

**Study of Trend in Dropout Rates at  
Elementary Level based on DISE data of  
the years 2008-09 to 2013-14**

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## Content

Nos.	INDEX	PAGE NO.
	<b>Preface</b>	1
<b>1</b>	<b>Introduction</b>	2
<b>2</b>	<b>Computation of Dropout Rates</b>	5
<b>3</b>	<b>Use of data of all schools and common schools in computing dropout rates</b>	6
<b>4</b>	<b>Grade-wise and Average Dropout Rates in 2008-09</b>	7
4.1	Grade-wise and Average dropout rates in 2008-09 based on DISE data of <u>all</u> schools of the years 2008-09 and 2009-10	7
4.2	Grade-wise and Average dropout rates based on DISE data of <u>common</u> schools for the year 2008-09.	9
4.3	Average Dropout Rates for the year 2008-09	11
<b>5</b>	<b>Grade-wise and Average Dropout Rates in 2009-10</b>	<b>12</b>
5.1	Grade-wise Dropout Rates in 2009-10 based on the data of <u>all</u> schools the years 2009-10 and 2010-11.	12
5.2	Grade-wise and Average dropout rate in 2009-10 based on data of <u>common</u> schools of the years 2009-10 and 2010-11.	14
5.3	Average Dropout Rate in 2009-10	<b>16</b>
<b>6</b>	<b>Grade-wise and average dropout rates for the year 2010-11 based on DISE data of 2010-11 and 2011-12</b>	16
6.1	Grade-wise and average dropout rates for 2010-11 based on the data of <u>all</u> schools.	17
6.2	Grade-wise dropout rates in 2010-11 based on the data of <u>common</u> schools for the years 2010-11 and 2011-12.	19
6.3	Average Dropout rates in 2010-11	<b>21</b>
<b>7.</b>	<b>Grade-wise and average dropout rates in 2011-12</b>	21
7.1	Grade-wise Dropout rates based on the data of <u>all</u> schools of 2011-12 and 2012-13	22
7.2	Grade-wise Dropout rates in 2011-12 based on the data of <u>common</u> schools	23
7.3	Average Dropout rates in 2011-12	<b>25</b>
<b>8.</b>	<b>Grade-wise and average dropout rates in 2012-13 and changes in dropout rate between 2008-09 and 2012-13</b>	<b>26</b>
8.1	Grade-wise Dropout rates based on the data of <u>all</u> schools of 2012-13 and 2013-14	26
8.2	Average Dropout rates in 2012-13	27
8.3	Changes in grade-wise and average dropout rates between 2008-09 and 2012-13	29
<b>9</b>	<b>Cohort Dropout rates at Primary Level derived under different Assumptions</b>	<b>30</b>
9.1	Cohort Dropout Rate for primary level in different states in 2009-10	34
9.2	Cohort Dropout Rate for primary level in different states in 2010-11	37
9.3	Cohort Dropout Rate for primary level in different states in 2012-13	38
9.4	Cohort Dropout Rate for primary level in different states in 2013-14	40
9.5	Cohort Dropout Rate for Priamry level in Different States 2013-14	41
9.6	Trends in Cohort Dropout Rate at Primary Level	43
<b>10</b>	<b>Cohort Dropout rate at elementary level (dropping out between grade 1 and grade 7/8)</b>	<b>44</b>
10.1	Cohort dropout rate for the Elementary level in 2009-10	46
10.2	Cohort dropout rate for the Elementary level in 2010-11	48
10.3	Cohort dropout rate for the Elementary level in 2012-13	49
10.4	Cohort dropout rate for the Elementary level in 2013-14	

Nos.	INDEX	PAGE NO.
	Preface	1
Appendix – I	Reconstructed Cohort Method	54

## LIST OF TABLES

TABLE NOS.	TABLE DESCRIPTION	PAGE NO.
Table 4.1	Grade-wise Dropout Rates at Elementary Level in Different States/ UTs in 2008-09 based on the data of <u>all</u> schools of 2008-09 & 2009-10	6
Table 4.2	Grade-wise Dropout Rates in Different States/ UTs in 2008-09 based on data of <u>common</u> Schools of the year 2008-09 and 2009-10	8
Table 4.3	Average Dropout Rate for Primary and Elementary levels for 2008-09 based on the data of <u>all</u> Schools and the data of <u>common</u> Schools of the years 2008-09 and 2009-10	10
Table 5.1	Grade-wise Dropout Rates at Elementary Level in Different States/ UTs in 2009-10 based on the data of <u>all</u> schools of 2009-10 and 2010-11	11
Table 5.2	Grade-wise Dropout Rates in Different States/ UTs in 2009-10 based on data of <u>common</u> Schools of the years 2009-10 & 2010-11	12
Table 5.3	Average Dropout Rate for Primary and Elementary levels for 2009-10 based on DISE data of <u>all</u> Schools and the data of <u>common</u> Schools of the years 2009-10 & 2010-11	14
Table 6.1	Grade-wise dropout rates for 2010-11 based on the data of <u>all</u> Schools of the years 2010-11 and 2011-12.	17
Table 6.2	Grade-wise dropout rates for 2010-11 based on the data of <u>Common</u> Schools of the years (2010-11 and 2011-12)	18
Table 6.3	Average Dropout Rate for Primary and Elementary levels for 2010-11 based on DISE data of <u>all</u> Schools and the data of <u>common</u> Schools of the years 2010-11 & 2011-12	19
Table 7.1	Grade-wise dropout rates for 2011-12 based on the data of <u>all</u> Schools of the years 2011-12 and 2012-13	21
Table 7.2	Grade-wise dropout rates for 2011-12 based on the data of <u>Common</u> Schools based on the data of the years 2011-12 and 2012-13	22
Table 7.3:	Average Dropout Rate for Primary and Elementary levels for 2011-12 based on DISE data of <u>all</u> Schools and the data of <u>common</u> Schools of the years 2011-12 & 2012-13	24
Table 8.1	Grade-wise dropout rates for 2012-13 based on the data of <u>all</u> schools of the years 2012-13 and 2013-14	26
Table 8.2	Average Dropout Rate for Primary and Elementary levels for 2012-13 based on DISE data of <u>all</u> Schools of the years 2012-13 & 2013-14	27
Table 8.3	Grade-wise Dropout Rates based on data of all schools (2008-09 to 2012-13)	28
Table 9.1	Cohort Dropout Rates (%) for primary level (grades 1 to 5) in 2009-10 derived under Assumptions A and B (based on data of all schools and data of common schools of the years 2008-09 and 2009-10) and Dropout rate reported in SSE (2009-10)	31
Table 9.2	Cohort Dropout Rates for Primary Level (grade I to 5) in 2010-11 obtained under Assumptions A and B (based on data of all schools and common schools of the years 2009-10 and 2010-11)	34
Table 9.3	Cohort Dropout Rates (%) for primary level (grades 1 to 5) in 2012-13 derived under Assumptions A and B and Dropout rate derived from Retention rates reported in DISE Flash Statistics of 2012-13	37
Table 9.4	Cohort Dropout Rates (%) for primary level (grades 1 to 5) in 2013-14 derived under Assumptions A and B (based on data of all schools of the years 2012-13 and 2013-14) and Cohort Dropout rate from DISE Flash Statistics (2013-14)	39

<b>TABLE NOS.</b>	<b>TABLE DESCRIPTION</b>	<b>PAGE NO.</b>
Table 9.5	Cohort Dropout Rates (%) for primary level (grades 1 to 5) in 2013-14 derived under Assumptions A and B (based on data of all schools of the years 2012-13 and 2013-14) and Cohort Dropout rate from DISE Flash Statistics (2013-14)	41
Table 9.6	Cohort Dropout Rates (at Primary Level) for the years 2009-10 to 2013-14	42
Table 10.1	Cohort Dropout Rate (grade 1 to 7/8) for 2009-10 based on the data of 2008-09 and 2009-10 and Dropout Rate reported in SSE, 2009-10	45
Table 10.2	Cohort Dropout Rate (grade 1 to 7/8) for 2010-11 based on the data of 2009-10 and 2010-11	46
Table 10.3	Cohort Dropout Rate (grade 1 to 8) for 2012-13 based on the data of 2011-12 and 2012-13	48
Table 10.4	Cohort Dropout Rate (grade 1 to 8) for 2013-14 based on the data of all Schools of 2012-13 and 2013-14	50

### **LIST OF FIGURES**

<b>FIG. NOS.</b>	<b>FIGURES DESCRIPTION</b>	<b>PAGE NO.</b>
Fig. 1	Class-wise Dropout Rates in India based on DISE data of 2008-09 and 2009-10 for All Schools and Common Schools	9
Fig. 2	Dropout Rates in India for the year 2009-10 based on the DISE data of 2009-10 and 2010-11 of All Schools and Common Schools	14
Fig. 3	Grade-wise Dropout Rates in India in the year 2010-11 for All Schools and Common Schools	19
Fig. 4	Grade wise Dropout Rates in India for the year 2011-12 for <u>All</u> schools and Common Schools	23
Fig. 5	Grade-wise Dropout Rates from 2008-09 to 2012-13	28
Fig. 6	Average Dropout Rates for Grades 1-5 and Grades 1-8	29
Fig 7	Cohort Dropout Rates for all schools and MHRD/DISE (at Primary Level)	42
Fig 8	Cohort Dropout Rates for Common Schools (at Primary Level)	43

## Preface

The present study on the trend in dropout rates was undertaken under NUEPA's programme of getting research studies conducted in the field of elementary education making use of DISE data collected annually from all schools of the country. The DISE data on enrolment and repeaters were analyzed to compute the dropout rates of the years 2008-09 to 2012-13 for every state and UT as well as for the whole country. The dropout rate for each grade as well as the average dropout rate for primary level and elementary level of education, were computed for each year using the data of two consecutive years. It is assumed that the students who neither not get promoted to next grade nor repeat the same grade, are dropouts. In addition, the cohort dropout rates for each year were also computed using the Reconstructed Cohort method. This was done to estimate the percentage of children who, after angering grade 1, drop out before reaching the last grade (grade 5 for primary level and grade 8 for elementary level). The situation in which the children are considered as dropouts from primary level if they do not enter grade 6 was also considered as an alternative.

While the dropout rates were found to be very high in a few states, these were also very low and even negative in some cases. This was to some extent due to children taking admission directly in grades other than grade 1 or being admitted in school after 30<sup>th</sup> September. However, this is probably also because of inconsistencies in the data. We decided to report whatever dropout rates we obtained though the very low or negative dropout rates or very high dropout rates are not likely to be the actual dropout rates. In spite of a few such cases, we found that the dropout rates have declined gradually over the years. Some recommendations have been made at the end to improve the quality of enrolment data so that reliable flow statistics can be generated and good estimates of dropout rates are obtained for every state and UT on yearly basis. It is commendable that NUEPA has already started publishing grade-wise and average dropout rates.

I am grateful to NUEPA, and in particular to Dr Arun Mehta, for providing all the required data for making this study possible. It is hoped that the quality of data improves further so that reliable estimates of dropout rates are made available to user in the future.

-A.B.L. Srivastava

## **Study of Trend in Dropout Rates at Elementary Level based on DISE data of the years 2008-09 to 2013-14**

### **1. Introduction**

DISE was developed for monitoring the progress in enrolment, retention and facilities for primary education as a result of inputs provided under DPEP in the early nineties in a few selected districts of different states. When Sarva Shiksha Abhiyan was launched in 2001, DISE was expanded to cover all the districts of all the states, and was no longer confined to primary level but covered upper primary level too. For the last 15 years it has been an important source of data on a number of variables relating to elementary education in the country. Over the years, the quality and coverage of data has improved considerably. The DISE data have been used extensively for preparing Annual Work Plan and Budget (AWP & B) of elementary education at district, state and national levels. The most significant feature of DISE is that all the data and reports become available within a year of the date of reference which is 30 September every year. The data on grade-wise enrolment and number of repeaters in each grade provided by DISE have been useful for studying the trend in enrolment and also for estimating the retention and dropout rates.

One of the major goals of DPEP was and now of SSA too, is to improve the quality of education and to reduce dropout rates. The Ministry of HRD used to collect enrolment and other data for all levels of education from every state and UT directly and publish the same in its annual report, *Statistics of School Education* (formerly *Selected Educational Statistics*). The dropout rates were reported for primary, elementary and secondary levels every year in this publication but the method adopted for its calculation was rather crude. For example, the dropout rate for primary level for the year 2009 was obtained by finding the difference between class I enrolment of 2005 and class V enrolment of 2009 and then determining the ratio of this difference to class I enrolment of 2005 to give the dropout rate for 2009. It is interpreted as the proportion of class I children who dropped out before reaching class V. In the same way the difference between class I enrolment of 2002 and class VIII enrolment of 2009, gave the dropout rate for elementary level, that is, between class I and class VIII. The annual dropout rates (percentage of children who drop out from different classes every year) were not reported and repeaters were ignored in computation of the dropout rate. Further the enrolment and dropout rates used to be reported after considerable time lag. By 2011, the time lag had reduced to two years; the enrolment and other data of 2009-10 had become available in 2011; these were reported in the *Statistics of School Education* published by MHRD in 2011. Another drawback was that the reported statistics were based on consolidated state level data, and so there was no possibility of using the data for any further analysis such as for computing district level dropout rates or dropout rates for Scheduled Caste or Scheduled Tribes children. Since 2012-13, the Ministry has changed its strategy of reporting the enrolment statistics and dropout rates; it now reports the same enrolment data as are reported by NUEPA in its publications. NUEPA also reports the grade-wise and average annual dropout rates for primary and upper primary levels along with Retention Rate for primary level, calculated for the year  $y$  as ratio of class V enrolment of year  $y$  to the class I enrolment of year  $y - 4$  in its annual publication *Elementary Education in India: Progress towards UEE*.

The DISE statistics are more up to date as they become available within a year. Also since school level data become available not only at district and state level, but at national level too, it is possible to calculate not only the state-wise dropout rates but district-wise dropout rates also, if required. Further, the data on repeaters that are crucial for more accurate estimation of dropout rates are also available from DISE. Such data has made it possible to

calculate class-wise dropout rates, the average dropout rate for primary and elementary levels as well as cohort dropout rate for these levels for every state. The cohort dropout rates tell us what percentage of children would dropout between class I and class V (or class I and class VIII). For calculation of cohort dropout rates the enrolment and repeaters data of only two consecutive years are used. To compute the cohort dropout rate based only on the enrolment and repeaters data of latest two years the Reconstructed Cohort method is used. If some reduction in dropout rate has occurred in recent years, it does not get reflected when the dropout rate is calculated using the base year class I enrolment that is several years old. Actually we are interested in monitoring the year to year progress in reducing the dropout rate and eventually making it negligible due to various interventions being made to improve the quality of education as well as the facilities for elementary education. With the Right to Education Bill of 2009, it has become all the more important to report progress in retention of children in school till completion of elementary education on the basis of most up to date data.

The dropout rate for each grade can be easily calculated for any state and even for any district using the DISE data of two consecutive years and from that the cohort dropout rate or retention rate can be derived using the Reconstructed Cohort method. The information on grade-wise dropout rate and retention rate so derived is valuable for monitoring the change in retention rate that may be occurring from year to year.

## 2. Computation of Dropout Rates

Now let us see how the grade-wise and cohort dropout rates are calculated from DISE data which also has 30<sup>th</sup> September as date of reference. Let us take a hypothetical example. Suppose the enrolment in grade I on 30<sup>th</sup> September, 2009 in a district is 50,000, the enrolment in grade II on 30<sup>th</sup> September, 2010 is 45,000 and number of repeaters out of total students in grades I and II as on 30<sup>th</sup> September, 2010 are 2000 and 1000 respectively. Then the number of promotees from grade I to grade II in 2010 is 45000-1000 = 44000. Thus the promotion and repetition rates for grade I students of 2009 are  $\frac{44000}{50000} = .88$  or 88% and  $\frac{2000}{50000} = .04$  or 4% respectively. Now it is assumed that out of the 50000 students enrolled in grade I, those students who were neither promoted to grade II nor repeated grade I, are dropouts. So the number of dropouts from grade I of 2009 in this example is 50000-44000-2000 = 4000 and hence the dropout rate for grade I in 2009 is 4000/50000 = .08 or 8%. Obviously the promotion rate, repetition rate and dropout rate for any grade would add to 100%. We can similarly calculate these rates for grade II using the data on enrolment in grades II and III in 2009 and number of repeaters in these grades in 2010. In general, if  $E_{iy}$  denotes enrolment and  $R_{iy}$  the number of repeaters in grade  $i$  in year  $y$ , then for grade  $i$  in year  $y$ .

$$\text{Repetition rate, } RR(i, y) = \frac{R_{i,y+1}}{E_{i,y}} \times 100$$

$$\text{Promotion rate, } PR(i, y) = \frac{(E_{i+1,y+1} - R_{i+1,y+1})}{E_{i,y}} \times 100$$

Here  $E_{i+1,y+1} - R_{i+1,y+1}$  gives the number of promotees from grade  $i$  in year  $y$  to the next grade  $i + 1$  in year  $y + 1$ .

$$\text{Dropout rate, } DR_{(i,y)} = \frac{E_{i,y} - R_{i,y+1} - (E_{i+1,y+1} - R_{i+1,y+1})}{E_{i,y}} \times 100$$

$$\text{or } DR_{(i,y)} = 100 - PR_{(i,y)} - RR_{(i,y)}$$



Only the data on enrolment and number of repeaters in different grades for two consecutive years  $y$  and  $y+1$  which are available from DISE, is used for computation of dropout rate for any class for the year  $y$ .

Apart from grade-wise dropout rate, one can calculate the dropout rate for a particular level of education such as primary level by finding out the number of children who drop out from school in any given year out of the total students enrolled at that level. This is also termed as 'average annual dropout rate' for the particular level or stage of education. It is not the mean of dropout rates of different grades of primary or elementary level. For primary level having grades 1 to 5, if  $E_{p,y}$  is total enrolment at primary level in year  $y$ , and  $D_{p,y}$  is the number of students out of  $E_{p,y}$  who drop out, that is, who neither get promoted to the next grade nor repeat the grade in which they were studying in year  $y$ , then  $D_{p,y}$  expressed as percentage of  $E_{p,y}$  is the 'average dropout rate' for the primary level in year  $y$ .

The average repetition promotion and dropout rates from primary level comprising grades 1, to 5 for the year  $y$ , can expressed as

$$\text{Average Repetition rate, } RR(p, y) = \frac{R_{p,y+1}}{E_{p,y}} \times 100$$

$$\text{Average Promotion rate, } PR(p, y) = \frac{P_{p,y+1}}{E_{p,y}} \times 100$$

$$\text{where } E_{p,y} = E_{1,y} + E_{2,y} + E_{3,y} + E_{4,y} + E_{5,y}$$

$$R_{p,y+1} = R_{1,y+1} + R_{2,y+1} + R_{3,y+1} + R_{4,y+1} + R_{5,y+1}$$

$P_{p,y+1}$  = sum of promotees in grades 2, 3, 4, 5 and 6 in year  $y+1$  from grades 1, 2, 3, 4 and 5 respectively of the previous year

$$= (E_{2,y+1} - R_{2,y+1}) + (E_{3,y+1} - R_{3,y+1}) + \dots + (E_{6,y+1} - R_{6,y+1})$$

Hence the number of dropouts out of  $E_{p,y} = D_{p,y} = E_{p,y} - R_{p,y+1} - P_{p,y+1}$ .

$$\text{And the Average Dropout rate, } DR_{(p,y)} = \frac{E_{p,y} - R_{p,y+1} - P_{p,y+1}}{E_{p,y}} \times 100$$

$$= [E_{p,y} - E_{p,y+1} + (E_{1,y+1} - R_{1,y+1}) - (E_{6,y+1} - R_{6,y+1})] / E_{p,y} \times 100$$

Here it is assumed that the children who did not get promoted to grade 6 out of those enrolled in grade 5 in year  $y$ , are dropouts. It would have been better to use the data on pass outs or successful completers of grade 5 but in the absence of such data, we have used promotees to grade 6. Actually since the children are expected to continue schooling up to grade 8, it is perhaps all right to consider all those who do not remain in any school after completing primary education (that is, passing grade 5) as dropouts from primary level.

The average dropout rate for elementary level is the percentage of children who drop out in a given year out of those enrolled in grades 1 to 8 but we cannot consider the students of grade 8 who do not get promoted to grade 9 as dropouts. In the absence of data on successful completers of grade 8, we have assumed that those who have reached grade 8 at par with those who have completed elementary education.

Once the class-wise promotion, repetition and dropout rates are computed for a particular year, the cohort dropout rate for that year can be derived using the Reconstructed Cohort method, which gives the percentage of children who would drop out before reaching or completing the last grade of primary/ elementary education and of those who would continue

to remain in school after entering grade I till the last grade of primary or elementary stage, whichever is of interest. The assumption that the grade-wise promotion, repetition and dropout rates would hold good for the cohort till all its members either reach the last grade (or complete it successfully) or drop out before that. Of course, some would take more years than the minimum required (e.g., more than 5 years for primary and more than 8 years for elementary) due to grade repetition. Thus the cohort dropout rate obtained for any given year is hypothetical in the sense that it indicates the extent of dropping out or retention between grade I and the last grade on the assumption that the class-wise repetition and dropout rates for the particular year are applicable for the cohort every year till the all the members of the cohort either complete that level of education or drop out without completing it. Thus if the cohort dropout rate so computed is 20% for any state in 2009 and due to certain interventions targeted to improve retention, the dropout rates in different grades get reduced in 2010, we are able to know how the cohort dropout rate, would decrease as a result of that. The Reconstructed Cohort method thus helps in monitoring the progress in respect of retention with the help of a single, meaningful indicator based on the grade-wise repetition and dropout rates of a particular year. An example of application of Reconstructed Cohort method is given in Appendix 1.

