | 103.79 | 103.34 | 0.09 | 0.10 | 0.09 | - |  |  |
| Maharashtra | 85.10 | 84.59 | 84.86 | 4.55 | 4.15 | 4.36 | 10.34 | 11.26 | 10.78 |
| Meghalaya | 71.92 | 76.12 | 74.05 | 7.92 | 6.24 | 7.07 | 20.16 | 17.65 | 18.88 |
| Mizoram | 115.94 | 115.81 | 115.88 | 2.63 | 2.07 | 2.35 |  |  |  |
| Nagaland | 72.95 | 75.15 | 74.02 | 5.10 | 4.80 | 4.95 | 21.94 | 20.05 | 21.02 |
| Orissa | 91.02 | 90.88 | 90.95 | 4.23 | 4.33 | 4.28 | 4.75 | 4.80 | 4.77 |
| Puducherry | 121.78 | 115.83 | 118.81 | 0.00 | 0.00 | 0.00 | - |  |  |
| Punjab | 84.39 | 87.41 | 85.83 | 9.42 | 7.33 | 8.42 | 6.19 | 5.26 | 5.75 |
| Rajasthan | 89.76 | 87.91 | 88.92 | 4.15 | 4.98 | 4.52 | 6.09 | 7.12 | 6.55 |
| Sikkim | 65.08 | 70.47 | 67.85 | 21.98 | 22.13 | 22.06 | 12.94 | 7.39 | 10.09 |
| Tamil Nadu | 97.20 | 97.72 | 97.45 | 1.58 | 1.37 | 1.48 | 1.22 | 0.91 | 1.07 |
| Tripura | 81.31 | 82.05 | 81.66 | 14.01 | 13.20 | 13.63 | 4.68 | 4.75 | 4.71 |
| Uttarakhand | 88.10 | 87.82 | 87.96 | 4.75 | 4.86 | 4.81 | 7.15 | 7.31 | 7.23 |
| Uttar Pradesh | 89.80 | 89.22 | 89.53 | 1.43 | 1.40 | 1.42 | 8.76 | 9.38 | 9.06 |
| West Bengal | 79.70 | 77.06 | 78.38 | 6.54 | 6.33 | 6.44 | 13.76 | 16.60 | 15.18 |
| All Districts | 90.10 | 89.61 | 89.87 | 3.90 | 3.75 | 3.83 | 5.99 | 6.64 | 6.30 |

Note: States having negative drop-out rates indicate inconsistent grade-specific enrolment data; most of these states are small and new states covered under DISE. Drop-out rates in such states are not reported.

## Table A5

Flow Rates Cohort: 2004-05
(Based on Common Schools for the Years 2004-05 and 2005-06)