As the Reconstructed Cohort method makes use of only the readily available data on enrolment and repeaters provided by DISE as on 30<sup>th</sup> September for successive years, it ignores the new entrants in grade I admitted after 30<sup>th</sup> September. As most states now admit children in grade I any time in the year, we cannot ignore them if their number is substantial. Some adjustment in the formula to be used for deriving cohort dropout rate can be made if the data on late entrants in grade I, becomes available. Also another factor that affects the dropout rate is lateral entry in grades other than grade I. Children often take admission directly in grade II or a higher grade after studying privately at home or after attending an unrecognised school. Since after implementation of RTE, no such school is expected to exist, the unrecognized schools are no longer covered under DISE. Anyway, the direct entry of children in grades other than grade I, can be taken into consideration if separate data on such students becomes available and necessary adjustment for lateral entrants is made in computation of dropout rate. If among the direct entrants in grades other than grade I, there are some who take admission after 30<sup>th</sup> September, that also can be taken into account if such data are collected and made available. If the number of late entrants in class I and lateral entrants in other classes is relatively small, the dropout rates derived from DISE data on enrolment and repeaters would be fairly accurate but otherwise both grade-wise and cohort dropout rates, would get distorted. Another factor that can cause distortion, and sometimes result in negative or absurd dropout rates, is that of incomplete coverage of schools under DISE in any one or both of the two consecutive years. Submission of inaccurate data on enrolment and repeaters by some schools also affects the accuracy of dropout rates.

If the grade-wise and cohort dropout rates are found to be very high or negative, one has to look into the reasons of why it is so. Either the number of late entrants in class I or lateral entrants in other classes is quite large or all the schools (government and private recognised schools) were not fully covered under DISE data collection programme in one or both of the two consecutive years of which data were used for computation of dropout rates. Also as mentioned above, to some extent, inaccuracy in the data on enrolment and repeaters supplied by the schools could be responsible for giving inaccurate dropout rates. But since 5% sample checking of DISE data is carried out every year in all the states, chances of inaccuracy in data are rather remote but the possibility of omission of some schools in one or both years still remains. Sometimes, some private schools do not supply data in a given year ( $y$ ) but due to more concerted measures and increased pressure from the Education Department they supply the data in the following year ( $y + 1$ ). This results in making grade  $i+1$  enrolments in year  $y+1$  higher than grade  $i$  enrolment of year  $y$ , as a consequence of which the dropout rate for

grade  $i$  in year  $y$  becomes negative or very low. If some grade-wise dropout rates are negative and not negligible, even the cohort dropout rate can become negative (for example, it was -15.9% in Kerala in 2009 according to DISE data of 2008 and 2009, implying that there were many more children in the last grade of the cycle (grade 5 of primary) than in the corresponding grade I cohort. There is also possibility of the opposite happening, that is, more schools being covered in the first year (say, year  $y$ ) than in the following year ( $y + 1$ ) due to omission of some schools under DISE in the year  $y + 1$ . In such a case, the grade-wise dropout rates would be higher than the actual dropout rate and may even result in making the cohort dropout rate abnormally high in the year  $y$ , which may not really be the correct dropout rate. Such negative or very high positive dropout rates call for investigation on the coverage and quality of data of both the years. If there is no serious problem in coverage of schools and quality of data, it becomes necessary to look into the data on late entrants in grade I and lateral entrants in other grades. If such data become available, necessary modification can be made in the formulae of repetition and dropout rates to take into account the number of new entrants and lateral entrants.

### **3. Use of data of all schools and common schools in computing dropout rates.**

In calculation of dropout rates, it is presumed that the data on grade-wise enrolment and number of repeaters are available for all the schools in both of the two consecutive years. For example, in calculation of grade-wise dropout rates of 2010-11 we need such data for all the schools that existed in 2010-11 and also all the schools that existed in 2011-12. If some schools supplied the data in only one of the two years, then the dropout rate calculated for 2010-11 from such data would be distorted and the extent of distortion would depend on the percentage of schools that did not supply the required data in both the years. In particular, if some schools that supplied enrolment data in 2010, but did not supply any data in 2011, it results in reduction of enrolment in 2011 and consequently an increase in dropout rates. Similarly when some schools that existed in 2010 but supplied enrolment data only in 2011, the total enrolment of 2011 tends to get inflated compared to 2010, as a result of which the dropout rates get reduced and sometimes become even negative.

As discussed earlier, such distortion in dropout rates occurs partly due to incomplete coverage of schools in DISE of one or both of the two consecutive years and partly due to lateral entry in grades 2, 3, 4 or 5. When children are admitted directly in grade 2 without attending any recognised school, the enrolment in grade 2 gets inflated leading to apparent reduction in dropout rate for grade 1. Also admissions after 30<sup>th</sup> September, particularly in grade 1, lead to distortion in dropout rate since DISE provides data on enrolment as on a fixed date, 30<sup>th</sup> September.

To overcome this problem, the strategy that was adopted by NUEPA some time back in reporting dropout rates from DISE data was to compute them from the enrolment data of only those schools that supplied data in both the years, leaving out those that supplied data in only one of the two consecutive years. This required separating the schools that were common in both the years and then calculating the dropout rates from the data of only such common schools. DISE reports produced by NUEPA started providing average dropout rates based only on the data of common schools. The schools that were covered under DISE in one year but not in the other year were excluded. Though not entirely satisfactory, this approach did seem to work since the omission of schools in one or both years was quite significant in some states. Use of data of common schools was made to correct the distortion that occurs when grade-wise dropout rates are calculated from the readily available data on enrolment and repeaters of all schools of two consecutive years. But as pointed out before, this also does not remove the distortion completely since it does not take into account the dropout rate of 'children who were in such schools as were covered in the first year but not in the following

year?’ It may not be quite justified to assume that their dropout rates will be the same as of those who were studying in the schools that supplied data in both years. But this distortion is apparently not serious in most states. Of course, the main problem in computing dropout rates from the data of common schools, is that of identifying the common schools and then using the enrolment and repeaters data of two consecutive years of the common schools for calculation of grade-wise and cohort dropout rates.

Even when the data of common schools is used distortion occurs due to other reasons. The model assumes that all the children get admitted in grade 1 only and that too before 30 September. If some children get admitted directly in grades other than grade 1 (lateral entrants) or due to new admissions taking place in grade 1 (or any other grade) after 30<sup>th</sup> September, the dropout rates are affected even when the data of common schools is used. Hence use of data of common schools for estimating the dropout rate helps in improving its reliability but only to a limited extent since other factors causing distortion still remain. The practice of reporting dropout rates based on the data of common schools was, however, given up in 2012. It was assumed that most schools were supplying the data every year, and the number of those which supply data in any year but not in the following year, is negligible.

Here the grade-wise and average dropout rates are being reported for both situations, (a) using the data of **all** schools and (b) using the data of only **common** schools, that is, the schools that supplied data on enrolment and repeaters for both the years. While using the data of common schools, the schools for which the data of only one of the two years was available, were excluded. In Sections 4, 5, 6, 7 and 8 respectively of this report, the dropout rates under both the conditions are being reported for the years 2008-09, 2009-10, 2010-11, 2011-12 and 2012-13 respectively. Further in Section 9, the Cohort Dropout rates and other cohort based indicators derived using the Reconstructed Cohort method are being reported for both the situations, (a) when the data of **all** schools was used and (b) when the data of only **common** schools was used.

#### 4. Grade-wise and Average Dropout Rates in 2008-09

##### 4.1 Grade-wise and Average dropout rates in 2008-09 based on DISE data of all schools of the years 2008-09 and 2009-10

Table 4.1 shows the grade-wise dropout rates for all states and UTs derived from DISE data on enrolment and repeaters of the years 2008-09 and 2009-10. In the case of grade 8, all those who reached grade 8 are treated as non-dropouts although some of them would have dropped out while they were studying in grade 8 or even after grade 8 but without passing it. Unlike the primary level here we cannot treat the children who do not go to grade 9 after completing grade 8 as dropouts from the upper primary level.

**Table 4.1: Grade-wise Dropout Rates at Elementary Level in Different States/ UTs in 2008-09 based on the data of all schools of 2008-09 & 2009-10**

S. No.	State	Dropout Rate in Grades						
		I	II	III	IV	V*	VI	VII
1	A&N Islands	-0.8	-2.0	-1.4	-1.8	-3.1	4.9	3.4
2	Andhra Pradesh	8.2	2.4	2.8	0.4	5.6	4.0	9.7
3	Arunachal Pradesh	38.6	17.3	8.0	2.9	-5.8	3.3	4.5
4	Assam	34.7	23.4	19.6	10.0	11.0	10.0	30.1
5	Bihar	16.3	10.1	9.9	9.0	27.6	4.1	6.4
6	Chandigarh	-6.7	1.0	-1.4	-0.5	-1.1	2.5	2.9
7	Chhattisgarh	7.8	4.3	5.1	5.4	5.5	4.0	5.7

S. No.	State	Dropout Rate in Grades						
		I	II	III	IV	V*	VI	VII
8	D&N Haveli	2.1	2.4	2.2	3.4	2.1	2.9	97.2
9	Daman & Diu	-3.0	-2.4	-3.8	-6.6	2.8	9.0	-2.5
10	Delhi	0.6	-0.7	-0.8	-2.2	-1.4	1.5	-3.2
11	Goa	1.4	-0.9	-2.9	-14.9	2.4	1.9	-8.4
12	Gujarat	3.0	0.9	1.3	1.6	3.6	3.3	97.7
13	Haryana	2.3	1.1	2.3	-0.5	2.3	-1.1	-2.4
14	Himachal Pradesh	4.3	2.2	1.4	2.0	3.1	3.8	-2.0
15	Jammu & Kashmir	5.5	1.6	0.7	0.0	4.7	-0.4	-1.3
16	Jharkhand	20.3	9.3	9.9	7.9	23.1	7.8	7.7
17	Karnataka	5.3	2.5	2.8	2.9	5.3	3.7	74.1
18	Kerala	-3.9	-2.4	-2.0	-6.5	-1.8	-1.8	7.7
19	Lakshadweep	3.2	-1.6	-2.5	0.9	1.4	-0.3	-1.6
20	Madhya Pradesh	8.5	6.5	7.5	8.7	11.8	8.6	5.8
21	Maharashtra	4.2	1.8	2.0	2.0	2.7	2.8	7.1
22	Manipur	16.2	23.2	11.5	10.8	21.7	-0.2	-1.8
23	Meghalaya	21.0	15.3	18.9	13.3	23.4	3.0	50.3
24	Mizoram	12.5	1.8	4.9	-9.1	-4.3	-1.1	97.2
25	Nagaland	1.4	2.4	5.7	12.2	1.5	6.1	7.7
26	Orissa	3.6	4.4	4.7	4.6	13.8	2.2	72.3
27	Puducherry	0.6	-0.4	0.1	-1.4	-2.7	-0.3	1.7
28	Punjab	-2.5	-2.6	-1.2	-3.6	-2.1	0.1	-5.8
29	Rajasthan	12.8	9.1	9.2	4.4	11.0	8.6	0.2
30	Sikkim	-1.4	-3.5	1.6	8.6	6.5	11.8	7.7
31	Tamil Nadu	0.3	-1.2	-1.2	-1.4	0.8	-0.2	-0.2
32	Tripura	1.0	-8.7	-4.3	-5.7	11.5	13.0	13.8
33	Uttar Pradesh	6.8	7.6	11.7	12.0	37.5	4.9	3.4
34	Uttarakhand	11.1	5.9	6.2	4.5	6.7	2.9	0.4
35	West Bengal	-11.0	-15.8	-16.4	-5.7	1.2	-4.6	-2.6
	<b>All India</b>	<b>8.2</b>	<b>4.8</b>	<b>5.4</b>	<b>5.0</b>	<b>14.0</b>	<b>3.8</b>	<b>16.1</b>

\* The children who did neither repeat grade V nor got promoted to grade VI were treated as dropouts while calculating dropout rates reported in this column.

The highest dropout rate was in grade 1 and grade 5 in most states. The dropout rate in grade 5 was very high in Uttar Pradesh (37.5%), Bihar (27.6%), Jharkhand (23.1%), Manipur (21.7%) and Meghalaya (23.4%). This could be due to incomplete coverage of schools having upper primary classes in 2009.

#### 4.2 Grade-wise and Average dropout rates based on DISE data of common schools for the year 2008-09.

As already pointed out, the grade-wise dropout rates derived from the DISE data of all schools (that is, all those which supplied enrolment area in 2008-09 and 2009-10), were very high in some states like Assam, Bihar, Jharkhand, Rajasthan and most of the North Eastern states and very low or negative in some others such as Kerala, West Bengal and Punjab. To overcome this problem, the dropout rates were calculated again from DISE data on enrolment and repeaters of only those schools that had supplied the data in both the years, omitting those which had supplied the data in only one of the two years, in other words, the schools which were common in both years. But as pointed out earlier, another possible reason for dropout rates getting distorted is lateral entry of children in grade 2, 3, 4 or 5. Such lateral entrants in 2009 inflated enrolment in these grades as a result of which dropout rates for the

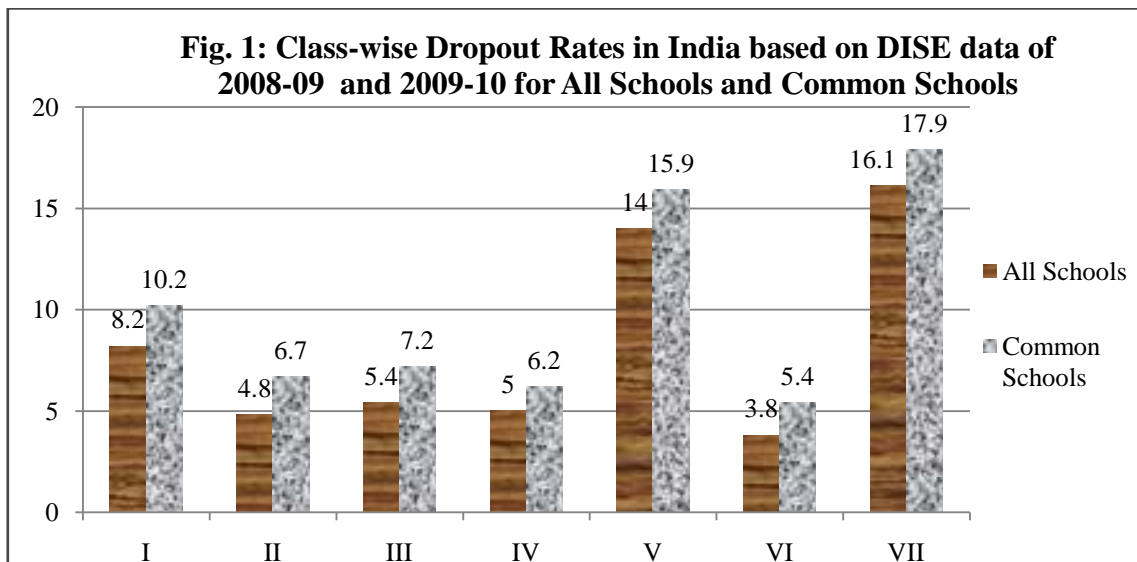
preceding grades became very low or even negative. Table 4.2 shows the grade-wise dropout rate for primary and elementary levels for the year 2008-09 based on the data of common schools.

**Table 4.2: Grade-wise Dropout Rates in Different States/ UTs in 2008-09 based on data of common Schools of the year 2008-09 and 2009-10**

S. No.	State	Dropout Rate in Grades						
		I	II	III	IV	V*	VI	VII
1	A&N Islands	3.7	2.3	2.5	2.6	-3.1	4.9	3.4
2	Andhra Pradesh	10.2	4.4	4.6	2.1	7.0	5.3	10.4
3	Arunachal Pradesh	40.1	20.0	11.2	7.1	-1.7	6.3	7.6
4	Assam	17.2	10.2	8.5	0.4	8.7	7.8	31.6
5	Bihar	16.0	9.7	9.3	8.3	26.8	2.8	5.0
6	Chandigarh	-7.1	0.7	-1.8	-0.9	-1.5	2.6	2.9
7	Chhattisgarh	8.1	4.7	5.4	5.7	7.0	4.8	6.2
8	D&N Haveli	3.6	2.5	2.2	3.2	2.5	3.1	97.2
9	Daman	5.8	5.2	2.4	-4.0	1.2	-1.1	12.9
10	Delhi	2.0	0.7	0.4	-1.1	-0.8	2.1	-2.7
11	Goa	13.0	10.8	8.4	-10.8	3.3	1.4	-9.6
12	Gujarat	4.9	2.8	3.1	3.3	5.2	5.0	97.3
13	Haryana	0.9	-0.3	1.0	-1.4	0.6	-0.7	-1.8
14	Himachal Pradesh	4.6	2.4	1.6	2.1	3.5	4.1	-1.7
15	Jammu & Kashmir	7.0	2.8	1.6	0.6	0.5	-0.2	-1.2
16	Jharkhand	21.3	10.9	11.5	9.9	24.3	9.8	10.1
17	Karnataka	6.0	3.0	3.0	3.0	5.6	3.9	75.1
18	Kerala	-0.5	0.6	0.9	-3.2	1.0	0.9	13.4
19	Lakshadweep	9.9	3.8	1.8	1.8	4.9	4.1	2.4
20	Madhya Pradesh	8.3	6.2	7.0	8.2	11.8	8.3	5.3
21	Maharashtra	5.3	2.7	2.7	2.6	3.1	3.2	8.4
22	Manipur	12.7	16.1	3.7	2.2	14.9	1.2	-0.1
23	Meghalaya	24.2	14.4	17.2	11.0	14.6	11.0	57.7
24	Mizoram	15.3	4.9	8.0	-4.9	-1.2	1.3	97.1
25	Nagaland	9.0	11.1	12.5	19.0	4.9	5.2	7.3
26	Orissa	4.2	4.8	4.8	4.7	14.0	2.3	72.8
27	Puducherry	0.4	-1.0	-0.5	-1.9	-3.7	-1.0	0.8
28	Punjab	4.6	4.6	5.5	3.4	5.6	7.1	1.5
29	Rajasthan	13.8	10.2	10.3	5.6	11.2	9.2	0.9
30	Sikkim	1.4	-0.5	3.8	10.1	7.8	13.4	8.7
31	Tamil Nadu	1.2	-0.5	-0.6	-0.9	1.5	0.6	0.6
32	Tripura	9.6	6.4	8.6	8.1	11.3	13.4	14.1
33	Uttar Pradesh	9.6	9.8	13.4	13.8	41.2	8.5	6.2
34	Uttarakhand	13.9	8.8	8.8	7.2	10.5	5.6	2.8
35	West Bengal	13.2	6.0	4.0	6.2	12.2	6.6	7.7
	<b>All India</b>	<b>10.2</b>	<b>6.7</b>	<b>7.2</b>	<b>6.2</b>	<b>15.9</b>	<b>5.4</b>	<b>17.9</b>

\* The children who did neither repeat grade V nor got promoted to grade VI are treated as dropouts for calculation of dropout rates reported in this column.

Comparison of all-India grade-wise dropout rates derived from the data of all schools and from the data of common schools is shown in Fig 1. It may be noticed that the dropout rates became higher in all the grades when the data of common schools was used. This indirectly indicates that the coverage of schools in DISE was more in 2009 compared to that in 2008.



### 4.3 Average Dropout Rates for the year 2008-09

The average dropout rate for both primary and elementary levels (grades 1 to 5 and grade 1 to 8) for the different states and UTs are shown in Table 4.3, based on the data of all schools and also common schools. The average dropout rate in India based on the data of all schools for the primary stage (grades 1-5) was 7.4% and at the elementary stage (grades 1-8) 18.8% in 2008-09. Some of the average dropout rates were negative (e.g. in West Bengal, Punjab, Goa, Kerala and Tamil Nadu), while some were positive but very high (e.g. in most North Eastern states, Bihar, Jharkhand and Uttar Pradesh). Both negative and very high dropout rates are likely to be incorrect, the main reason for that being incomplete coverage of schools in 2008 or 2009 or both these years. Also there could be large number of direct admissions in grades 2, 3, 4 or 5 in 2009 for which necessary correction was needed but could not be made in the absence of data on lateral entrants in different grades. Such lateral entrants tend to make the dropout rate negative or less than what it actually is.

On comparing the grade-wise dropout rates given in Tables 4.1 and 4.2, and average dropout rates given in Table 4.3 derived from the data of common schools with those derived from the data of all schools, we find that the use of data of common schools has not made much difference in most of the states but a significant difference in the case of some states. Negative dropout rates are due to the lateral entrants being included among promotees in 2009-10 while they were missing from enrolment figures of the previous year. However, the values of negative dropout rates are much lower than those derived from the data of all schools.

When the data of common schools was used significant change in the results occurred in a few states like Assam, Goa, Haryana, Punjab and West Bengal. Particularly, in West Bengal the negative dropout rates based on the data of all schools became positive and more realistic when the data of common schools was used.

Comparison of state level average dropout rates derived for primary level of education from the data of all schools and the data of common schools for the year 2008-09 shown in Table 4.3 indicates that their values were higher or comparable in almost all the states except in Assam and Haryana where the average dropout derived from the data of common schools was less than that derived from the data of all schools. The same is true for the average dropout rate at the elementary level (grades 1 to 8) in three states: Assam, Haryana and Orissa. In the states in which the average dropout rates derived from the data of all schools and data of common schools are close to each other, it appears that almost all schools were

covered under DISE in both years. It may be noted that the average dropout rates for the primary level (grades 1 to 5) in the case of common schools were the same as were reported for the year 2008-09 in the NUEPA publication *Elementary Education in India: Progress towards UEE (DISE 2009-10)*.

**Table 4.3: Average Dropout Rate for Primary and Elementary levels for 2008-09 based on the data of all Schools and the data of common Schools of the years 2008-09 and 2009-10**

S. No.	States	All Schools		Common schools	
		I-V	I-VIII	I-V	I-VIII
1	A&N Islands	-1.8	14.5	1.5	16.5
2	Andhra Pradesh	4.0	15.9	5.8	17.3
3	Arunachal Pradesh	18.1	25.8	20.7	28.4
4	Assam	21.5	28.7	9.6	20.8
5	Bihar	13.9	20.4	13.4	19.8
6	Chandigarh	-1.6	14.4	-2.0	14.2
7	Chhattisgarh	5.7	17.9	6.2	18.5
8	D&N Haveli	2.4	19.0	2.8	19.3
9	Daman & Diu	-2.6	14.0	2.3	16.9
10	Delhi	-0.9	12.7	0.3	13.5
11	Goa	-2.8	14.7	5.0	19.2
12	Gujarat	2.0	18.6	3.9	20.2
13	Haryana	6.1	21.4	0.2	15.7
14	Himachal Pradesh	2.6	18.0	2.8	18.2
15	Jammu & Kashmir	2.5	13.1	3.5	13.7
16	Jharkhand	14.4	23.5	15.8	25.0
17	Karnataka	3.7	17.0	4.1	17.3
18	Kerala	-3.3	12.8	-0.3	15.3
19	Lakshadweep	0.3	13.8	4.2	15.7
20	Madhya Pradesh	8.5	22.0	8.2	21.8
21	Maharashtra	2.6	16.7	3.3	17.3
22	Manipur	9.2	18.0	10.5	19.3
23	Meghalaya	12.4	21.3	17.3	25.3
24	Mizoram	2.1	16.4	5.3	19.1
25	Nagaland	9.8	19.5	11.4	19.9
26	Orissa	6.1	25.6	6.3	20.5
27	Puducherry	-0.7	13.4	-1.3	12.8
28	Punjab	-2.4	17.9	4.7	24.3
29	Rajasthan	9.6	22.9	10.5	23.7
30	Sikkim	2.3	22.1	4.5	24.0
31	Tamil Nadu	-0.5	12.5	0.1	13.1
32	Tripura	7.2	21.2	8.8	22.3
33	Uttar Pradesh	14.3	19.2	16.7	21.6
34	Uttarakhand	7.0	18.6	9.9	21.2
35	West Bengal	-9.6	11.6	8.7	24.5
	<b>All India</b>	<b>7.4</b>	<b>18.8</b>	<b>9.1</b>	<b>20.0</b>



## 5. Grade-wise and Average Dropout Rates in 2009-10

### 5.1 Grade-wise Dropout Rates in 2009-10 based on the data of all schools the years 2009-10 and 2010-11.

In Table 5.1, we are presenting the results on class-wise and average dropout rates using the enrolment and repeaters data of all the schools of both the years

**Table 5.1: Grade-wise Dropout Rates at Elementary Level in Different States/ UTs in 2009-10 based on the data of all schools of 2009-10 and 2010-11**

Sl. No.	State	Dropout Rate in Grades						
		I	II	III	IV	V*	VI	VII
1	A&N Islands	2.6	3.9	3.7	5.2	0.1	6.6	4.6
2	Andhra Pradesh	7.4	2.7	3.2	0.4	5.4	2.6	8.7
3	Arunachal Pradesh	39.6	14.0	9.6	7.0	6.2	12.1	9.3
4	Assam	16.9	9.9	8.4	-5.4	3.6	3.0	24.4
5	Bihar	7.4	0.7	4.7	5.0	21.3	4.2	7.8
6	Chandigarh	-16.3	-6.1	-2.8	-3.4	-5.6	-0.9	-2.6
7	Chhattisgarh	6.1	2.2	2.7	1.8	2.9	2.0	1.9
8	D&N Haveli	0.8	-0.3	2.1	0.6	4.1	3.3	1.9
9	Daman	8.1	2.2	2.3	2.1	2.4	0.3	1.2
10	Delhi	1.4	0.7	-0.2	-1.7	-2.2	0.1	-5.2
11	Goa	0.6	2.9	2.2	-9.0	2.3	1.9	0.3
12	Gujarat	0.0	0.0	1.1	0.3	2.4	1.9	75.6
13	Haryana	3.0	0.1	1.9	-5.4	-0.8	-4.5	-9.8
14	Himachal Pradesh	-0.3	-1.3	-1.3	-0.7	1.2	-0.5	-4.0
15	Jammu & Kashmir	8.8	3.4	2.9	1.6	8.3	1.1	1.1
16	Jharkhand	12.6	4.1	5.8	4.4	20.7	4.4	2.8
17	Karnataka	3.7	0.7	0.9	0.5	3.2	2.1	73.8
18	Kerala	-7.2	-7.6	-6.8	-8.5	-4.1	-2.9	-0.2
19	Lakshadweep	0.8	-0.3	0.6	3.7	5.0	6.0	4.7
20	Madhya Pradesh	8.7	6.0	6.2	6.7	11.9	6.3	5.4
21	Maharashtra	2.3	0.3	0.3	0.1	-0.4	-0.5	3.4
22	Manipur	13.0	16.5	2.7	0.2	12.9	-2.8	-0.4
23	Meghalaya	14.4	5.5	10.3	-2.5	8.2	4.3	42.8
24	Mizoram	15.9	9.2	13.7	10.0	16.2	17.2	80.3
25	Nagaland	2.4	1.8	6.0	13.2	-1.4	5.5	6.9
26	Orissa	2.5	3.9	4.9	3.6	13.9	2.5	10.8
27	Puducherry	1.7	0.4	0.2	-0.1	-2.7	1.1	1.5
28	Punjab	-1.1	-2.7	-1.3	-3.4	-7.2	-4.5	-8.6
29	Rajasthan	15.0	10.7	10.8	6.0	11.5	8.1	-0.1
30	Sikkim	2.2	4.0	7.2	8.9	9.4	11.1	6.4
31	Tamil Nadu	2.2	-0.5	-0.7	-0.8	3.1	1.5	1.8
32	Tripura	14.6	8.2	11.9	10.5	12.3	15.8	11.3
33	Uttar Pradesh	3.7	2.5	6.3	5.8	33.1	0.3	-0.5
34	Uttarakhand	6.1	0.8	2.1	1.0	3.3	-0.3	-1.2
35	West Bengal	13.1	6.8	5.0	14.2	10.5	7.1	8.1
	<b>All India</b>	<b>7.0</b>	<b>3.1</b>	<b>4.3</b>	<b>3.6</b>	<b>12.3</b>	<b>2.7</b>	<b>11.4</b>

\* The children who did neither repeat grade V nor get promoted to grade VI are treated as dropouts for calculation of dropout rates reported in this column

On comparing the figures given in Tables 4.1 and 5.1, we find that the dropout rates had declined in every grade between 2008-09 and 2009-10 in almost all the states and certainly the all India dropout rates in 2009-10 were much lower than those of 2008-09 in every grade.

## 5.2 Grade-wise and Average dropout rate in 2009-10 based on data of common schools of the years 2009-10 and 2010-11.

Table 5.2 gives the grade-wise dropout rates based on the enrolment and repeaters data of the common schools for which the data was available for both the years 2009-10 and 2010-11. This table is similar to Table 4.2 for the year 2008-09.

**Table 5.2: Grade-wise Dropout Rates in Different States/ UTs in 2009-10 based on data of common Schools of the years 2009-10 & 2010-11**

Sl. No.	State	Dropout Rate in Grades						
		I	II	III	IV	V	VI	VII
1	A&N Islands	3.6	4.5	3.8	5.3	0.4	5.1	2.6
2	Andhra Pradesh	8.8	4.1	4.6	1.7	7.2	4.8	10.3
3	Arunachal Pradesh	36.8	14.4	10.1	7.1	6.9	13.2	10.7
4	Assam	17.0	10.2	8.8	-3.1	5.2	4.7	27.5
5	Bihar	7.3	0.3	4.1	4.1	20.1	2.6	5.8
6	Chandigarh	-14.6	-4.8	-1.7	-1.8	-4.6	0.0	-1.5
7	Chhattisgarh	8.4	4.3	4.7	3.5	5.6	3.9	3.6
8	D&N Haveli	1.7	0.3	2.6	1.2	4.5	3.7	2.3
9	Daman	11.9	4.7	4.9	6.8	2.3	0.7	0.4
10	Delhi	2.1	0.5	-0.8	-3.1	-10.8	1.0	3.3
11	Goa	5.1	5.8	4.9	-13.4	2.7	2.4	0.9
12	Gujarat	5.1	3.1	4.1	3.4	5.6	5.3	76.3
13	Haryana	6.8	6.3	6.1	4.3	7.6	6.5	4.0
14	Himachal Pradesh	0.1	-0.9	-0.9	-0.4	1.8	0.1	-3.5
15	Jammu & Kashmir	9.5	3.7	3.0	1.5	8.1	0.9	0.9
16	Jharkhand	14.0	5.1	6.6	5.2	21.6	7.3	8.4
17	Karnataka	6.0	2.5	2.4	2.0	5.3	3.6	75.5
18	Kerala	-0.6	-1.7	-1.4	-3.5	-0.3	0.5	10.5
19	Lakshadweep	1.4	-0.3	0.6	3.7	5.0	6.0	15.0
20	Madhya Pradesh	9.5	6.7	7.0	7.2	13.0	7.7	6.7
21	Maharashtra	4.3	1.9	1.5	1.7	0.9	0.7	6.4
22	Manipur	11.0	15.7	2.7	-0.1	13.3	-2.1	-0.1
23	Meghalaya	17.5	8.9	13.4	6.7	14.5	10.9	56.3
24	Mizoram	14.7	8.0	12.5	8.7	15.2	15.3	79.6
25	Nagaland	3.4	2.4	6.5	13.8	-0.1	5.9	7.5
26	Orissa	3.7	4.4	5.1	3.7	13.9	2.6	66.1
27	Puducherry	2.5	1.1	1.0	0.5	-2.8	1.1	2.1
28	Punjab	3.3	1.8	3.2	1.1	-0.4	1.7	-2.9
29	Rajasthan	14.6	10.3	10.4	5.6	11.2	8.2	0.0
30	Sikkim	3.3	4.4	7.6	9.4	10.9	12.6	7.8
31	Tamil Nadu	2.7	0.0	-0.3	-0.6	4.1	2.5	2.7
32	Tripura	15.2	8.7	12.3	10.8	12.2	15.9	11.4
33	Uttar Pradesh	5.3	3.8	7.4	6.8	35.9	3.4	2.1
34	Uttarakhand	9.4	4.1	5.0	3.7	6.5	3.5	2.1
35	West Bengal	10.0	3.4	1.5	9.1	7.4	3.7	4.7
	<b>All India</b>	<b>7.8</b>	<b>3.9</b>	<b>4.9</b>	<b>4.2</b>	<b>13.5</b>	<b>4.0</b>	<b>15.3</b>

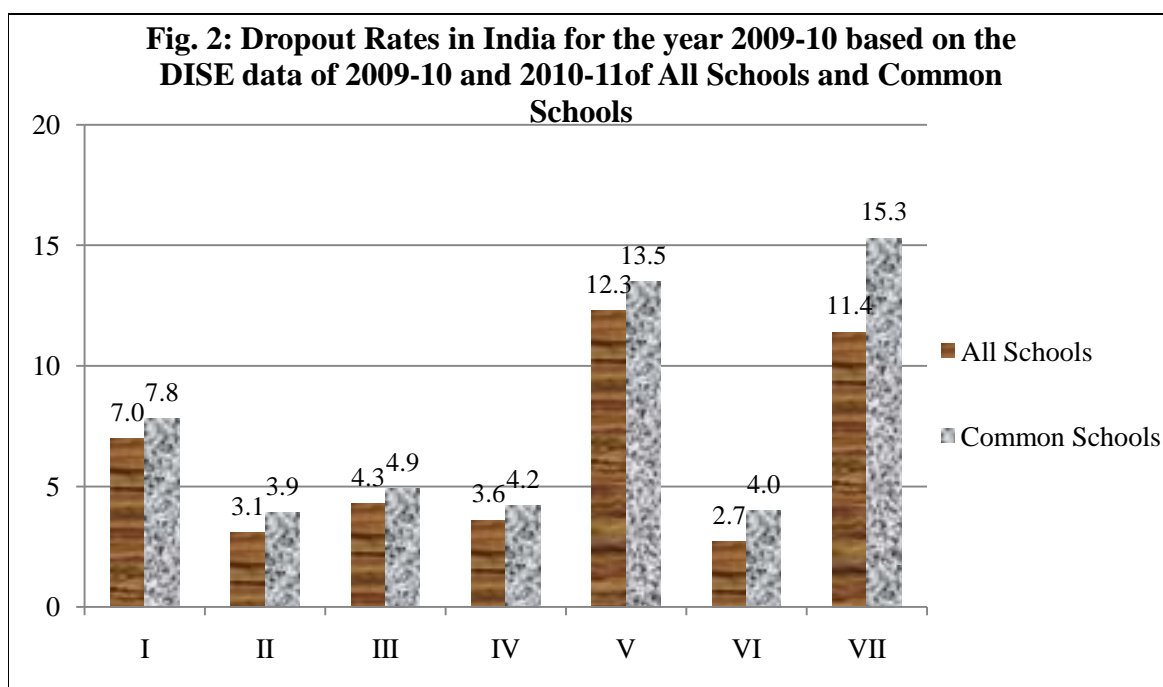
\* The children who did neither repeat grade V nor got promoted to grade VI are treated as dropouts for calculation of dropout rates reported in this column

We find that the dropout rates were less than those of 2008-09 in every grade. On comparing the grade-wise dropout rates based on the data of all schools with those based on the data of common schools, we find that the trend is very similar to that of 2008-09 shown in Fig 1.

Fig.2 shows the grade-wise dropout rates derived from the data of all schools and data of common schools for 2009-10 for the country as a whole. The highest dropout rate was in grade 5 (13.5%) and grade 7 (15.3%). Actually, from grade 5 to grade 6 is the transition stage for primary level while grade 7 to grade 8 was the transition stage from upper primary to secondary level in a few states like Karnataka and Gujarat where the upper primary level was only up to grade 7 at that time; there the DISE data shows very low or nil enrolment in grade 8 which means no school or very few schools supplied enrolment data for grade 8 in 2009-10, though some of them had supplied grade 8 enrolment data in 2008-09.

Actually the dropout rate for grade 7 derived from DISE data of common schools was unbelievably high in Karnataka (75.5%), Mizoram (79.6%), Meghalaya (56.3%) and Orissa (66.1%) which is obviously due to incomplete coverage of schools having grade 8. While almost all the schools had supplied enrolment data of grade 7 in 2009-10, hardly any school had provided enrolment data of grade 8 in 2010-11. This resulted in the dropout rate for grade 7 becoming very high. Obviously this cannot be considered as true dropout rate for grade 7. In Gujarat and Dadra & Nagar Haveli, the problem was acute as the coverage of such schools was nil in 2008-09 and 2009-10. The national level dropout rate for grade 7 (15.3%) was also exaggerated due to inclusion of the states that have shown very high dropout rate because of incomplete enrolment data of grade 8.

The average dropout rate at the elementary stage was much higher than that at the primary stage not because of high dropout rates in grades 6, 7 or 8 but more because of low transition rates between grades 5 and 6. As Table 6 shows, there is large variation in the average dropout rates across states in both years. Only in a few states the average dropout rate in 2008-09 based on the data of common schools, differs greatly from the one based on the data of all schools. In these states, the use of data of common schools in calculation of average dropout rate made a big difference and provided more realistic figures. In 2009-10, the difference between the average dropout rates derived from the data of all schools and data of common schools had narrowed down considerably in all the states; the only exceptions were Orissa, Kerala, Haryana and Punjab where the difference between the two still remained rather large. The narrowing down of the difference shows that almost all schools provided enrolment data in both years and very few were such schools as had provided data in only one of the two years. Actually, while the all India average dropout rate for the primary stage had shown significant decline from 9.1 to 6.7 between 2008-09 and 2009-10, the decline was nominal from 20.0 to 19.4 in the case of elementary stage, when the data of common schools was used for calculation of dropout rate. In other words, there was no noteworthy reduction in the all India average dropout rate at the elementary stage (classes 1 to 8) between 2008-09 and 2009-10, though the reduction in the average dropout was significant at the primary stage.



### 5.3 Average Dropout Rate in 2009-10

Table 5.3 which is similar to Table 4.3 shows the average dropout rates of primary and elementary levels (grades 1-5 and 1-8 respectively) based on the data of 2009-10 and 2010-11. These rates are shown for both situations (a) when the data of all schools was used and (b) when the data of common schools was used. It is reiterated that the average dropout rate is not the mean of the grade-wise dropout rates; it is actually the percentage of children who drop out from a given stage of education in a year. Here again the average dropout rates for the primary level based on the data of common schools are the same as those reported for the year 2009-10 in the NUEPA publication, entitled *Elementary Education in India: Progress towards UEE (DISE 2010-11)*

The average dropout rate had declined in most states between these two years but there are exceptions like Haryana, Jammu & Kashmir, Mizoram, Tripura, A & N Islands, Daman & Diu where it had increased. Also it is seen that there is wide variation in the average dropout rate across the states in both the years.

**Table 5.3: Average Dropout Rate for Primary and Elementary levels for 2009-10 based on DISE data of all Schools and the data of common Schools of the years 2009-10 & 2010-11**

S. No.	States	All Schools		Common schools	
		I-V	I-VIII	I-V	I-VIII
1	A&N Islands	3.1	18.5	3.5	17.8
2	Andhra Pradesh	3.9	15.4	5.4	16.8
3	Arunachal Pradesh	19.7	27.9	18.7	27.5
4	Assam	7.7	19.8	8.5	20.8
5	Bihar	7.0	20.8	6.4	20.1
6	Chandigarh	-6.5	9.3	-5.2	10.3
7	Chhattisgarh	3.2	16.5	5.4	18.2
8	D&N Haveli	1.4	6.8	2.0	7.4
9	Daman & Diu	3.5	14.4	6.3	13.7
10	Delhi	-0.4	15.5	-2.3	17.9

S. No.	States	All Schools		Common schools	
		I-V	I-VIII	I-V	I-VIII
11	Goa	-0.2	16.5	1.0	17.6
12	Gujarat	1.2	18.7	4.3	21.5
13	Haryana	-0.1	11.4	6.2	18.6
14	Himachal Pradesh	-0.5	16.1	0.0	16.5
15	Jammu & Kashmir	5.1	15.1	5.3	15.2
16	Jharkhand	9.4	21.8	10.5	23.0
17	Karnataka	1.8	15.9	3.6	17.6
18	Kerala	-6.8	10.7	-1.5	15.4
19	Lakshadweep	2.3	15.2	2.4	16.4
20	Madhya Pradesh	7.8	19.5	8.6	20.5
21	Maharashtra	0.5	12.8	2.1	14.6
22	Manipur	9.8	17.5	9.1	17.2
23	Meghalaya	8.1	19.0	12.7	23.8
24	Mizoram	13.1	25.7	12.0	24.6
25	Nagaland	4.4	18.3	5.2	19.0
26	Orissa	5.6	13.2	6.1	20.3
27	Puducherry	-0.1	12.9	0.4	13.5
28	Punjab	-3.1	13.5	1.8	17.9
29	Rajasthan	11.2	26.4	10.8	26.0
30	Sikkim	6.4	25.8	7.1	26.8
31	Tamil Nadu	0.7	13.8	1.2	14.4
32	Tripura	11.6	24.1	11.9	24.4
33	Uttar Pradesh	9.6	16.8	11.1	18.4
34	Uttarakhand	2.7	17.3	5.8	20.0
35	West Bengal	10.1	27.2	6.5	24.2
	<b>All India</b>	<b>6.0</b>	<b>18.3</b>	<b>6.8</b>	<b>19.4</b>

Also it may be noted that the negative dropout rates in A & N Islands, Daman & Diu, Lakshadweep, Sikkim and West Bengal had become positive and more realistic indicating improvement in reporting of data after 2008-09.

Similarly on comparing the figures of Table 4.2 and Table 5.2, we find that also when the data of common schools was used, the dropout rates in 2009-10 were lower than those of 2008-00 in every grade in every state as well as in the total of all the states.

On comparing the figures given in Table 4.3 and 5.3, we find that between 2008-09 and 2009-10, the all-India average dropout rate for the primary stage had declined from 7.4 to 6.0 when the data of all schools was used whereas it had declined from 9.1 to 6.8 when the data of common schools was used. The sharper decline in the latter case is due to the large difference in dropout rates of situations (a) all schools and (b) common schools, in 2008-09 in some of the large states like Punjab, Assam and West Bengal. In West Bengal, a negative dropout rate (-9.6) became positive and more realistic (8.7) when the data of common schools was used. In 2009-10, the difference between average dropout rates of situations (a) and (b) had narrowed down in most states. At all India level, the difference between the two had reduced to 0.7 in 2009-10 from 1.7 in 2008-09.

The average dropout rate at the elementary stage was much higher than that at the primary stage not because of high dropout rates in grades 6, 7 or 8 but more because of low transition

rates between grades 5 and 6. As Table 5.3 shows, there is large variation in the average dropout rates across states. Only in a few states the average dropout rate in 2008-09 based on the data of common schools, differed greatly from the one based on the data of all schools. In these states, the use of data of common schools in calculation of average dropout rate made a big difference and provided more realistic figures. In 2009-10, the difference between the average dropout rates derived from the data of all schools and data of common schools had narrowed down considerably in all the states; the only exceptions were Orissa, Kerala, Haryana and Punjab where the difference between the two still remained rather large. The narrowing down of the difference shows that more schools provided enrolment data in both years and very few were such schools as had provided data in only one of the two years. Actually, while the all India average dropout rate for the primary stage had shown significant decline from 9.1 to 6.8 between 2008-09 and 2009-10, the decline was nominal from 20.0 to 19.4 in the case of elementary stage, when the data of common schools was used for calculation of dropout rate. In other words, there was no noteworthy reduction in the all India average dropout rate at the elementary stage (classes 1 to 8) between 2008-09 and 2009-10, though the reduction in the average dropout was significant at the primary stage.