| State/UT | Grade V |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Promotion Rate |  |  | Repetition Rate |  |  | Drop-out Rate |  |  |
|  | Boys | Girls | Total | Boys | Girls | Total | Boys | Girls | Total |
| Andhra Pradesh | 81.86 | 77.39 | 79.67 | 2.83 | 2.97 | 2.90 | 15.32 | 19.63 | 17.43 |
| Arunachal Pradesh | 74.29 | 73.79 | 74.05 | 11.41 | 11.63 | 11.52 | 14.30 | 14.58 | 14.43 |
| Assam | 88.32 | 90.05 | 89.15 | 2.40 | 2.33 | 2.37 | 9.28 | 7.61 | 8.48 |
| Bihar | 65.39 | 62.46 | 64.21 | 5.43 | 5.36 | 5.40 | 29.18 | 32.18 | 30.39 |
| Chandigarh | 97.77 | 101.02 | 99.23 | 5.86 | 4.22 | 5.12 | - |  |  |
| Chhattisgarh | 73.50 | 69.78 | 71.73 | 7.88 | 7.69 | 7.79 | 18.62 | 22.53 | 20.48 |
| Delhi | 123.56 | 159.23 | 139.53 | 6.19 | 3.40 | 4.94 |  |  |  |
| Gujarat | 84.69 | 84.82 | 84.75 | 9.74 | 8.54 | 9.20 | 5.57 | 6.64 | 6.06 |
| Haryana | 62.94 | 66.43 | 64.59 | - |  | - | 37.06 | 33.57 | 35.41 |
| Himachal Pradesh | 90.20 | 89.66 | 89.94 | 2.84 | 2.28 | 2.58 | 6.96 | 8.05 | 7.48 |
| Jammu \& Kashmir | 93.53 | 91.73 | 92.72 | 1.98 | 2.02 | 2.00 | 4.49 | 6.25 | 5.29 |
| Jharkhand | 72.12 | 73.99 | 72.93 | 2.90 | 2.80 | 2.86 | 24.98 | 23.21 | 24.21 |
| Karnataka | 89.65 | 89.01 | 89.34 | 4.65 | 4.34 | 4.50 | 5.70 | 6.65 | 6.16 |
| Kerala | 93.30 | 95.47 | 94.36 | 4.52 | 2.87 | 3.72 | 2.19 | 1.65 | 1.93 |
| Madhya Pradesh | 68.99 | 67.11 | 68.13 | 0.16 | 0.16 | 0.16 | 30.84 | 32.73 | 31.71 |
| Maharashtra | 88.01 | 88.66 | 88.32 | 6.49 | 5.74 | 6.13 | 5.50 | 5.60 | 5.55 |
| Meghalaya | 74.69 | 76.00 | 75.37 | 9.74 | 8.85 | 9.28 | 15.58 | 15.15 | 15.35 |
| Mizoram | 116.16 | 119.04 | 117.57 | 5.07 | 4.46 | 4.77 |  |  |  |
| Nagaland | 88.64 | 91.00 | 89.79 | 5.89 | 5.69 | 5.79 | 5.48 | 3.32 | 4.43 |
| Orissa | 80.78 | 79.31 | 80.09 | 3.73 | 3.52 | 3.63 | 15.49 | 17.17 | 16.28 |
| Puducherry | 105.18 | 114.81 | 109.97 | 0.00 | 0.00 | 0.00 | - |  |  |
| Punjab | 69.42 | 65.96 | 67.77 | 3.78 | 3.24 | 3.52 | 26.81 | 30.80 | 28.71 |
| Rajasthan | 81.98 | 73.71 | 78.44 | 3.13 | 3.55 | 3.31 | 14.89 | 22.74 | 18.25 |
| Sikkim | 71.22 | 72.93 | 72.12 | 19.84 | 20.50 | 20.19 | 8.94 | 6.57 | 7.69 |
| Tamil Nadu | 95.87 | 95.61 | 95.75 | 1.69 | 1.50 | 1.60 | 2.43 | 2.89 | 2.65 |
| Tripura | 80.48 | 83.10 | 81.74 | 11.88 | 11.14 | 11.52 | 7.64 | 5.76 | 6.74 |
| Uttar Pradesh | 56.09 | 53.87 | 55.04 | 1.32 | 1.35 | 1.33 | 42.59 | 44.78 | 43.62 |
| Uttarakhand | 79.56 | 78.03 | 78.80 | 1.82 | 1.59 | 1.71 | 18.62 | 20.38 | 19.50 |
| West Bengal | 61.50 | 61.74 | 61.62 | 25.00 | 25.98 | 25.48 | 13.50 | 12.28 | 12.90 |
| All Districts | 74.63 | 73.39 | 74.05 | 5.55 | 5.61 | 5.58 | 19.81 | 21.00 | 20.37 |

Note: States having negative drop-out rates indicate inconsistent grade-specific enrolment data; most of these states are small and new states covered under DISE. Drop-out rates in such states are not reported.

## One Million+ School Report Cards (www.schoolreportcards.in)

The National University of Educational Planning and Administration has created a comprehensive database on elementary education in India under one of its most prestigious projects, known as, District Information System for Education (DISE). The project covers both primary and upper primary schools/sections of all the districts of the country. What is more remarkable about DISE is that it has drastically reduced the time-lag in availability of educational statistics which is now down from 7-8 years to less than a year at the national and only a few months at the district and state levels. DISE is supported by the Ministry of Human Resource Development and UNICEF.

The National University has successfully developed School Report Cards of more than one million primary and upper primary schools/sections. In addition to quantitative information, the Report Cards also provide qualitative information and a descriptive report about individual school. And, all that can now be accessed with the click of a mouse.

The Report Cards are produced to provide users comprehensive information on all the vital parameters, be it student, teacher or school related variables, yet concise, accurate information about each school in a standard format which is easy to understand and allows meaningful comparisons to be made among schools. We hope that these reports are used in constructive conversations which lead to improved education for all children across the country.

## DISE : Recent \& Forthcoming Publications

Elementary Education in India : Progress towards UEE - DISE Flash Statistics, 2005-06
Elementary Education in India : Where do we stand? - District Report Cards, Volume I, 2005-06
Elementary Education in India : Where do we stand? - District Report Cards, Volume II, 2005-06
Elementary Education in Rural India : Analytical Tables, 2005-06
Elementary Education in Urban India : Analytical Tables, 2005-06
Elementary Education in India : Where do we stand? - State Report Cards, 2005-06
Elementary Education in India : Progress towards UEE - Analytical Report, 2005-06


Department of School Education and Literacy
Ministry of Human Resource Development, Government of India


[^0]:    * District Information System for Education (DISE) is a joint initiative of the Government of India, UNICEF and National University of Educational Planning and Administration (NUEPA) towards strengthening EMIS in the country (For details, see Elementary Education in India: Progress towards UEE, Analytical Report 2004-05; Government of India and NUEPA, New Delhi, 2006).

[^1]:    * Including repeaters.

[^2]:    * Data not reported.

[^3]:    *Based on Common Schools for the years 2004-05 \& 2005-06.
    **Repeaters data not reported.

[^4]:    * As the case may be
    ** More than 100 transition rate may be because of inconsistent enrolment data or migration of children into that state at the Grade VI level.

[^5]:    * As the case may be.
    ** More than 100 transition rate may be because of inconsistent enrolment data or migration of children into that state at the Grade VI level.