## **6. Grade-wise and average dropout rates for the year 2010-11 based on DISE data of 2010-11 and 2011-12**

In this Section, we are reporting the grade-wise dropout rates as well as average dropout rates derived for the year 2010-11 for both the situations, (a) using the data of all schools and (b) using the data of common schools, that is, the schools for which data was available for both the years.

### **6.1 Grade-wise and average dropout rates for 2010-11 based on the data of all schools.**

Table 6.1 shows the grade-wise dropout rates of all the states/ UTs and the whole country for the year 2010-11. We find that the all India dropout rates were much less than those of 2009-10 in every grade. The largest reduction had occurred in grade 7 (from 11.4 to 3.4). A disturbing trend was that the dropout rates were negative in quite a few states. The dropout rates were negative in a few states in 2009-10 also but the problem appears to have aggravated in 2010-11. In Kerala, certainly something was wrong with DISE data as the negative dropout rate was as high as -23.0 in grade 1 and between -16.3 and -19.8 in other primary grades. In upper primary classes also, the dropout rates were negative (between -6.4 and -11.5) in Kerala. The other states/ UTs in which negative dropout rates occurred were Chandigarh, Delhi, Goa, Haryana and Uttar Pradesh.

On the other hand, dropout rates were very high in some states particularly in grade 1 and grade 5. The states/ UTs in which the dropout rate in grade 1 was very high, are Arunachal Pradesh, Manipur, Meghalaya, Mizoram, Sikkim, Jharkhand and Jammu & Kashmir. The problem of very high dropout rates, particularly in North-Eastern states existed in 2009-10 also. The states with very high dropout rate in grade 5 were Bihar, Jharkhand, Manipur and Uttar Pradesh. These states had very high dropout rate in grade 5 in 2009-10 too, which shows that the problem had continued. A high dropout rate in grade 5 could be due to low transition from primary to upper primary but also due to incomplete coverage of upper primary schools in DISE.

**Table 6.1. Grade-wise dropout rates for 2010-11 based on the data of all Schools of the years 2010-11 and 2011-12.**

Sl. No.	State	Dropout Rate in Grades						
		I	II	III	IV	V	VI	VII
1	A&N Islands	-1.5	-0.9	-2.4	-0.6	-4.2	0.4	-0.8
2	Andhra Pradesh	8.2	3.6	4.1	1.5	6.3	1.5	8.3
3	Arunanchal Pradesh	36.1	10.0	6.8	-3.1	2.8	2.9	0.9
4	Assam	19.8	11.9	10.7	9.3	3.9	5.8	1.8
5	Bihar	3.1	-0.8	3.4	4.0	18.9	1.3	4.2
6	Chandigarh	-11.2	-11.2	-6.8	-6.0	-5.7	-1.0	-1.4
7	Chhattisgarh	7.0	1.7	1.9	1.1	3.0	-0.4	-0.4
8	D&N Haveli	3.7	0.8	2.4	1.0	2.0	1.6	2.2
9	Daman	-0.4	2.1	4.0	4.0	0.0	-0.1	1.3
10	Delhi	-6.3	-5.6	-4.0	-6.6	-3.3	-0.9	-3.6
11	Goa	-4.5	-6.7	-6.6	-11.2	0.7	1.8	1.5
12	Gujarat	3.9	0.9	1.2	1.1	2.9	2.7	57.6
13	Haryana	-4.8	-5.7	-4.6	-6.4	-1.8	-3.9	-6.1
14	Himachal Pradesh	1.3	-0.5	-0.9	-0.5	1.3	0.4	0.3
15	Jammu & Kashmir	12.5	4.9	2.1	-1.8	6.4	0.5	6.7
16	Jharkhand	12.7	6.9	8.1	6.7	21.2	4.9	3.7
17	Karnataka	2.7	0.0	-0.2	0.0	3.0	1.3	5.0
18	Kerala	-23.0	-19.8	-17.1	-16.3	-11.5	-10.2	-6.4
19	Lakshadweep	3.7	1.7	1.1	2.0	-1.6	1.8	-2.7
20	Madhya Pradesh	6.5	3.8	3.9	3.7	10.2	4.7	4.5
21	Maharashtra	1.1	0.5	0.3	0.7	-0.1	-0.1	3.8
22	Manipur	14.9	13.6	5.1	4.7	15.6	2.4	3.1
23	Meghalaya	21.8	9.4	12.3	12.4	2.8	2.2	10.8
24	Mizoram	12.3	0.5	3.0	6.9	4.0	3.4	12.6
25	Nagaland	3.9	5.4	8.1	10.0	6.7	3.5	3.3
26	Orissa	2.8	3.2	4.5	4.1	11.3	2.2	4.5
27	Puducherry	0.4	-1.2	-0.6	-0.3	-3.1	0.2	0.5
28	Punjab	6.8	0.8	1.5	-0.9	1.2	0.8	-2.6
29	Rajasthan	7.9	3.0	4.2	-1.1	6.2	0.6	-4.8
30	Sikkim	12.3	1.0	3.0	2.4	3.0	5.2	3.0
31	Tamilnadu	1.5	-0.3	0.0	-1.1	1.3	0.2	-2.2
32	Tripura	2.9	2.6	4.7	4.5	7.7	4.5	4.3
33	Uttar Pradesh	-6.9	-6.0	-2.3	-1.6	25.9	-10.6	-10.2
34	Uttarakhand	4.4	0.8	2.0	1.1	4.2	-0.2	-0.7
35	West Bengal	9.5	3.1	0.5	7.1	6.6	4.3	5.2
	<b>All India</b>	<b>3.6</b>	<b>0.3</b>	<b>1.5</b>	<b>1.4</b>	<b>10.1</b>	<b>0.0</b>	<b>3.4</b>

**6.2 Grade-wise dropout rates in 2010-11 based on the data of common schools for the years 2010-11 and 2011-12.**

Table 6.2 shows the grade-wise dropout rates for 2010-11 derived from DISE data of common schools, that is, the schools that had supplied data for both the years. We find that the dropout rates in all the classes were higher than those based on the data of all schools. In

particular, the dropout rate in grade 7 (10.1%) was much higher than that based on the data of all schools (3.4%).

The problem of negative dropout rates was no longer faced in most of the states, but in Chandigarh, Delhi, Goa and Haryana, the dropout rates were negative in most of the grades. In Goa, although the dropout rate had become positive in grades 1, 2 and 3, it was still highly negative (-12.3) in grade 4. Since most of the dropout rates had become positive when the data of common schools was used, it appears that there was incomplete coverage of schools under DISE in 2009. However, even when the data of common schools was used, the dropout rate was still negative or very low in a few cases, which indicates that there were other problems too, such as lateral entry in some grades, and not only the problem of incomplete coverage of schools.

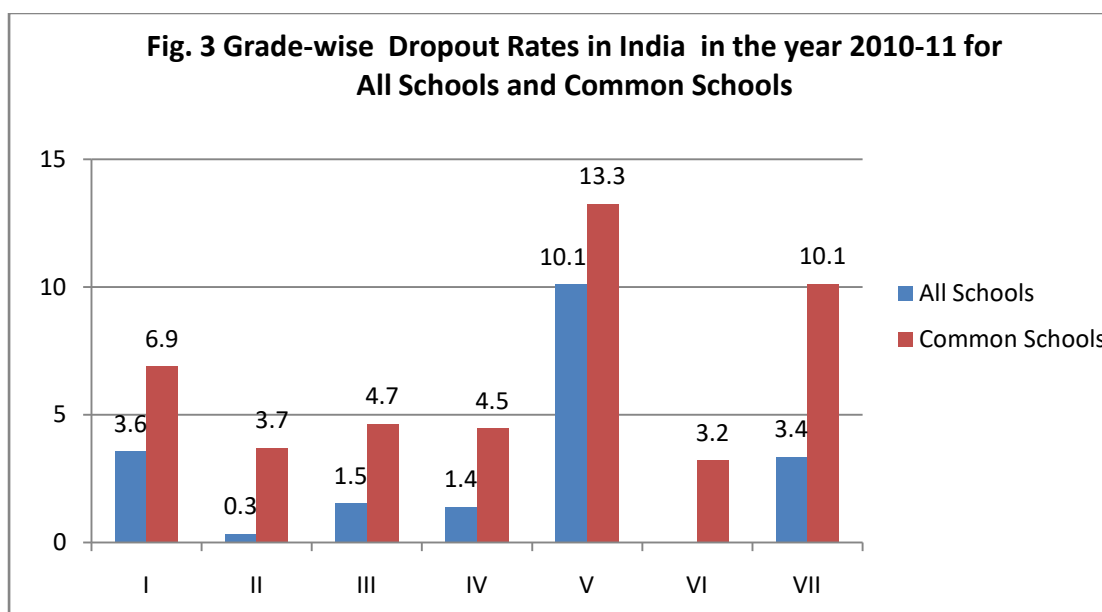
**Table 6.2. Grade-wise dropout rates for 2010-11 based on the data of Common Schools of the years (2010-11 and 2011-12)**

Sl. No.	State	Dropout Rate in Grades						
		I	II	III	IV	V	VI	VII
1	A&N Islands	0.2	0.8	-0.8	-0.4	-1.9	3.1	1.7
2	Andhra Pradesh	9.2	4.7	5.2	2.7	8.6	3.8	10.1
3	Arunanchal Pradesh	35.6	11.1	7.2	-3.0	1.4	2.3	-0.6
4	Assam	19.4	11.7	10.5	9.0	3.6	5.5	1.6
5	Bihar	4.3	0.0	4.0	4.4	18.9	1.6	4.5
6	Chandigarh	-9.6	-10.0	-5.8	-4.9	-5.0	-0.2	-0.8
7	Chhattisgarh	8.9	3.4	3.4	2.4	5.9	1.8	1.6
8	D&N Haveli	4.2	1.3	2.9	1.4	2.5	2.1	2.5
9	Daman	0.6	3.1	4.4	4.0	0.9	1.0	2.0
10	Delhi	-5.6	-5.0	-3.5	-6.1	-1.9	0.2	-2.4
11	Goa	3.4	0.1	0.0	-12.3	2.4	3.6	2.9
12	Gujarat	4.9	1.9	2.1	2.0	3.8	3.7	57.9
13	Haryana	-0.2	-1.3	-0.3	-2.0	3.5	0.8	-1.8
14	Himachal Pradesh	2.2	0.2	-0.2	-0.1	1.5	0.9	0.9
15	Jammu & Kashmir	15.2	10.8	10.0	7.7	12.1	4.9	3.9
16	Jharkhand	14.6	8.6	9.7	8.2	22.5	7.0	5.8
17	Karnataka	4.0	1.1	0.6	0.7	3.8	2.1	73.3
18	Kerala	1.2	0.6	1.1	-2.0	-0.2	0.2	2.3
19	Lakshadweep	3.7	1.7	1.1	2.0	-1.6	-0.5	-4.8
20	Madhya Pradesh	9.7	6.6	6.5	6.0	13.1	7.6	7.2
21	Maharashtra	3.2	2.0	1.4	1.7	1.0	0.9	5.8
22	Manipur	16.2	14.8	5.9	5.1	15.6	2.7	3.3
23	Meghalaya	23.5	11.1	13.8	16.0	5.2	4.5	13.6
24	Mizoram	13.3	2.0	3.8	9.2	4.7	4.3	13.7
25	Nagaland	3.4	4.7	7.3	9.2	6.5	2.9	3.0
26	Orissa	4.2	3.6	4.5	4.1	11.1	2.3	5.0
27	Puducherry	1.0	-0.5	-0.1	0.2	-2.8	0.4	0.7
28	Punjab	6.2	0.5	1.2	-1.0	1.1	0.9	-2.6
29	Rajasthan	11.4	6.9	7.9	2.5	8.6	2.6	-2.9
30	Sikkim	10.4	2.9	2.0	3.0	2.0	5.0	5.5
31	Tamilnadu	2.2	0.3	0.5	-0.7	2.6	1.6	-1.1
32	Tripura	5.4	4.9	6.4	6.1	8.1	4.8	4.4
33	Uttar Pradesh	4.2	4.9	8.4	8.8	36.1	3.7	4.3
34	Uttarakhand	7.0	3.1	4.1	3.0	7.2	2.5	1.7
35	West Bengal	9.9	3.7	1.1	9.1	8.2	5.6	6.3
	<b>All India</b>	<b>6.9</b>	<b>3.7</b>	<b>4.7</b>	<b>4.5</b>	<b>13.3</b>	<b>3.2</b>	<b>10.1</b>



Fig. 3 shows comparison of All India grade-wise dropout rates derived from the data of all schools and common schools for the year 2010-11. The trend is similar to that of the years 2008-09 and 2009-10 shown in Fig. 1 and 2. The dropout rate is highest in grade 5 and quite high in grade 7 also. Many children studying in primary schools are not able to go to grade 6 after grade 5 due to lack of facility for upper primary education in the same village or at a reasonable distance. In some states, the upper primary education was only up to grade 7 and grade 8 was a part of secondary school. In these states there was transition from upper primary to secondary after grade 7, which became a factor in reduction of dropout rates after grade 7. In grade 6 the dropout rate was nil when the data of all schools was used.

It may be noted that the state to state variations are very large. The all India figures of dropout rate hide large the variations that exist across the states.



### 6.3 Average Dropout rates in 2010-11

Table 6.3, which is similar to Tables 4.3 and 5.3, shows the average dropout rates for primary and elementary levels for the year 2010-11 based on the data of 2010-11 and 2011-12. The average dropout rates were derived under both the conditions (a) when the data of all schools was used and (b) when the data of common schools was used.

**Table 6.3: Average Dropout Rate for Primary and Elementary levels for 2010-11 based on DISE data of all Schools and the data of common Schools of the years 2010-11 & 2011-12**

S. No.	States	All Schools		Common Schools	
		I-V	I-VIII	I-V	I-VIII
1	A&N Islands	-1.9	13.0	-0.4	14.6
2	Andhra Pradesh	4.8	14.9	6.2	16.4
3	Arunanchal Pradesh	15.1	21.4	14.8	20.9
4	Assam	12.0	19.9	11.7	15.1
5	Bihar	5.0	16.2	5.7	16.7
6	Chandigarh	-0.3	6.6	-0.3	7.5
7	Chhattisgarh	3.0	12.3	4.9	14.0
8	D&N Haveli	2.0	15.0	2.5	15.4
9	Daman & Diu	2.0	12.8	2.6	13.4

S. No.	States	All Schools		Common Schools	
		I-V	I-VIII	I-V	I-VIII
10	Delhi	-5.2	9.3	-4.4	10.0
11	Goa	-5.3	10.6	-1.1	13.8
12	Gujarat	2.0	16.7	3.0	17.7
13	Haryana	-4.7	7.5	-0.1	11.6
14	Himachal Pradesh	0.1	15.2	0.7	15.8
15	Jammu & Kashmir	5.2	16.0	11.3	20.2
16	Jharkhand	11.0	21.2	12.6	22.3
17	Karnataka	1.1	6.0	2.0	15.4
18	Kerala	-17.2	3.5	0.1	15.7
19	Lakshadweep	1.3	12.5	1.3	11.4
20	Madhya Pradesh	5.5	15.3	8.3	17.9
21	Maharashtra	0.5	12.0	1.9	13.2
22	Manipur	11.2	19.0	12.1	19.7
23	Meghalaya	13.0	19.3	15.1	20.6
24	Mizoram	5.8	9.3	7.0	10.5
25	Nagaland	6.7	18.0	6.0	17.5
26	Orissa	5.0	16.7	5.4	17.0
27	Puducherry	-1.0	12.5	-0.4	12.9
28	Punjab	2.1	13.6	1.8	13.5
29	Rajasthan	4.3	16.0	7.8	18.7
30	Sikkim	4.8	15.4	4.3	17.0
31	Tamil Nadu	0.3	12.5	1.0	13.3
32	Tripura	4.4	15.2	6.2	16.4
33	Uttar Pradesh	1.2	8.9	11.9	19.0
34	Uttarakhand	2.5	16.5	4.9	18.5
35	West Bengal	5.6	23.8	6.6	24.7
	<b>All India</b>	<b>3.3</b>	<b>14.2</b>	<b>6.5</b>	<b>17.3</b>

The All-India average dropout rate at primary level based on the data of all schools declined from 6.0 to 3.3 between 2009-10 and 2010-11, while the average dropout rate based on the data of common schools remained almost the same (6.7 in 2009-10 and 6.5 in 2010-11). The difference between average dropout rates at primary level derived from the data of all schools and the data of common schools was large in Haryana, Jammu & Kashmir, Kerala and Uttar Pradesh. In these states the average dropout rates became much higher and more realistic when the data of common schools was used. The average dropout rates for the primary level of education based on the data of common schools are the same as are reported for the year 2010-11 in the NUEPA publication, entitled *Elementary Education in India: Progress towards UEE (DISE 2011-12)*.

The average dropout rate for elementary level (classes 1 to 8), had declined slightly between 2009-10 and 2010-11. It was 14.2% when the data of all schools was used and 17.3% when the data of common schools was used. The states, where the difference between the two was large, were Haryana, Jammu & Kashmir, Karnataka, Kerala and Uttar Pradesh. In Karnataka, where the elementary level ended in grade 7; the coverage of schools having grade 8 was apparently inadequate. The low average dropout rate based on the data of all schools in the states like Kerala, Karnataka, Haryana and Uttar Pradesh do not appear to be realistic.

## 7. Grade-wise and average dropout rates in 2011-12

In this Section the grade-wise and average dropout rates are presented for the year 2011-12 for all the states using the data of all schools as well as common schools. The tables are similar to the tables presented in Sections 4, 5 and 6 for the years 2008-09, 2009-10 and 2010-11.

### 7.1 Grade-wise Dropout rates based on the data of all schools of 2011-12 and 2012-13

Table 7.1 shows the grade-wise dropout rates for the year 2011-12 based on the DISE data of all the schools of the years 2011-12 and 2012-13. These were derived in the same way as the dropout rates reported in Tables 4.1, 5.1 and 6.1. The dropout rates are negative in all the grades in Chandigarh, Goa and Kerala, and in most of the grades in Delhi, Haryana and Tripura. It appears that a large number of children were admitted directly in grades other than grade 1 in 2012-13. The problem of very high dropout rates from primary classes continues to remain serious in North-Eastern states. Also in Bihar, Jharkhand and Uttar Pradesh, the dropout rate was very large (over 19%) between grade 5 and grade 6, as a result of which the dropout rate in grade 5 for the whole country became as high as 11.25%. On comparing the all India dropout rates of 2011-12 with those of 2010-11 (both based on the data of all schools), we find that there was some increase in the dropout rate in all the grades in 2011-12; only in grade 7 there was some decrease.

**Table 7.1: Grade-wise dropout rates for 2011-12 based on the data of all Schools of the years 2011-12 and 2012-13**

Sl. No.	State	Dropout Rate In Grades						
		I	II	III	IV	V	VI	VII
1	A & N Islands	0.68	0.02	-0.43	-0.82	-0.11	1.58	1.90
2	Andhra Pradesh	10.23	4.46	4.99	2.36	5.64	2.12	7.87
3	Arunachal Pradesh	34.92	15.73	12.16	8.04	8.29	2.60	2.02
4	Assam	16.68	7.96	6.49	5.10	4.41	6.03	2.95
5	Bihar	12.19	10.53	14.02	14.75	26.29	12.12	12.31
6	Chandigarh	-7.66	-4.04	-0.92	-2.52	-1.91	-0.67	-0.91
7	Chhattisgarh	4.93	2.48	2.35	1.30	4.61	0.86	0.11
8	Dadra & Nagar Haveli	-2.20	-1.48	-1.70	-0.97	1.69	0.94	1.66
9	Daman & Diu	2.31	0.63	2.63	-1.15	-1.07	5.00	6.15
10	Delhi	-5.11	-2.12	-0.70	-3.34	-0.52	0.12	-2.58
11	Goa	-8.20	-9.57	-9.65	-8.21	-5.56	-3.78	-5.98
12	Gujarat	0.31	2.00	3.28	1.31	3.11	3.57	61.92
13	Haryana	-4.21	-4.14	-3.04	-4.76	0.42	-3.64	-4.96
14	Himachal Pradesh	-0.89	-0.50	-0.82	-0.29	2.21	0.17	0.93
15	Jammu & Kashmir	14.55	7.44	5.89	3.77	8.47	3.19	1.90
16	Jharkhand	8.65	2.17	4.72	3.14	19.44	3.64	1.14
17	Karnataka	2.66	2.47	-1.40	-1.98	3.63	2.23	9.57
18	Kerala	-12.07	-10.48	-10.05	-9.74	-8.23	-7.31	-4.05
19	Lakshadweep	2.78	0.37	0.18	1.47	2.25	3.08	4.35
20	Madhya Pradesh	6.28	5.81	5.71	5.20	8.36	2.18	2.27
21	Maharashtra	0.25	0.30	0.45	1.22	0.70	0.74	4.53
22	Manipur	11.27	12.35	3.65	0.35	13.65	-3.90	-3.47
23	Meghalaya	26.39	10.35	12.35	13.82	-5.45	9.81	9.19

Sl. No.	State	Dropout Rate In Grades						
		I	II	III	IV	V	VI	VII
24	Mizoram	16.19	11.01	8.17	11.16	3.70	1.95	10.59
25	Nagaland	3.26	5.43	6.80	6.00	6.22	3.98	5.31
26	Odisha	3.59	3.67	4.31	4.39	10.54	3.15	4.41
27	Puducherry	1.36	0.28	0.17	0.52	-1.19	0.51	0.83
28	Punjab	6.19	1.33	0.99	-1.89	0.58	0.07	-0.64
29	Rajasthan	7.67	5.11	4.40	0.67	9.46	0.96	-1.21
30	Sikkim	6.28	0.01	1.05	1.04	3.23	5.11	2.09
31	Tamil Nadu	1.77	-1.10	-0.99	-2.05	4.94	2.39	0.38
32	Tripura	-1.00	-1.67	-0.57	-1.26	5.23	3.38	5.36
33	Uttar Pradesh	2.17	2.07	4.80	4.47	24.46	-8.44	-10.51
34	Uttarakhand	9.68	2.67	2.92	1.10	4.14	-1.38	-2.36
35	West Bengal	10.03	4.20	2.76	7.62	7.08	5.08	6.09
	<b>India</b>	<b>5.80</b>	<b>3.38</b>	<b>4.20</b>	<b>3.88</b>	<b>11.25</b>	<b>1.16</b>	<b>1.31</b>

## 7.2 Grade-wise Dropout rates in 2011-12 based on the data of common schools

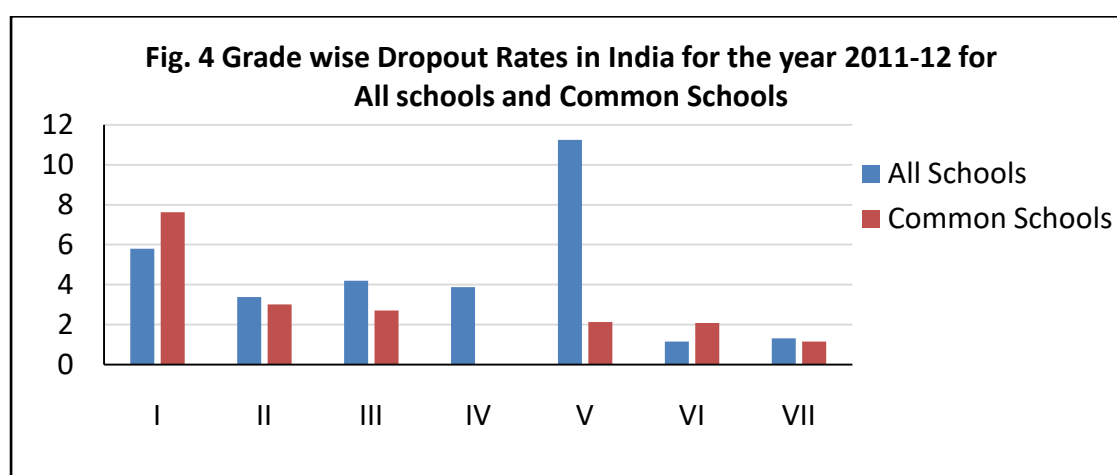
Table 7.2 shows the grade-wise dropout rates for 2011-12 based on the data of those schools that had supplied the enrolment and repeaters data for both the years. This table is similar to Tables 6.2. In this case also the dropout rates were negative in a few grades in some of the states such as Assam and Odisha. The dropout rate is much less than what was found when the data of all schools was used, in particular in grade 5 of Uttar Pradesh. It appears that the schools having grade 6 were under-enumerated in 2012-13. The dropout rate was very high in Grade 1 in Tamil Nadu (27.4%); also it was quite high (over 15%) in some other states/ UTs like Tripura, Meghalaya, Mizoram, Delhi, Sikkim and Dadra and NH. Again, in grade 5, the dropout rate was very high (20% or more) in Andhra Pradesh and some small states/ UTs like Mizoram, Sikkim, Lakshadweep and Dadra & NH. Such high dropout rates are puzzling when the data of common schools are used.

**Table 7.2: Grade-wise dropout rates for 2011-12 based on the data of Common Schools based on the data of the years 2011-12 and 2012-13**

Sl. No.	State	Dropout Rate in Grades						
		I	II	III	IV	V	VI	VII
1	A&N Islands	15.46	7.98	6.11	3.87	8.41	3.35	2.02
2	Andhra Pradesh	10.69	4.39	6.66	5.00	21.39	6.40	5.11
3	Arunachal Pradesh	4.01	2.45	-1.46	-2.02	3.55	2.22	9.73
4	Assam	0.38	0.07	-0.27	-1.68	-1.32	-1.37	0.14
5	Bihar	2.78	0.37	0.18	1.47	2.25	3.08	4.35
6	Chandigarh	6.20	5.81	5.60	5.11	9.55	3.25	3.34
7	Chhattisgarh	3.16	2.56	2.37	3.20	2.18	2.16	7.08
8	D&N Haveli	19.31	18.87	10.17	7.23	19.87	3.40	2.97
9	Daman & Diu	27.43	11.50	13.67	16.34	-0.86	14.75	16.56
10	Delhi	16.62	11.33	8.55	11.68	4.41	2.75	10.87
11	Goa	0.89	3.35	4.38	2.45	7.08	5.70	6.88
12	Gujarat	4.52	4.40	4.68	4.62	10.68	3.41	5.41
13	Haryana	1.72	0.63	0.48	0.77	-0.88	0.67	1.04
14	Himachal Pradesh	7.67	3.02	2.70	-0.08	2.13	2.09	1.15
15	Jammu & Kashmir	11.42	8.81	7.96	4.36	11.47	3.43	1.12

Sl. No.	State	Dropout Rate in Grades						
		I	II	III	IV	V	VI	VII
16	Jharkhand	9.61	2.30	2.79	2.61	5.56	5.60	2.26
17	Karnataka	1.89	-1.03	-0.95	-2.05	6.87	4.37	2.35
18	Kerala	4.16	2.79	3.35	1.70	4.44	3.58	4.64
19	Lakshadweep	8.16	7.81	10.28	10.16	33.76	5.23	4.38
20	Madhya Pradesh	10.31	3.47	4.29	2.74	6.61	1.46	0.74
21	Maharashtra	11.82	6.06	4.27	8.80	7.55	5.35	6.29
22	Manipur	8.57	6.01	6.69	6.32	14.65	4.82	5.34
23	Meghalaya	15.46	7.98	6.11	3.87	8.41	3.35	2.02
24	Mizoram	10.69	4.39	6.66	5.00	21.39	6.40	5.11
25	Nagaland	4.01	2.45	-1.46	-2.02	3.55	2.22	9.73
26	Odisha	0.38	0.07	-0.27	-1.68	-1.32	-1.37	0.14
27	Puducherry	2.78	0.37	0.18	1.47	2.25	3.08	4.35
28	Punjab	6.20	5.81	5.60	5.11	9.55	3.25	3.34
29	Rajasthan	3.16	2.56	2.37	3.20	2.18	2.16	7.08
30	Sikkim	19.31	18.87	10.17	7.23	19.87	3.40	2.97
31	Tamilnadu	27.43	11.50	13.67	16.34	-0.86	14.75	16.56
32	Tripura	16.62	11.33	8.55	11.68	4.41	2.75	10.87
33	Uttar Pradesh	0.89	3.35	4.38	2.45	7.08	5.70	6.88
34	Uttarakhand	4.52	4.40	4.68	4.62	10.68	3.41	5.41
35	West Bengal	1.72	0.63	0.48	0.77	-0.88	0.67	1.04
	<b>All India</b>	<b>7.67</b>	<b>3.02</b>	<b>2.70</b>	<b>-0.08</b>	<b>2.13</b>	<b>2.09</b>	<b>1.15</b>

From Fig. 4 one can see at a glance the dropout rate was very high when the data of all schools was used, but quite low when the data of common schools was used. Unlike the previous years, most upper primary schools now had grade 8 as the last grade and so the children who completed primary education continued schooling up to grade 8. The dropout rate continued to remain relatively higher in grade I compared to other grades (except grade 5) as was the case in the previous years.



### 7.3 Average Dropout rates in 2011-12

Table 7.3, which is similar to Tables 4.3, 5.3 and 6.3, shows the average dropout rates for primary and elementary levels for the year 2011-12 based on the data of 2011-12 and 2012-13. The average dropout rates were derived under both the conditions (a) when the data of all

schools was used and (b) when the data of common schools was used. The average dropout rate at primary level for the country was 5.62% when the data of all schools was used which was much less than the average dropout rate (8.37%) obtained when the data of common schools was used. Also we find that in a few states/ UTs like Kerala, Goa, Gujarat, Delhi, Chandigarh, Haryana and Himachal Pradesh, the average dropout rate was still negative which as explained in the previous sections, could be due to late entrants in different grades in 2012-13 or faulty enrolment data. But, except in Kerala and Goa, most of the negative dropout rates were quite low.

The average dropout rates for the primary level of education based on the data of all schools are the same as are reported for the year 2011-12 in the NUEPA publication, entitled *Elementary Education in India: Progress towards UEE (DISE 2012-13)*. It may be noted that NUEPA decided not to report the average dropout rates based on the data of common schools from this year. In the previous three years the average dropout rates were derived from the enrolment data of common schools. The practice of reporting dropout rates based on the data of common was given up from this year as it was felt that now almost all schools are covered under DISE and so there was no longer any need of deriving the dropout rates from the data of only those schools that have supplied enrolment data in both the years.

It is interesting to note that the average dropout rate at the elementary level (grades 1 to 8) was not very different from the average dropout rate for primary level (grades 1 to 5). It means that, unlike the previous year, very few dropped out after entering grade 6; most of them continued schooling up to grade 8.

**Table 7.3: Average Dropout Rate for Primary and Elementary levels for 2011-12 based on DISE data of all Schools and the data of common Schools of the years 2011-12 & 2012-13**

S. No.	States	All Schools		Common Schools	
		I-V	I-VIII	I-V	I-VIII
1	A&N Islands	-0.13	0.43	0.84	1.12
2	Andhra Pradesh	5.65	5.47	6.42	6.59
3	Arunanchal Pradesh	18.69	15.31	20.59	17.48
4	Assam	8.84	7.82	10.17	9.11
5	Bihar	15.28	14.70	16.20	15.85
6	Chandigarh	-3.26	-2.54	-3.64	-2.74
7	Chhattisgarh	3.14	2.44	4.93	4.11
8	D&N Haveli	-0.93	-0.33	1.09	1.21
9	Daman & Diu	0.72	2.06	4.50	5.96
10	Delhi	-2.33	-2.01	-1.50	-1.09
11	Goa	-8.21	-7.18	-10.06	-7.31
12	Gujarat	-1.26	-1.01	2.92	3.26
13	Haryana	-3.16	-3.45	2.38	2.18
14	Himachal Pradesh	-0.06	0.12	1.00	1.02
15	Jammu & Kashmir	8.37	6.84	8.75	7.15
16	Jharkhand	7.51	6.41	9.51	8.70
17	Karnataka	2.61	3.13	3.49	3.98
18	Kerala	-10.06	-8.69	-0.60	-0.60
19	Lakshadweep	1.44	2.25	1.44	2.25
20	Madhya Pradesh	6.25	5.26	6.41	5.65
21	Maharashtra	0.58	1.15	2.69	3.22
22	Manipur	8.61	6.05	15.54	12.96

S. No.	States	All Schools		Common Schools	
		I-V	I-VIII	I-V	I-VIII
23	Meghalaya	13.91	12.98	15.78	15.74
24	Mizoram	10.59	9.58	11.04	10.05
25	Nagaland	5.46	5.27	3.48	4.14
26	Orissa	5.20	4.85	5.69	5.38
27	Puducherry	0.21	0.35	0.53	0.63
28	Punjab	1.55	1.05	3.19	2.76
29	Rajasthan	5.51	4.23	8.91	7.39
30	Sikkim	2.24	2.64	4.49	4.39
31	Tamil Nadu	0.55	0.79	0.99	1.69
32	Tripura	0.12	1.33	3.30	3.53
33	Uttar Pradesh	7.13	3.92	13.51	11.83
34	Uttarakhand	4.29	2.69	5.62	4.43
35	West Bengal	6.56	6.32	7.95	7.43
	<b>All India</b>	<b>5.62</b>	<b>4.58</b>	<b>8.37</b>	<b>1.12</b>

## 8. Grade-wise and average dropout rates in 2012-13 and changes in the Dropout rate between 2008-09 and 2012-13

In this Section the grade-wise and average dropout rates are presented for the year 2012-13 for all the states using the data of all schools. The dropout rates for common schools are no longer being reported by NUEPA, but when we calculated the grade-wise dropout rates based on the data of common schools, we got some absurd results. However, not being reported since NUEPA had given up the practice of reporting dropout rates based on the data of common schools as it was felt that almost all schools are now covered under DISE and so only the dropout rates based on the data of all schools need to be reported. The tables in this Section are similar to those presented in Sections 4, 5, 6 and 7 for the years 2008-09, 2009-10 and 2010-11 and 2011-12 with the exception that the tables based on the data of common schools are no longer reported. Lastly, the changes in grade-wise and average dropout rates over the last 5 years are also discussed.

### 8.1 Grade-wise Dropout rates based on the data of all schools of 2012-13 and 2013-14

Table 8.1 shows the grade-wise dropout rates for the year 2012-13 based on the DISE data of all the schools of the years 2012-13 and 2013-14. These were derived in the same way as the dropout rates reported in Tables 4.1, 5.1, 6.1 and 7.1. The dropout rates in grades 1 to 5 are the same as are reported in the *Flash Statistics: Elementary Education in India – Progress towards UEE for 2013-14*, produced by NUEPA. We find that the dropout rates were still negative in a few states and UTs (Bihar, Chandigarh, Delhi, Kerala and Dadra & Nagar Haveli) and very high in most of the North Eastern states like Arunachal Pradesh, Mizoram and Meghalaya, particularly in grade 1. In Jharkhand and Uttar Pradesh the dropout rate was very high in grade 5, indicating that a large number of children could not go to grade 6 after completing primary education. This could be due to lack of facilities for upper primary education or incomplete coverage of upper primary schools in DISE.

Since NUEPA has already given up the practice of reporting dropout rates based on the enrolment data of common schools, for the year 2012-13 we are reporting the grade-wise and average dropout rates based only on the data of all schools as shown in Table 8.1.

**Table 8.1 Grade-wise dropout rates for 2012-13 based on the data of all schools of the years 2012-13 and 2013-14**

Sl. No.	State	Dropout Rate in Grades						
		I	II	III	IV	V	VI	VII
1	A & N Islands	-0.02	1.23	0.30	0.71	1.14	0.65	1.15
2	Andhra Pradesh	7.21	1.45	2.48	0.44	3.99	0.89	5.62
3	Arunachal Pradesh	32.63	13.41	8.32	5.99	1.55	6.75	4.07
4	Assam	11.94	4.53	3.69	3.10	6.53	3.07	2.45
5	Bihar	-7.19	-7.99	-3.24	-2.34	12.75	-2.54	-3.26
6	Chandigarh	-11.63	-7.11	-4.40	-3.50	-3.36	-0.67	0.53
7	Chhattisgarh	4.96	3.15	3.52	2.92	6.25	3.01	3.45
8	Dadra & Nagar Haveli	-4.11	0.62	0.05	0.19	0.32	1.59	1.27
9	Daman & Diu	-7.44	-2.93	-3.08	-5.71	-4.58	-3.79	-2.27
10	Delhi	-8.95	-4.27	-2.30	-4.93	-1.00	-0.32	-2.40
11	Goa	-0.11	0.55	0.46	-0.45	-0.65	-0.16	0.18
12	Gujarat	1.50	2.08	1.43	3.61	3.23	2.55	4.31
13	Haryana	0.31	1.03	1.98	0.28	2.86	-0.54	-1.06
14	Himachal Pradesh	0.52	0.22	0.37	-0.11	1.27	0.16	-0.06
15	Jammu & Kashmir	12.14	5.45	4.06	2.10	6.21	2.31	1.46
16	Jharkhand	6.77	2.78	5.30	3.63	18.35	0.66	-0.31
17	Karnataka	3.94	2.06	1.63	-0.98	1.76	1.61	4.90
18	Kerala	-0.39	-2.29	-2.12	-2.42	-2.02	-1.79	-1.40
19	Lakshadweep	3.97	1.16	1.01	3.40	2.99	2.30	6.14
20	Madhya Pradesh	6.49	4.19	5.40	4.96	9.58	5.35	5.07
21	Maharashtra	1.05	0.55	0.48	1.93	0.80	0.70	3.96
22	Manipur	13.38	10.62	5.15	6.28	12.03	2.28	2.65
23	Meghalaya	22.53	6.63	8.89	9.07	-6.70	4.56	5.90
24	Mizoram	30.56	23.76	25.77	21.58	15.77	13.78	23.57
25	Nagaland	5.15	5.94	6.23	6.97	12.00	4.48	6.58
26	Odisha	2.15	2.18	3.05	1.90	8.93	2.35	4.03
27	Puducherry	1.11	0.27	0.46	0.58	-0.71	0.78	0.91
28	Punjab	5.59	1.05	1.94	-0.77	1.93	0.61	-0.21
29	Rajasthan	6.55	8.81	8.91	5.12	10.58	3.44	2.13
30	Sikkim	5.78	1.72	4.34	1.51	4.60	4.13	3.37
31	Tamil Nadu	5.94	3.43	3.48	2.90	4.53	-1.41	-2.13
32	Tripura	1.26	0.31	1.44	1.04	7.30	3.23	4.30
33	Uttar Pradesh	6.92	5.65	9.13	9.21	22.52	-1.24	-2.12
34	Uttarakhand	4.60	-0.74	-0.36	-1.71	3.79	-1.11	-2.10
35	West Bengal	12.38	3.07	1.58	7.66	5.05	3.83	3.91
	<b>India</b>	<b>4.83</b>	<b>2.28</b>	<b>3.58</b>	<b>3.49</b>	<b>9.47</b>	<b>0.99</b>	<b>1.46</b>

## 8.2 Average Dropout rates in 2012-13

Table 8.2, which is similar to Tables 4.3, 5.3, 6.3 and 7.3, shows the average dropout rates for primary and elementary levels for the year 2012-13 based on the enrolment and repeaters data of 2012-13 and 2013-14. The average dropout rates were derived on the basis of actual enrolment and repeaters data of all the schools covered under DISE in these two years. We find that the average dropout rates calculated from the data of all schools are still negative in Bihar, Chandigarh, Daman & Diu, Delhi and Kerala. The dropout rate was very high (24.1%) in Mizoram but substantial (between 10% and 15%) in Arunachal Pradesh, Meghalaya and Uttar Pradesh also. The average dropout rates are the same as are reported in the DISE Flash Statistics of 2013-14 *Elementary Education in India: Progress towards UEE (DISE 2013-14)* published by NUEPA. For the country as a whole, the average dropout rate is 4.67% at the primary level which is about 1 percentage point less than that of 2011-12. The average



dropout rate for the elementary level is also less than that of 2011-12 and much less than that of the years 2008-09, 2009-10 and 2010-11. This clearly indicates that the dropout rates in upper primary classes are very low and also the transition rate from primary to upper primary level has improved substantially.

**Table 8.2: Average Dropout Rate for Primary and Elementary levels for 2012-13 based on the data of all Schools of the years 2012-13 & 2013-14**

S. No.	States	All Schools	
		I-V	I-VIII
1	A&N Islands	0.68	0.74
2	Andhra Pradesh	3.18	3.20
3	Arunachal Pradesh	15.16	12.97
4	Assam	6.24	5.42
5	Bihar	-1.78	-2.01
6	Chandigarh	-5.75	-4.04
7	Chhattisgarh	4.14	3.90
8	D&N Haveli	-0.18	0.30
9	Daman & Diu	-4.76	-4.31
10	Delhi	-4.16	-3.35
11	Goa	-0.03	-0.02
12	Gujarat	0.74	1.11
13	Haryana	1.29	0.73
14	Himachal Pradesh	0.45	0.34
15	Jammu & Kashmir	6.30	5.17
16	Jharkhand	7.21	5.64
17	Karnataka	2.97	3.22
18	Kerala	-1.85	-1.77
19	Lakshadweep	2.50	3.06
20	Madhya Pradesh	6.11	5.88
21	Maharashtra	0.97	1.35
22	Manipur	9.86	8.31
23	Meghalaya	10.14	9.08
24	Mizoram	24.11	22.81
25	Nagaland	7.07	6.71
26	Orissa	3.56	3.46
27	Puducherry	0.34	0.49
28	Punjab	1.99	1.51
29	Rajasthan	7.97	6.77
30	Sikkim	3.60	3.64
31	Tamil Nadu	4.06	2.39
32	Tripura	2.22	2.62
33	Uttar Pradesh	10.28	7.79
34	Uttarakhand	1.16	0.43
35	West Bengal	6.30	5.69
	<b>All India</b>	<b>4.67</b>	<b>3.82</b>

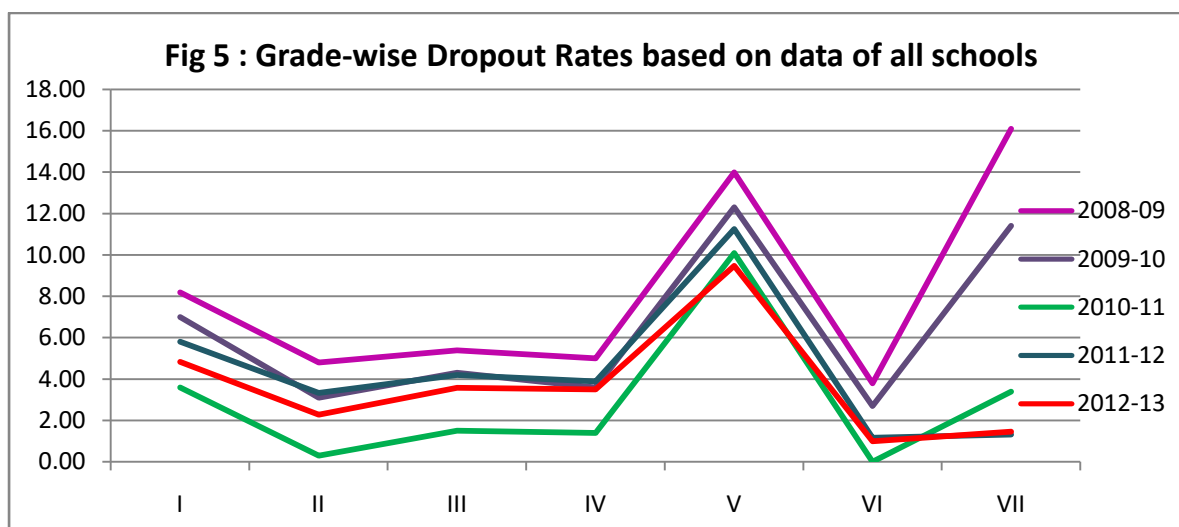
### 8.3. Changes in grade-wise and average dropout rates between 2008-09 and 2012-13

Fig. 5 shows the changes in dropout rate in different grades over the 5 years period 2008-09 to 2012-13 in the country (total of all the states and UTs) based on the data of all schools. We find that the dropout rates in different grades declined in 2010-11 but increased again after that. The dropout rates have been highest in grade 5 in all the years which is the terminal grade of primary level. Very high dropout rates in grade 7 in the years 2008-09 and 2009-10, were apparently due to several states not having grade 8 as part of elementary stage in these years, but when all the states made grade 8 a part of upper primary level, the dropout rate in

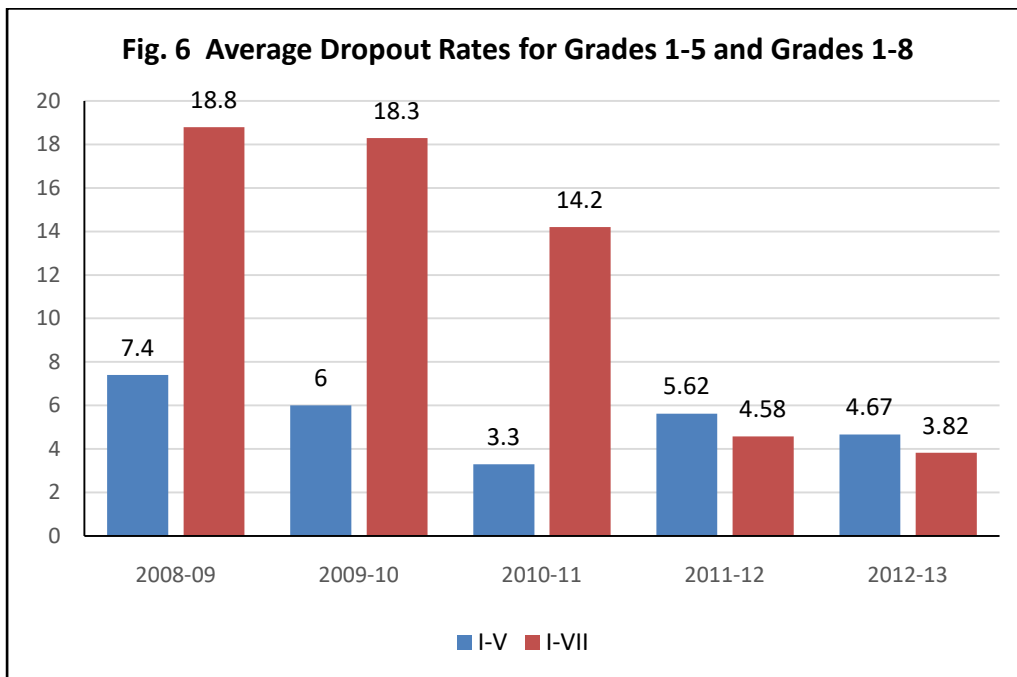
grade 7 declined substantially. This decline could also be due to large improvement in coverage of schools having upper primary classes after 2010-11. In all the 5 years, the dropout rates were less than 5% in grades 2, 3, 4 and 6; in 2012-13 these became less than 5% in grade 7 also. The largest decline in one year was in grade 7, from 11.4% in 2009-10 to 3.4% in 2010-11.

**Table 8.3 Grade-wise Dropout Rates based on data of all schools (2008-09 to 2012-13)**

Year	I	II	III	IV	V	VI	VII
2008-09	8.20	4.80	5.40	5.00	14.00	3.80	16.10
2009-10	7.00	3.10	4.30	3.60	12.30	2.70	11.40
2010-11	3.60	0.30	1.50	1.40	10.10	0.00	3.40
2011-12	5.80	3.32	4.20	3.88	11.25	1.16	1.31
2012-13	4.83	2.28	3.58	3.49	9.47	0.99	1.46



The changes in average dropout rate for primary level (grades 1 to 5) and elementary level (grades 1 to 8) are shown in Fig. 6. The average dropout rate at primary level in the country as a whole declined gradually from 7.4% in 2008-09 to 3.3% in 2010-11 and increased again to 5.62% in 2011-12 and then again declined to 4.67% in the following year. The average dropout rate for the entire elementary level was very high (above 14% up to 2010-11) but became less than 4% after that. The large decline in dropout rate after 2010-11 is mainly due to better coverage of schools with upper primary classes. The reason for average dropout rate at elementary level becoming less than that at primary level is due to the dropout rates in the upper primary classes being less than the dropout rate in primary classes. But it has to be kept in mind that there is large state to state variation in average dropout rates which do not get reflected in the all-India average dropout rates.



### 9. Cohort Dropout rates at Primary Level derived under different Assumptions

As already discussed earlier, the Cohort Dropout rate is an indicator of the magnitude of dropping out of children between grade 1 and the last grade of the cycle. Out of the children who after taking admission in grade I discontinue schooling without completing the last grade, are dropouts from the grade I cohort and those who continue to remain in school till completion of the last grades are survivors. The survival or retention rate is actually the percentage of children of grade I cohort who do not drop out before reaching or completing the last grade and so it is 100 minus Cohort Dropout rate. Grade 5 was treated as the terminal grade for primary level in all the states while calculating the cohort dropout rate, although a few states had only grades 1 to 4 at the primary stage. So far as grades 1 to 4 are concerned, the children who were neither promoted to the next grade nor repeated the same grade, were considered as dropouts. In the case of grade 5, there were two options: (a) treating those children as non-dropouts who were in grade 5 on 30<sup>th</sup> September as promotees from grade 4 or who remained in grade 4 as repeaters; those who would have dropped out from grade 5 after 30 September are ignored and (b) treating the children of grade 5 as non-dropouts if they continued to remain in school till the end of the grade and then got promoted to grade 6 after that. If they did not go to grade 6, they were treated as dropouts from the primary level. We would have preferred to use the data on successful completers of grade 5 instead of promotees to grade 6, but in the absence of that data, the data on promotees to grade 6 was used to find out the dropouts from primary level under the option (b).

The Reconstructed Cohort method used for computation of Cohort Dropout rate is explained in Appendix I with an example. The flow chart shown in the Appendix was prepared using the grade-wise promotion, repetition and dropout rates, which helps in calculating the cohort dropout rate, average number of pupil-years spent in producing a graduate (successful completer of primary/elementary education) and coefficient of internal efficiency of the system. This coefficient is an indicator of the extent of wastage that occurs due to students repeating grades or dropping out from school without completing full cycle of any particular stage of education (primary or elementary).

To be specific, for computing the Cohort Dropout rate, one of the following three assumptions has to be made.

**Assumption A: Children reach the last grade (grade 5) without dropping out.** In this case it is sufficient for a child to be considered as retained or non-dropout if he/she completes grade 4 and gets promoted to grade 5 and remains in class 5 at least up to 30<sup>th</sup> September. Whether the child passes grade 5, that is, completes primary cycle successfully after entering grade 5 is not a requirement for retention. The dropout rate from class 5 (that is, dropping out after 30 September from class 5) is assumed to be zero. The dropout rates are derived from enrolment and repeaters data of all grades up to grade 5 as on 30<sup>th</sup> September. The dropout rate reported in the MHRD publication *Statistics of School Education* is conceptually of this type since the dropping out of children from grade 5 after 30 September is ignored. It is based on the enrolment data of the last grade as on 30<sup>th</sup> September.

**Assumption B: Children do not just complete the last grade but get promoted to grade 6.** In this case the data on enrolment and repeaters of grade 6 are required in order to calculate the number of promotees to grade 6. Such data are readily available and are used for computation of transition rate from primary to upper primary, which is defined as ‘number of promotees in grade 6 expressed as percentage of enrolment in grade 5 of the previous year’. When we compute retention rate at primary level using the data on promotees in grade 6 of the following year, the children who do not enter grade 6 even after completing grade 5 are treated as dropouts. The cohort dropout rate so obtained will be more than that derived in the previous case since dropping out after completion of the last grade (that is, not entering grade 6 after passing grade 5) is more common than dropping out from any other primary grade probably due to lack of access to upper primary schooling facility in some areas.

**Assumption C: Children do not only reach the last grade but pass the last grade though not necessarily enter grade 6.** In this case data on successful completers of grade 5, that is, graduates of primary cycle are required. At present these data are not available from DISE. Actually this model leads to a more accurate assessment of retention rate since only the children of grade 1 cohort who do not complete the full primary cycle successfully are treated as dropouts from the cohort. The children who drop out from grade 5 are also counted as dropouts, which is not the case under assumption A. Actually Assumption A leads to under-estimation of cohort dropout rate while Assumption B, leads to over-estimation of cohort dropout rate.

When the retention rate for the primary cycle or dropout rate for the last grade of the cycle is calculated under the above mentioned three assumptions, it will be seen that they differ considerably. But we often talk of retention or dropout rate without being specific about which of the three approaches have been adopted. The third approach is most appropriate in which completion of grade 5 and neither just reaching grade 5 nor being promoted to grade 6, is the criterion.

### **9.1 Cohort Dropout Rate for primary level in different states in 2009-10**

Under both Assumptions, A and B, the grade-wise dropout rates and cohort dropout rates for primary level can be derived from DISE data on enrolment and repeaters. It is assumed that the late entrants in grade 1 and lateral entrants in other grades are negligible compared to total enrolment in these grades. Actually when this assumption does not hold good the values of CDR get distorted and even become negative sometimes.

When the actual grade 1 cohort of 2005-06 is used for determining the retention rate or cohort dropout rate for 2009-10, the ratio of enrolment in grade 5 in 2009-10 to the enrolment in grade 1 in 2005-06 gives the retention rate that was reported in *Statistics of School Education* and also in the DISE report *Elementary Education in India: Progress towards UEE (2009-10)*. But this approach gives only a crude retention rate since no allowance is made for the extra years of schooling taken by the repeaters. Also it does not help in monitoring the changes in dropout rate that may have taken place more recently, for example if the dropout rate in grade 1 has reduced between 2005-06 and 2008-09, it is not reflected in the retention rate. But the cohort dropout rate or retention rate derived by the Reconstructed Cohort method for 2009-10 uses only the grade-wise enrolment data of 2008-09 and 2009-10 and repeaters are also accounted for. As such this approach not only gave more accurate estimates of Cohort Dropout and retention rates but was also more suitable for monitoring year to year changes in dropout rates.

Table 9.1 shows the Cohort Dropout rate (CDR) for the primary cycle for the year 2009-10 based on the 2008 and 2009 DISE data of all schools as well as common schools, for all the states and UTs and the whole country under both Assumptions A and B. The Cohort Dropout rate (CDR) under Assumption A can be interpreted as the percentage of children enrolled in grade 1 who would dropout from school before reaching grade 5. The CDR under Assumption B has to be interpreted as the percentage of grade 1 students who would drop out before getting enrolled in grade 6. The children who repeat grades but continue to remain in school till reaching grade 5 are not treated as dropouts under Assumption A. Similarly, if they get promoted to grade 6 even after 6 or more years of schooling due to repetition of grades, are not treated as dropouts under Assumption B. As already pointed out, while applying the Reconstructed Cohort method for calculating CDR for 2009-10, the actual Cohort of 2005-06 was not followed up but a hypothetical cohort was taken and the grade-wise repetition and drop-out rates of 2008-09 were used to determine the Cohort Dropout rate for the year 2009-10. In Table 9.1, the dropout rates reported in *Statistics of School Education (SSE)* for 2009-10 are also shown for comparison. Conceptually these are comparable with the CDR values calculated under Assumption A, but the two approaches differ widely in methodology and the type of data used. Apart from other shortcomings of the method used for computing dropout rate reported in SSE, the major lacuna is that the data on repeaters was not used in its calculation. Incidentally, the 'dropout rate' reported in SSE is actually a cohort dropout rate.

**Table 9.1: Cohort Dropout Rates (%) for primary level (grades 1 to 5) in 2009-10 derived under Assumptions A and B (based on data of all schools and data of common schools of the years 2008-09 and 2009-10) and Dropout rate reported in SSE (2009-10)**

	State	All Schools		Common Schools		Dropout Rate from SSE (2009-10)*
		Assumption A	Assumption B	Assumption A	Assumption B	
1	A&N Islands	-6.2	-9.6	10.9	8.1	5.0
2	Andhra Pradesh	13.5	18.4	20.3	26.0	15.8
3	Arunachal Pradesh	56.9	54.2	63.0	62.4	41.4
4	Assam	64.7	68.6	33.0	38.9	35.9
5	Bihar	39.8	56.6	38.6	55.3	42.5
6	Chandigarh	-7.9	-9.1	-9.4	-11.1	-22.8
7	Chhattisgarh	22.2	26.5	23.2	28.7	34.1
8	D&N Haveli	10.6	12.5	11.9	14.2	17.5
9	Daman& Diu	-17.8	-14.4	10.3	11.3	2.9
10	Delhi	-3.3	-4.8	2.1	1.4	13.3
11	Goa	-18.1	-15.1	21.5	24.3	-8.5

	State	All Schools		Common Schools		Dropout Rate from SSE (2009-10)*
		Assumption A	Assumption B	Assumption A	Assumption B	
12	Gujarat	6.9	10.3	14.2	18.9	25.7
13	Haryana	5.3	7.6	0.1	0.7	-1.6
14	Himachal Pradesh	9.9	12.7	10.6	13.7	0.7
15	Jammu & Kashmir	7.7	12.0	11.7	16.2	8.4
16	Jharkhand	42.9	56.3	47.3	60.4	27.1
17	Karnataka	13.0	17.7	14.3	19.2	11.1
18	Kerala	-15.9	-18.0	-2.3	-1.2	-12.5
19	Lakshadweep	0.0	1.4	16.5	20.6	11.1
20	Madhya Pradesh	29.8	38.4	28.5	37.3	21.2
21	Maharashtra	9.9	12.4	13.2	15.9	21.3
22	Manipur	50.5	61.4	32.2	42.3	36.5
23	Meghalaya	54.0	65.1	53.2	60.3	57.6
24	Mizoram	11.4	7.6	23.0	22.1	46.0
25	Nagaland	20.6	21.8	43.3	46.2	40.0
26	Orissa	17.1	28.9	18.1	29.9	26.5
27	Puducherry	-1.1	-3.9	-3.0	-6.9	-3.6
28	Punjab	-11.1	-13.6	18.3	23.4	-18.1
29	Rajasthan	33.6	41.2	36.9	44.1	50.5
30	Sikkim	6.7	13.4	16.3	23.6	18.6
31	Tamil Nadu	-3.5	-2.7	-0.8	0.7	0.4
32	Tripura	-19.0	-4.7	29.5	37.8	25.5
33	Uttar Pradesh	33.3	58.5	39.3	64.4	42.1
34	Uttarakhand	26.0	31.1	34.9	41.9	32.6
35	West Bengal	-66.7	-64.5	29.3	39.1	20.5
	<b>All India</b>	<b>22.3</b>	<b>33.5</b>	<b>28.1</b>	<b>39.8</b>	<b>28.9</b>

\*Cohort dropout rates in the last column are derived from Retention rates given in SSE report of 2009-10. These were calculated from the ratio of grade 5 enrolment of 2009-10 to grade 1 enrolment of 2005-06.

When the data of common schools (that is, the data of those schools which had supplied enrolment and repeaters data in both the years 2008-09 and 2009-10), was used the Cohort Dropout rate at all India level was higher in comparison with that derived using the data of all schools. Under Assumption A, the Cohort Dropout Rate for the country as a whole was 22.3% in 2009-10 which shows that nearly one-fifth of grade 1 students drop out before reaching grade 5. But when Assumption B is made the corresponding CDR value is found to be 33.5%, which means that from a cohort of grade 1 students nearly one-third dropped out before reaching grade 6; some dropping out before passing grade 5 while others not getting admitted to grade 6 after passing grade 5. The difference between the two values of CDR makes sense since the transition rate from grade 5 to 6 is not very high which reduces the Cohort Dropout Rate when Assumption B is made. But when we look at the cohort dropout rates of different states, we find several inconsistencies and also absurd values in some cases. The large state to state variation and absurdities in CDR values in some states got concealed in the all-India value of CDR. Since  $100 - \text{CDR}$  gives retention rate, we can infer that 71.9% children of grade 1 cohort would reach grade 5 (when grade-wise repetition and dropout rates of 2009-10 are used to estimate CDR) while 60.2% would not only reach grade 5 but would also get enrolled in grade 6.

When the data of common schools was used, the CDR for the whole country under Assumption A was 28.1% and under Assumption B, 39.8% both of which are much higher than the corresponding values of CDR when the data of all schools was used.

It may be noticed that the Cohort dropout rates that were negative in the case of some state/UTs (such as West Bengal, Punjab, Tripura, A & N Islands, Daman & Diu), when the data of all schools was used became positive and more acceptable when derived from the data of common schools. In West Bengal particularly there was serious problem with the data since the CDR was about -66% which is absurd. In the case of Chandigarh and Kerala, the cohort dropout rates continued to remain negative even when the data of common schools was used, though their values were no longer very highly negative. In the states/UTs in which CDR was negative even when the data of common schools was used, obviously there were more lateral entrants in different grades in 2009-10.

From the state-wise CDR values in Table 9.1, we find that the states in which the CDR (derived from the data of common schools under Assumption A) was positive and low (below 15%) in 2009-10 are Gujarat, Maharashtra, Karnataka, Himachal Pradesh, Haryana and Jammu & Kashmir. The states in which the values of CDR in 2009-10 were fairly high (between 15% and 25%) were: Andhra Pradesh, Goa, Mizoram, Punjab, Orissa, Chhattisgarh. The states with rather high values of CDR (between 25% and 50%) were Jharkhand, Bihar, Assam, Madhya Pradesh, Manipur, Tripura, Rajasthan, Uttarakhand, West Bengal and Uttar Pradesh. The states with very high (above 50%) CDR, were: Arunachal Pradesh, Manipur and Meghalaya. Such high values appear to be due to faulty data.

When the data of all schools was used, the distortions in CDR due to incomplete coverage of schools in 2008-09 become conspicuous when we find negative cohort dropout rates in the states/UTs like West Bengal, Punjab, Kerala, Tamil Nadu, Tripura, Goa, Delhi, Chandigarh and Daman & Diu.

Under Assumption B, the Cohort Dropout rates were much higher in most states mainly due to low transition rate from grade 5 to 6 but also due to dropping out from grade 5 after 30<sup>th</sup> September. In some states/UTs like Arunachal Pradesh, A & N Islands and Delhi, the Cohort Dropout rate under Assumption B was slightly less than that under Assumption A, which could be due to intake in grade 6 from schools not covered under DISE.

In Arunachal Pradesh, Jharkhand, Meghalaya, the CDR was quite high even when the data of common schools was used. This again appears to be due to some problems with the data as such high dropout rates are unlikely to occur since several measures had been taken in every state/UT to reduce the dropout rate.

It was of interest to compare the cohort dropout rates for the year 2009-10 derived by the Reconstructed Cohort method under Assumption A, with the 'dropout rates' of the same year reported in *Statistics of School Education (SSE)*. Both are indicators of percentage of children of grade I dropping out before reaching grade 5 derived from the data of all schools. The dropout rate for grade 1 to 5 reported in SSE is 28.9% for the country whereas it is much less, 22.3% when derived from DISE data of all schools using the Reconstructed Cohort method. It shows that the dropout rate is generally inflated when the method of calculating it is the one used by the Ministry of HRD for reporting it in SSE. However, this conclusion is not true in every state; in some states like Assam, Jharkhand, Madhya Pradesh and Manipur the opposite is true.

There is very large state to state variation in cohort dropout rate but as expected, in most states, under Assumption B the CDR is higher due to a large number of children dropping out after grade 5. Also another possible reason is low coverage of schools having upper primary classes in DISE as a result of which the dropout rate just after grade 5 shows increase.

In most states the cohort dropout rate under Assumption B was much higher than that under Assumption A (when the data of common schools is used) but there are some exceptions, for example, in Arunachal Pradesh, Delhi and Mizoram the CDR is slightly lower under Assumption B. Such a situation could be due to omission of some schools having grade 5 in DISE. Also the negative Cohort Dropout rates in Chandigarh, Puducherry, Kerala and Tamil Nadu and very low CDR in Delhi, and Haryana are most probably due to problems with data. In such cases, the retention rate would exceed 100% which is unacceptable or would be very close to 100% which too is unrealistic.

## 9.2 Cohort Dropout Rate for primary level in different states in 2010-11

Table 9.2 which is similar to Table 9.1, shows the Cohort Dropout rates at primary level under Assumptions A and B for the year 2010-11 based on DISE data of all schools as well as common schools of the years 2009 and 2010. We find that there was definite improvement in retention rate between 2009-10 and 2010-11. On the basis of data of all schools, the all India Cohort dropout rate under Assumption A is found to be 17.7% and under Assumption B, 28.1% in 2010-11 whereas these were 22.3% and 33.5% respectively in 2009-10. Under Assumption A, on the basis of data of common schools, the all India CDR reduced from 28.1% in 2009-10 to 20.3% in 2010-11 and under Assumption B, it reduced from 39.8% in 2009-10 to 31.5% in 2010-11. In other words, the retention rate in terms of percentage of children of grade 1 who would reach grade 5 (that is under Assumption A), increased from 71.9% in 2009-10 to 79.7% in 2010-11 while the percentage of those who would reach grade 6 (that is, under Assumption B) increased from 60.2% in 2009-10 to 68.5% in 2010-11. The difference between the retention rates derived under Assumptions A and B is due to dropping out of children from school between grades 5 and 6; the difference was of 11.7 percentage points in 2009-10 and of 11.2 percentage points in 2010-11. This shows only marginal improvement in transition rate between these two years at all India level.

**Table 9.2: Cohort Dropout Rates for Primary Level (grade I to 5) in 2010-11 obtained under Assumptions A and B (based on data of all schools and common schools of the years 2009-10 and 2010-11)**

S. No.	State	All Schools		Common Schools		CDR* from DISE (2010-11)	CDR* from MHRD States (2010-11)
		A	B	A	B		
1	A&N Islands	14.9	0.2	16.4	16.7	-	7.8
2	Andhra Pradesh	13.3	18.0	18.2	24.1	17.2	17.4
3	Arunachal Pradesh	58.3	60.9	56.8	59.8	55.2	43.0
4	Assam	28.9	31.5	31.0	34.6	43.9	29.9
5	Bihar	18.8	37.3	17.0	34.9	33.5	35.7
6	Chandigarh	-31.6	-39.1	-24.6	-30.5	-	-
7	Chhattisgarh	13.2	15.8	20.7	25.3	25.1	31.0
8	D&N Haveli	3.4	7.6	5.9	10.4	17.1	12.7
9	Daman & Diu	14.1	16.2	25.6	27.3	-	8.3
10	Delhi	0.2	-2.0	-1.3	-12.5	1.5	5.9
11	Goa	-3.2	-0.5	3.5	6.4	-	-
12	Gujarat	3.8	6.2	16.4	21.4	19.2	25.7
13	Haryana	-0.2	-1.0	22.0	28.0	-	9.4
14	Himachal Pradesh	-3.9	-2.6	-2.1	-0.3	6.3	3.8
15	Jammu & Kashmir	16.0	23.0	16.9	23.7	13.6	8.4
16	Jharkhand	27.7	43.2	31.1	46.4	52.3	28.4
17	Karnataka	5.8	8.8	12.5	17.2	25.2	8.9



S. No.	State	All Schools		Common Schools		CDR* from DISE (2010-11)	CDR* from MHRD States (2010-11)
		A	B	A	B		
18	Kerala	-34.5	-40.1	-7.5	-7.8	-	-
19	Lakshadweep	4.8	9.7	5.4	10.3	-	7.1
20	Madhya Pradesh	26.0	35.1	28.6	38.3	29.9	29.5
21	Maharashtra	3.0	2.7	9.3	10.2	11.4	20.3
22	Manipur	30.4	39.5	27.8	37.6	43.5	45.7
23	Meghalaya	27.1	33.4	41.1	50.2	44.0	58.4
24	Mizoram	42.1	51.7	38.6	48.2	38.4	37.9
25	Nagaland	22.8	21.7	25.1	25.0	51.3	39.9
26	Orissa	14.9	27.2	16.6	28.5	-	7.0
27	Puducherry	2.2	-0.4	5.0	2.4	1.6	-
28	Punjab	-9.1	-17.0	9.5	9.1	-	-
29	Rajasthan	40.3	47.6	38.5	45.7	50.0	50.6
30	Sikkim	23.3	31.5	25.4	34.5	21.5	18.4
31	Tamil Nadu	0.3	3.4	1.8	5.8	-	-
32	Tripura	39.1	46.9	40.4	47.9	33.4	31.1
33	Uttar Pradesh	17.4	45.3	21.7	50.3	30.2	34.1
34	Uttarakhand	10.5	13.5	22.0	27.1	7.3	32.9
35	West Bengal	37.9	45.3	25.1	31.4	31.5	28.4
	<b>All India</b>	<b>17.7</b>	<b>28.1</b>	<b>20.3</b>	<b>31.5</b>	<b>26.6</b>	<b>27.4</b>

\* Cohort dropout rates in the last column are from 'Statistics of School Education 2010-11' published by MHRD' and CDR in the last but one column were derived from Retention rates given in DISE report of 2010-11.

The variation in the values of CDR across states was very large even when derived from the data of common schools. Leaving out the states with negative CDR, we find that the CDR under Assumption A varies from 1.8% in Tamil Nadu to 56.8% in Arunachal Pradesh. Very low values of CDR (say, CDR below 10%) in D & N Haveli, Goa, Lakshadweep, Maharashtra, Puducherry, Punjab and Tamil Nadu are also suspect; it appears that there was under-estimation of the actual Cohort Dropout rate due to possible shortcomings in the data.

As in 2009-10, in 2010-11 also the CDR derived from the data of common schools of the years 2009-10 and 2010-11 was more than the CDR derived from the data of all schools under either of the Assumptions, A and B in most of the states. At all India level, the low values of CDR under Assumptions A (17.7% when the data of all schools was used and 20.3% when the data of common schools was used) are due to CDR being negative or very low in some states. Even when common schools data was used the cohort dropout rates were found to have high negative values in Chandigarh and Kerala. Obviously, the enrolment in some of the grades in 2010-11 was significantly more than the enrolment in the preceding grades in 2009-10 in the same schools. This is possible only when there is large scale lateral entry in different grades in schools, but this could not be verified since no data on lateral entrants was available from DISE. In Himachal Pradesh and Delhi also, CDR was negative but not below -2.1. Equally intriguing was the case of Arunachal Pradesh, Meghalaya and Tripura where CDR (derived from the data of common schools) was over 40% under Assumption A, indicating that more than 40% children dropped out before reaching grade 5 in these states. Were so many children really dropping out or was there some other reason for such large decline in enrolment between grade 1 and grade 5? Such issues require further investigation. Under Assumption B, the CDR was above 40% in some more states, like Arunachal Pradesh, Jharkhand, Meghalaya, Mizoram, Rajasthan, Tripura and Uttar Pradesh. It implies that over 40% children of grade 1 cohort did not continue schooling up to grade 6.

The possible reason for such high dropout rates appears to be incomplete coverage of schools having upper primary classes in these states in 2010-11.

Comparison of CDR values in 2010-11 under Assumptions A and B, shows large difference between the two in some states like Bihar, Jharkhand, Orissa and Uttar Pradesh. This indicates large scale dropping out of children from school between grade 5 and grade 6 or, may be, children who actually went to grade 6 were under-reported in DISE. Obviously the transition rate (from grade 5 to grade 6) in these states is low. Low coverage of schools having upper primary grades could be a possible reason for lowering the transition rate.

It is clear that in several states the DISE data on enrolment and repeaters did not show any smooth trend of increase or decrease over the recent years indicating that all the schools both private and government, that were supposed to be covered under DISE were not covered fully every year. And if covered, the enrolment data supplied by them was faulty. This has resulted in lack of comparability of dropout rates across years.

While the all-India figures of Cohort Dropout rate can be considered as acceptable, the problem is with the Cohort Dropout rates which are either negative or unbelievably low or very high in some of the states. There is certainly need for checking and rectification of data in such states before providing estimates of Cohort Dropout rates that can be considered plausible.

Let us compare the cohort dropout rates derived from the data of 2009-10 and 2010-11 by the Reconstructed Cohort method with those based on the difference between grade 5 enrolment of 2010-11 and grade 1 enrolment of 2006-07. These are reported in the last two columns of Table 9.2. In the first case, the enrolment figures are taken from the DISE reports, *Elementary Education in India: Progress toward UEE* which gives retention rates for the primary level for all the states/UTs. The Cohort Dropout rates were derived by subtracting the retention rate from 100. In the second case, the dropout rates were based on the difference between enrolment at primary level in the years 2006-07 and 2010-11 as given in *Statistics of School Education*, of these years. These dropout rates for all the states/ UTs were shown in Table G1 of *Statistics of School Education, 2010-11*; these were reproduced in the last column of Table 9.2 for the sake of comparison with the Cohort Dropout rate derived from the data of all schools under Assumption A and also with the dropout rates given in the last but one column of the table. Since Assumption A corresponds to dropping out before reaching grade 5, it is fair to compare it with the Cohort Dropout rates obtained from the retention rates given in the DISE report and the dropout rates given in the MHRD report.

In the DISE report and also in the MHRD report, negative values of CDR were not shown. The all-India Cohort Dropout rates under Assumption A derived from the data of all schools as well as common schools (17.7% and 20.3% respectively) are much lower than the Cohort Dropout rate (26.6%) derived from retention rate given in the DISE report of the same year. These are also much lower than the Dropout rate (27.4) shown in the MHRD report. The main reason for this difference is that in the DISE report and also MHRD report, the enrolment data of grade I of the year 2006-07 was used whereas under Assumption A, we used the grade 1 enrolment data of 2009-10. It may, however, be pointed out the trend is not the same in all the states; in some states like Arunachal Pradesh, Jammu & Kashmir, Mizoram, Tripura and West Bengal, the opposite is true, that is, the CDR derived from the retention rate given in DISE report is lower.

It is interesting to note that the cohort dropout rates in the last two columns of Table 9.2 were derived from the enrolment data of 2006-07 and 2010-11 following the same approach. In one case the data are from DISE source and in the other case from the MHRD's own source. But

the large difference between the CDR values of the last two columns in the case of some states indicates that the enrolment figures from one or both sources were inaccurate in some states such as Assam, Jharkhand, Uttarakhand, Maharashtra and Meghalaya. On the other hand in quite a few states such as Andhra Pradesh, Bihar, Madhya Pradesh, Manipur, Rajasthan and Uttar Pradesh, the CDR values from the two sets of data were very close to each other. In the total of all the states/ UTs, The two CDR values (26.6 and 27.4) are not much different.

### 9.3 Cohort Dropout Rate for primary level in different states in 2011-12

Table 9.3 is similar to Table 9.2. It gives the Cohort Dropout rates for the primary level under both Assumptions, A and B. We find that the CDR values are still negative in some states and UTs and the negative values are absurd in Chandigarh, Goa, Delhi and Kerala. In the case of Kerala, the problem is really serious. We do not expect the CDR values to be negative when the data of common schools are used to compute CDR. But we find the values to be highly negative in Chandigarh and Delhi, and Haryana too. It seems that some of the existing schools enrolled large number of children in different classes in 2011-12 who were not in the school system in 2010-11. In the DISE report, the negative values are not shown since it is difficult to explain what they imply and why they are negative. Here we have reported the negative values also to highlight the problem of inconsistencies in the data, though we do not want to indicate in any way that CDR can be negative too.

**Table 9.3 : Cohort Dropout Rates (%) for primary level (grades 1 to 5) in 2011-12 derived under Assumptions A and B and Dropout rate derived from Retention rates reported in DISE Flash Statistics of 2011-12**

	State	All Schools		Common Schools		Dropout Rate from DISE (2011-12)*
		Assumption A	Assumption B	Assumption A	Assumption B	
1	A&N Islands	-5.4	-9.8	0.2	-3.0	7.3
2	Andhra Pradesh	13.3	18.8	20.4	27.3	14.7
3	Arunachal Pradesh	45.9	47.4	47.2	48.0	53.2
4	Assam	43.7	45.9	43.3	45.5	46.6
5	Bihar	10.1	27.7	12.5	29.8	41.3
6	Chandigarh	-40.2	-48.2	-36.9	-44.4	-
7	Chhattisgarh	11.2	13.8	18.1	23.0	21.1
8	D&N Haveli	8.0	9.8	9.7	12.1	11.2
9	Daman& Diu	9.5	9.5	11.5	12.3	-
10	Delhi	-24.8	-28.8	-22.1	-24.5	-
11	Goa	-32.1	-31.2	-5.3	-3.1	-
12	Gujarat	6.7	9.1	7.7	10.1	12.4
13	Haryana	-2.4	-20.2	-10.7	-8.4	-
14	Himachal Pradesh	-0.6	0.8	2.2	3.7	4.3
15	Jammu & Kashmir	36.9	44.8	37.4	45.1	-
16	Jharkhand	32.2	46.9	37.4	51.7	48.5
17	Karnataka	0.2	4.0	1.8	5.5	8.1
18	Kerala	-103.6	-127.5	1.7	1.8	-
19	Lakshadweep	8.3	6.8	8.3	6.8	1.7
20	Madhya Pradesh	16.9	25.4	26.2	35.5	25.8
21	Maharashtra	2.6	2.5	8.1	9.0	7.2
22	Manipur	34.1	44.5	36.6	46.6	44.9
23	Meghalaya	42.1	51.2	52.2	54.7	39.6

	State	All Schools		Common Schools		Dropout Rate from DISE (2011-12)*
		Assumption A	Assumption B	Assumption A	Assumption B	
24	Mizoram	21.5	24.7	25.9	29.4	26.0
25	Nagaland	25.4	30.6	23.0	28.1	35.8
26	Orissa	13.3	23.1	14.8	24.4	16.3
27	Puducherry	-1.7	-4.9	0.6	-2.1	-
28	Punjab	8.2	9.3	7.3	8.3	-
29	Rajasthan	14.4	19.8	27.1	33.5	40.0
30	Sikkim	18.6	21.0	18.2	19.9	9.6
31	Tamil Nadu	0.1	1.4	2.4	4.9	-
32	Tripura	14.2	20.8	21.2	27.6	29.4
33	Uttar Pradesh	-17.9	13.4	24.4	52.1	19.8
34	Uttarakhand	8.6	12.6	17.3	23.4	17.7
35	West Bengal	21.8	27.5	27.1	33.9	18.6
	<b>All India</b>	<b>6.9</b>	<b>16.5</b>	<b>19.0</b>	<b>30.0</b>	<b>24.1</b>

#### 9.4 Cohort Dropout Rate for primary level in different states in 2012-13

Table 9.4 shows the cohort dropout rates for all the states and UTs under Assumptions A and B, for the year 2012-13 for all schools as well as common schools. The trend is similar to that of the years 2009-10 and 2010-11. The CDR is negative in the case of Chandigarh, Dadra & Nagar Haveli, Delhi, Goa, Haryana and Kerala under both the Assumptions, A and B, when the data of all schools was used. In Tamil Nadu, there was apparently some problem with data of common schools since the very high negative dropout rate was obviously wrong. The same is true for Kerala when the data of all schools was used. However, these rates are being reported in the table just to show the problem that arises in computation of dropout rates when the data of two consecutive years are not comparable and to highlight the issue of very low or negative dropout rates as well as of very high cohort dropout rates in most of the north-eastern states such as Arunachal Pradesh, Manipur, Meghalaya and Mizoram.

The cohort dropout rate for the country as a whole, however, is slightly less than that of the year 2010-11 under either of the two assumptions when the data of all schools was used. But the cohort dropout rates are higher than those of the year 2010-11 when the data of common schools was used.

The dropout rate derived from the retention rates for the primary level given in the DISE Flash Statistics of 2012-13 are close to the CDR values derived for all schools under the assumption A in most of the states also for the total of all the states. NUEPA has avoided reporting of negative dropout rates and so the cells in which negative dropout rates occur are left blank. Both of these give an idea of the percentage of children who dropout between grade 1 and grade 5. We consider CDR derived from the enrolment and repeaters data of 2011-12 and 2012-13 as better indicator since it is based on the data of latest two years and makes allowance for repeaters while the dropout rates derived from retention rates reported in the DISE Flash Statistics are based on comparison of grade 1 enrolment of 2008-09 with grade 5 enrolment of 2012-13, with no allowance made for repeaters in different grades.

**Table 9.4 : Cohort Dropout Rates (%) for primary level (grades 1 to 5) in 2012-13 derived under Assumptions A and B and Dropout rate derived from Retention rates reported in DISE Flash Statistics of 2012-13**

	State	All Schools		Common Schools		Dropout Rate from DISE (2012-13)*
		Assumption A	Assumption B	Assumption A	Assumption B	
1	A&N Islands	-0.5	-0.6	3.8	4.1	1.9
2	Andhra Pradesh	20.5	25.0	22.1	28.1	15.2
3	Arunachal Pradesh	56.1	59.7	60.0	65.3	57.7
4	Assam	32.0	35.0	36.2	40.1	43.8
5	Bihar	43.5	58.7	45.8	60.9	37.7
6	Chandigarh	-15.8	-18.0	-18.3	-20.2	-
7	Chhattisgarh	10.8	14.9	17.7	22.5	19.9
8	D&N Haveli	-6.8	-4.9	3.5	5.5	8.8
9	Daman& Diu	4.4	3.4	18.0	20.5	5.0
10	Delhi	-11.7	-12.3	-8.7	-8.1	-
11	Goa	-75.2	-84.8	-59.7	-63.2	-
12	Gujarat	6.7	9.6	10.6	13.4	6.7
13	Haryana	-17.7	-16.6	5.9	11.5	-
14	Himachal Pradesh	-2.5	-0.3	1.6	4.9	5.0
15	Jammu & Kashmir	28.6	34.7	1.4	3.8	22.4
16	Jharkhand	18.3	34.4	24.8	41.0	39.8
17	Karnataka	2.0	5.6	3.2	6.7	8.4
18	Kerala	-49.3	-61.4	-1.5	-2.8	-
19	Lakshadweep	4.8	6.9	4.8	6.9	5.7
20	Madhya Pradesh	21.9	28.6	21.7	29.5	26.5
21	Maharashtra	2.2	2.9	10.8	12.7	8.8
22	Manipur	25.5	35.7	48.2	60.2	48.1
23	Meghalaya	51.4	48.7	54.9	54.5	35.5
24	Mizoram	39.3	41.5	40.4	43.0	34.2
25	Nagaland	20.3	25.3	10.9	17.4	24.3
26	Orissa	15.4	24.5	17.4	26.4	20.0
27	Puducherry	2.4	1.2	3.5	2.6	2.3
28	Punjab	6.6	7.1	12.8	14.6	-
29	Rajasthan	17.0	24.9	29.0	37.1	33.2
30	Sikkim	8.3	11.2	16.3	21.0	4.9
31	Tamil Nadu	-2.4	2.6	-95.4	-93.4	
32	Tripura	-4.6	0.9	11.8	15.8	9.3
33	Uttar Pradesh	13.1	34.6	32.2	55.4	12.6
34	Uttarakhand	15.9	19.4	19.7	25.1	16.7
35	West Bengal	25.4	31.1	30.7	36.3	25.0
	<b>All India</b>	<b>16.6</b>	<b>26.2</b>	<b>25.4</b>	<b>36.5</b>	<b>19.9</b>

Cohort dropout rates in the last column are derived from Retention rates given in DISE report of 2012-13. These were calculated from the ratio of grade 5 enrolment of 2012 – 2013 to grade 1 enrolment of 2008-09.

The CDR values for the total of all the states/ UTs under both the Assumptions A and B are less than the corresponding values of CDR of 2010-11. But the CDR values in the case common schools are higher than the corresponding values of CDR of 2010-11. In each of the three years for which we have computed CDR using the data of all schools as well as

common schools, we found that the use of data of common schools has given higher values of CDR compared to the values of CDR when the data of all schools was used.

The cohort dropout rates based on comparison of grade 5 enrolment of 2012-13 with grade 1 enrolment of 2010-11(both from DISE source), are shown in the last column of Table 9.3. These values are logically comparable with the CDR values under Assumption A when the data of all schools was used. We find that the CDR values are actually not very different from those reported in the last column in most states but a few states such as Jharkhand, Rajasthan, Manipur and Meghalaya are exceptions. The negative values of dropout rate are omitted in the last column as the DISE report also avoided reporting the retention rates that exceeded 100%. For this year, the dropout rates from MHRD statistics were not available, since the Ministry used only DISE data and did not like to get enrolment data from another source.

### **9.5 Cohort Dropout Rate for primary level in different states in 2013-14**

Table 9.4 shows the cohort dropout rates for all the states and UTs under Assumptions A and B, for the year 2012-13 for all schools which provided enrolment data for each grade in 2012-13 and 2013-14. Unlike the previous years the cohort dropout rates based on the data of common schools are not being reported as NUEPA has also stopped reporting dropout rates based on the data of common schools, assuming that almost all schools now provide enrolment and other data every year. The trend is similar to that of the year 2012-13 but the CDR for the total of all the states has reduced from 16.6% to 13.6% under Assumption A and from 26.2% to 21.9% under Assumption B. The CDR continues to remain negative in some states /UTs; it was negative in the case of Bihar, Chandigarh, Dadra & Nagar Haveli, Daman & Diu and Kerala under both the Assumptions, A and B. The CDR in Kerala which had very high negative value in 2012-13 had now low negative value, but its negative value indicates that there was still some problem with the data. However, the negative rates are being reported in the table only just to highlight the problem that even now exists in deriving dropout rates from DISE data when the data of two consecutive years are not comparable and as a consequence very low or negative dropout rates occur. Also very high cohort dropout rates as in Arunachal Pradesh, Meghalaya and Mizoram have continued to be problematic in some of the North-Eastern states.

The dropout rates shown in the last column of the table are close to those derived under Assumption A. As in the previous years, in 2013-14 also, the CDR under Assumption A is less than that derived from the Retention rate reported in the DISE Flash Statistics. Both indicate the percentage of children who, after entering grade 1, drop out from school before reaching grade 5. For the total of all the states/ UTs, the CDR (13.6%) is 4 percentage points less than that derived from the reported Retention Rates. As pointed out earlier, the dropouts for calculating the CDR values of the last column are obtained by subtracting the grade 1 enrolment of 2009-10 from grade 5 enrolment of 2013-14. In some states/ UTs, the Retention Rate exceeded 100% as a result of which the CDR became negative; these CDR values were not shown in the DISE Flash Statistics against such states. In computing Retention rate and CDR from that, the repeaters are ignored and no cognizance is taken of the change in dropout rate that might have occurred in grade 1 and other grades between 2009-10 and 2013-14. In view of this, we consider the CDR derived from the data of the latest two consecutive years more realistic. The errors in CDR, if any, are mainly due to deficiencies in the data.

**Table 9.5 : Cohort Dropout Rates (%) for primary level (grades 1 to 5) in 2013-14 derived under Assumptions A and B (based on data of all schools of the years 2012-13 and 2013-14) and Cohort Dropout rate from DISE Flash Statistics (2013-14)**

	State	All Schools		CDR from Retention rate reported in DISE (2013-14)
		Assumption A	Assumption B	
1	A&N Islands	2.2	3.3	6.2
2	Andhra Pradesh	11.2	14.7	13.3
3	Arunachal Pradesh	50.2	51.0	57.0
4	Assam	21.6	26.7	23.9
5	Bihar	-22.7	-6.8	25.4
6	Chandigarh	-29.1	-33.4	-
7	Chhattisgarh	14.0	19.4	17.0
8	D&N Haveli	-3.9	-3.1	4.0
9	Daman& Diu	-20.3	-25.2	7.8
10	Delhi	-21.9	-23.6	-
11	Goa	0.6	0.0	-
12	Gujarat	8.4	11.4	4.5
13	Haryana	3.5	6.2	-
14	Himachal Pradesh	1.0	2.3	0.6
15	Jammu & Kashmir	22.0	26.9	25.8
16	Jharkhand	17.9	33.2	34.9
17	Karnataka	6.5	8.2	8.2
18	Kerala	-7.4	-9.5	-
19	Lakshadweep	9.3	12.0	4.8
20	Madhya Pradesh	19.9	27.8	24.8
21	Maharashtra	10.3	13.7	5.8
22	Manipur	31.3	39.6	35.8
23	Meghalaya	40.9	36.8	42.5
24	Mizoram	70.9	77.8	42.4
25	Nagaland	22.2	31.5	20.8
26	Odisha	9.3	15.0	15.2
27	Puducherry	2.5	1.8	1.5
28	Punjab	7.7	9.4	-
29	Rajasthan	26.5	34.3	31.5
30	Sikkim	12.9	16.9	7.2
31	Tamil Nadu	14.8	18.6	3.7
32	Tripura	4.0	11.0	20.0
33	Uttar Pradesh	27.6	44.0	12.2
34	Uttarakhand	2.0	5.7	11.0
35	West Bengal	24.2	28.1	39.2
	<b>All India</b>	<b>13.6</b>	<b>21.9</b>	<b>17.6</b>

Cohort dropout rates in the last column are derived from Retention rates given in DISE report of 2010-11. These were calculated from the ratio of grade 5 enrolment of 2010 – 2011 to grade 1 enrolment of 2006-07.

### 9.6 Trend in Cohort Dropout Rate at Primary level

The following table (Table 9.6) and Figs. 7 and 8 show the changes in the Cohort Dropout rate at the primary level between 2009-10 and 2013-14. The dropout rates are shown for all schools as well as common schools in the table and also in Figs. 7 and 8. The dropout rates are given under both the assumption – Assumption A (dropping out before reaching grade 5)

and Assumption B (dropping out before getting promoted to grade 6). The dropout rates under Assumption B are higher because those who drop out after completing primary education are also included. In the last column the dropout rates reported by the Ministry of HRD in *Selected Educational Statistics* annually up to the year 2011-12 are given and after that the dropout rates are those derived from Retention Rates reported by NUEPA in the annual Flash Statistics *Elementary Education in India: Progress towards UEE*. There is clear departure from the trend of gradual decrease in dropout rates in the year 2011-12, in which year there is sharp decline in the dropout rates particularly when the data of all schools were used for computation of dropout rates. It appears that there was some discrepancy in the data, possibly due to sudden increase in coverage of schools in 2011-12 in some of the states as a result of which the enrolment in some grades was less than that of the previous year in the preceding grade.

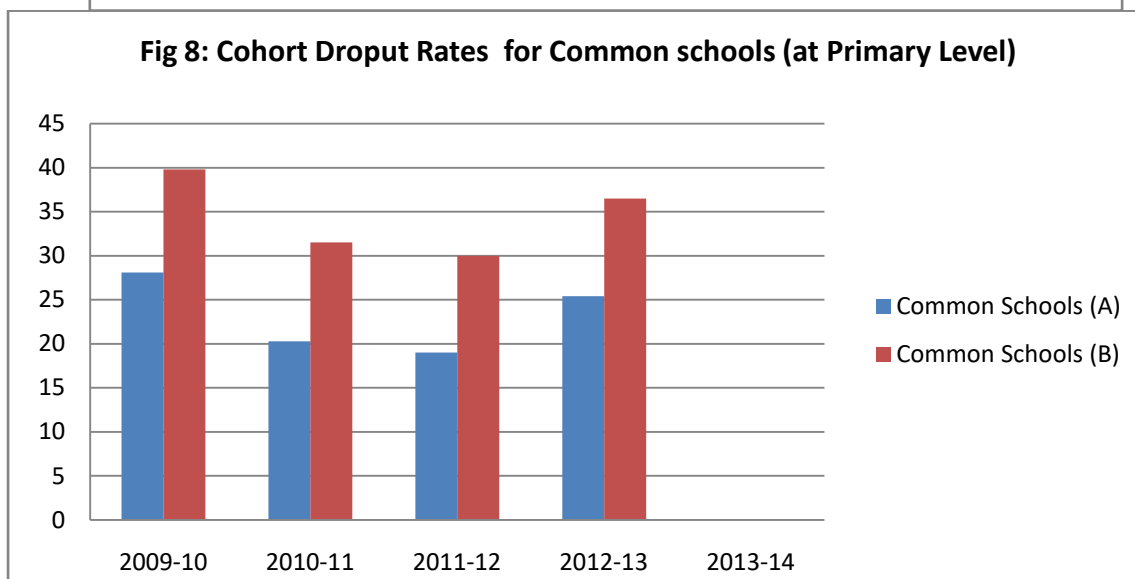
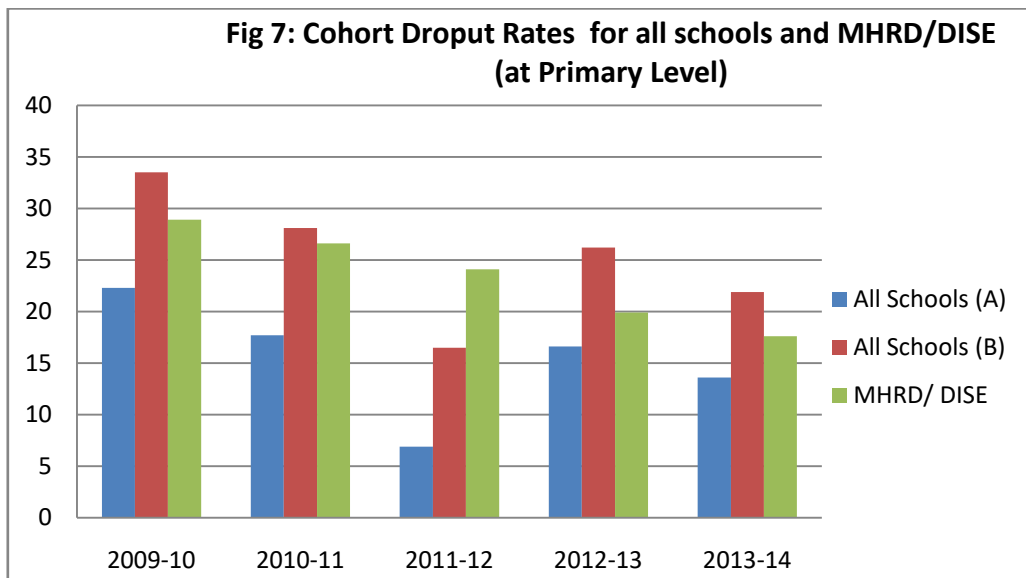
So far as the MHRD or DISE dropout rates are concerned, these are derived by subtracting the retention rate from 100. The retention rate is simply the grade 5 expressed as percentage of grade 1 enrolment of 5 years back, that is, when most students of grade 5 were in grade 1. These dropout rates are comparable with the dropout rates of all schools under Assumption A, except for the fact that in MHRD or DISE dropout rates there was no consideration of repeaters and old the data of class 1 enrolment was used. Thus there was vast difference in the approach to computation of cohort dropout rates.

We find that the cohort dropout rate under both the Assumptions has declined to about two-third of what it was in 2009-10 during the last 5 years. In 2013-14, 21.9% students of grade 1 dropped out before entering the upper primary stage of education while 33.6% did so in 2009-10. It may be noted that these figures are for the country as a whole. There are wide state to state variations in the dropout rates, so the trend would vary greatly across the states.

**Table 9.6 Cohort Dropout Rates (at Primary Level)  
for the years 2009-10 to 2013-14**

Year	All Schools (A)	All Schools (B)	Common Schools (A)	Common Schools (B)	MHRD/DISE
2009-10	22.3	33.5	28.1	39.8	28.9
2010-11	17.7	28.1	20.3	31.5	26.6
2011-12	6.9	16.5	19.0	30.0	24.1
2012-13	16.6	26.2	25.4	36.5	19.9
2013-14	13.6	21.9	-	-	17.6





**10. Cohort Dropout rate at elementary level (dropping out between grade 1 and grade 7/8)**

To find out what percentage of children drop out from school between grade 1 and grade 7 or 8, we used the DISE data on enrolment and repeaters of the years 2008-09 and 2009-10 to compute the Cohort Dropout rate for 2009-10. Similarly the DISE data of 2009-10 and 2010-11 was used to compute the Cohort Dropout rate for the year 2010-11. In the same way, the cohort dropout rates for the elementary level (grade 1 to 8) were derived for the years 2012-13 and 2013-14 from the DISE data of all schools, but not for common schools. The Cohort Dropout rates were calculated only under Assumption A (that is, treating those as dropouts who do not reach grade 8 if the terminal grade of upper primary level is grade 8 in a particular state). In the case of the states in which grade 7 was the terminal grade of upper primary level, those who did not reach grade 7 were treated as dropouts.

**10.1 Cohort dropout rate for the Elementary level in 2009-10**

To find out what percentage of children drop out from school between grade 1 and grade 7 or 8, we used the DISE data on enrolment and repeaters of the years 2008-09 and 2009-10 to compute the Cohort Dropout rate for 2009-10. The Cohort Dropout rates have been calculated only under Assumption A, that is, by treating those as dropouts who do not reach grade 8 if the terminal grade of upper primary level is grade 8 in a given state.

In the case of the states in which grade 7 was the terminal grade of upper primary level, those who did not reach grade 7 were treated as dropouts. Table 10.1 shows these Cohort Dropout rates under Assumption A for the year 2009-10 in two situations, (i) when the data of all schools was used and (ii) when the data of common schools, was used. In the case of the states in which the elementary education cycle consists of grades 1 to 8, those who drop out from grade 8 after 30<sup>th</sup> September or who do not get admitted in grade 9 were not counted as dropouts. Similarly, in the states in which elementary education is up to grade 7 and grade 8 is a part of secondary education, only those who failed to reach grade 7 have been considered as dropouts. At all India level, we have considered grade 8 as the terminal grade of elementary education, even though some states have not yet included grade 8 in the elementary education cycle.

Since it is expected that the children would continue to remain in school till completion of grade 8 in every state, the Cohort Dropout rate was calculated up to grade 8 also in the states in which grade 7 was the highest grade of upper primary cycle. These rates are shown in parenthesis along with the CDR values for 'reaching grade 7' in the case of such states in Table 10.1.

Actually, Assumption B is not applicable in the case of elementary level as it was not desirable to extend the definition of retention to include 'reaching grade 9', since grade 8 is the terminal grade of elementary level. Also DISE did not provide data on enrolment in grade 9. Actually we should have considered those who dropped out without completing grade 8 successfully as dropouts but DISE did not provide data on successful completers of grade 8.

As shown in Table 10.1, when the data of all schools was used, then on the basis of grade-wise repetition and dropout rates of 2008-09, 46.7% children entering grade 1 would have dropped out from school before reaching grade 8. The variation in CDR is very large across the states; CDR is even negative in some states/UTs like West Bengal, Punjab, Kerala, Goa, Daman & Diu and Delhi, which is clearly absurd. The main reason for getting absurd values of CDR appears to be large scale omission of schools with upper primary classes in DISE in 2008-09. If some schools were not covered in DISE in 2008-09 but were covered in 2009-10, the dropout rate is likely to become negative. The problem of very high dropout rate (not reaching grade 8) was quite serious in Assam, Bihar, Dadra & Nagar Haveli, Gujarat, Karnataka, Meghalaya, Mizoram, Orissa and Jharkhand. In most of these states/UTs since the upper primary stage ends in grade 7, hardly any school having grade 8 was covered under DISE, as a result of which the transition from grade 7 to 8 was grossly under-estimated.

When CDR of 2009-10 was calculated using the data of common schools, that is, the schools for which the enrolment data was available for both 2008-09 and 2009-10, most of the CDR values became positive; only in Chandigarh and Puducherry, CDR remained conspicuously negative. The CDR for India became 53.6% about 7 percentage points higher than that derived from the data of all schools. Also very high dropout rates (over 60%) were seen in some states/UTs which is obviously due to the large scale omission of schools having grade 8 in 2009-10. Such very high values of CDR are being reported here (in parenthesis) to highlight the problem of computing retention rate up to grade 8 in the states that had not yet switched over fully to the pattern of grades 1 to 8 for elementary education. The values of Cohort Dropout rates which were very high should certainly not be interpreted as indicators of very low retention rate, since it is mainly due the problem of incomplete coverage of schools with upper primary classes in the 2009-10 or faulty enrolment data in any year.

In the last column of the table, the dropout rates reported in the *Statistics of School Education, 2009-10* are reproduced. In this case the dropouts were estimated by finding out the difference between grade 8 enrolment of 2009-10 and grade 1 enrolment of 2002-03. The Dropout rate, which is actually Cohort Dropout Rate (CDR), is obtained by expressing the number of dropouts so determined as percentage of grade 1 enrolment of 2005-06. It is actually an indicator of the extent of dropping out for those who entered grade 1 in 2002-03 but failed to reach grade 8 in 2009-10, either due to repeating grades or dropping out from school in between. There is no consideration of repeaters in the different grades in this approach. The dropout rate is derived only from two figures, enrolment in grade 1 in the base year (2002-03) and enrolment in grade 8 in the last or target year (2008-09). On the other hand, the CDR values derived from the enrolment and repeaters data of different grades of two years, 2008-09 and 2009-10 by applying the Reconstructed Cohort method, are not only based on the data of the latest two years but have also taken into account the repeaters who may or may not drop out after 2008-09. Conceptually, all the CDR values shown in Table 10.1 are comparable indicators of dropping out between grade 1 and grade 8.

We find that there is no definite trend across the states, of CDR based on one approach being consistently higher or lower than that based on another approach. In most states the dropout rate given in the last column are higher than the CDR obtained from the data of all schools, but there are exceptions like Bihar, Jharkhand, Madhya Pradesh, Nagaland and Tripura where the dropout rates from SSE are lower. In the country as a whole, the dropout rate from SSE is about 4 percentage points lower than the CDR based on the data of all schools.

**Table 10.1: Cohort Dropout Rate (grade 1 to 7/8) for 2009-10 based on the data of 2008-09 and 2009-10 and Dropout Rate reported in SSE, 2009-10**

S. No.	State	CDR from data of All Schools	CDR from data of Common Schools	Dropout Rate from SSE, 2009-10
1	A&N Islands	-0.3	15.7	11.6
2	Andhra Pradesh	29.3	37.3	41.3
3	Arunachal Pradesh	57.8	67.7	47.0
4	Assam	71.7 (80.2)	43.7 (61.6)	61.2
5	Bihar	61.0	58.7	66.0
6	Chandigarh	-2.8	-4.6	-23.8
7	Chhattisgarh	33.5	36.4	40.7
8	D&N Haveli	15.1(98.3)	17.0 (98.3)	43.3
9	Daman& Diu	-13.5 (-16.3)	10.4 (22.2)	10.7
10	Delhi	-6.5	0.8	-27.1
11	Goa	-12.8 (-22.9)	25.4 (17.7)	-17.9
12	Gujarat	13.3 (99.0)	23.1 (99.3)	39.7
13	Haryana	4.3	-1.9	14.4
14	Himachal Pradesh	14.5	16.0	2.4
15	Jammu & Kashmir	10.4	15.1	22.0
16	Jharkhand	62.6	68.0	61.9
17	Karnataka	20.7 (79.9)	22.3(81.1)	25.9
18	Kerala	-20.2 (-10.7)	-0.3 (13.5)	-14.1
19	Lakshadweep	1.2 (-0.4)	23.9 (25.8)	9.0
20	Madhya Pradesh	47.3	46.0	21.4
21	Maharashtra	15.0 (21.1)	18.7 (25.7)	25.9
22	Manipur	36.3	42.9	57.1
23	Meghalaya	47.2 (74.5)	64.9 (85.7)	72.3

S. No.	State	CDR from data of All Schools	CDR from data of Common Schools	Dropout Rate from SSE, 2009-10
24	Mizoram	6.6 (99.9)	23.1 (99.8)	55.1
25	Nagaland	49.3	52.8	31.6
26	Odisha	30.4 (82.8)	31.5 (83.6)	54.3
27	Puducherry	-2.4	-7.2	-14.9
28	Punjab	-20.1	30.1	-19.1
29	Rajasthan	46.7	49.8	50.3
30	Sikkim	30.9	40.8	44.7
31	Tamil Nadu	-3.1	1.9	8.7
32	Tripura	50.6	55.3	43.7
33	Uttar Pradesh	62.0	69.4	52.8
34	Uttarakhand	33.4	46.8	30.8
35	West Bengal	-77.2	48.1	50.5
	<b>All India</b>	<b>46.7</b>	<b>53.6</b>	<b>42.5</b>

Note: The Cohort Dropout rates given in parenthesis are for grade 1 to 8. Since the elementary education of class 1 to 8 was not yet implemented in all the states, and also since the schools having grade 8 were not fully covered under DISE, the CDR values are very high when retention up to grade 8 is considered.

## 10.2 Cohort dropout rate for the Elementary level in 2010-11

Table 10.2 shows the cohort dropout rates at the elementary level based on the grade-wise enrolment and repeaters data of 2009-10 and enrolment data of 2010-11, in the case of all schools as well as common schools in the same way as the DISE data of 2008-09 and 2009-10 was used to compute the Cohort Dropout rate for the year 2009-10. As in Table 10.1, the cohort dropout rates are given for 'dropping out before reaching grade 8' in all the states/UTs but also for 'dropping out before reaching grade 7' in the case of the states which had not yet switched over to 8-year cycle of elementary education. We find that some of the dropout rates were negative, particularly when the data of all schools was used. The negative dropout rates were most conspicuous in Bihar, Chandigarh, Haryana, Himachal Pradesh, Kerala and Punjab; this was so mainly due to faulty data in one or both years. Most of the CDR values became positive and reasonable when the data of common schools was used. Since the use of data of common schools provided an acceptable solution to the problem of absurd negative dropout rates, the practice of using only the data of common schools for reporting dropout rates was adopted.

When CDR of 2010-11 was calculated using the data of common schools, that is, the schools for which the enrolment data was available for both 2009-10 and 2010-11, only in Chandigarh, Delhi and Himachal Pradesh, CDR continued to remain negative. However, very high dropout rates (over 60%) were seen in a few states/UTs which were obviously due to the large scale omission of schools having grade 8 in 2010-11. As in the case of 2009-10, such high values of CDR are being reported here only to highlight the problem of computing retention rate up to grade 8 in the states that had not yet adopted fully the pattern of elementary education consisting of grades 1 to 8. Because of this, the values of Cohort Dropout rates which are very high are not necessarily indicators of large scale dropping out of children from school. There was either incomplete coverage of schools or faulty enrolment data in one or both the years.

**Table 10.2: Cohort Dropout Rate (grade 1 to 7/8) for 2010-11 based on the data of 2009-10 and 2010-11**

S. No.	State	CDR from data of All Schools	CDR from data of Common Schools	CDR from SSE, 2010-11
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S. No.	State	CDR from data of All Schools	CDR from data of Common Schools	CDR from SSE, 2010-11
1	A&N Islands	24.4	23.2	15.1
2	Andhra Pradesh	27.1	35.1	32.9
3	Arunachal Pradesh	69.0	69.1	50.5
4	Assam	33.6 (50.1)	37.8 (55.2)	54.0
5	Bihar	-44.8	40.3	58.3
6	Chandigarh	-44.0	-32.3	-
7	Chhattisgarh	19.1	30.9	48.3
8	D&N Haveli	10.6(12.3)	13.8(15.8)	33.7
9	Daman& Diu	16.4 (17.4)	27.8 (28.1)	10.8
10	Delhi	-7.3	-7.6	-
11	Goa	1.6 (1.9)	8.8 (9.6)	-
12	Gujarat	8.1 (77.8)	25.7 (82.5)	46.7
13	Haryana	-16.2	35.6	4.6
14	Himachal Pradesh	-7.4	-3.8	-
15	Jammu & Kashmir	24.7	25.0	6.1
16	Jharkhand	47.1	54.5	45.1
17	Karnataka	10.7 (77.2)	20.2 (81.1)	20.8
18	Kerala	-44.2 (-44.4)	4.3 (-7.2)	-
19	Lakshadweep	15.2 (19.2)	15.8 (28.6)	12.7
20	Madhya Pradesh	42.7	47.2	30.7
21	Maharashtra	2.2 (5.4)	10.9 (16.7)	25.9
22	Manipur	37.6	36.3	52.8
23	Meghalaya	36.3 (64.5)	55.8 (81.6)	70.4
24	Mizoram	60.2 (93.2)	56.4 (92.3)	36.7
25	Nagaland	31.4	35.0	45.4
26	Orissa	29.1 (37.0)	30.5 (78.3)	55.0
27	Puducherry	2.2	5.5	-
28	Punjab	-33.6	7.9	-
29	Rajasthan	52.1	50.6	53.3
30	Sikkim	43.9	48.2	42.8
31	Tamil Nadu	6.5	10.6	8.0
32	Tripura	61.4	62.1	48.2
33	Uttar Pradesh	45.1	53.0	49.7
34	Uttarakhand	12.0	31.4	31.6
35	West Bengal	53.7	37.4	49.1
	<b>All India</b>	<b>38.3</b>	<b>44.6</b>	<b>40.8</b>

Note: The Cohort Dropout rates given in parenthesis are for class 1 to 8 as the elementary education of class 1 to 8 was not yet implemented in the state and the schools having grade 8 were not fully covered under DISE.

In Table 10.2, for some states that had not yet switched over fully to the structure of grade 1 to 8 for elementary education, the Cohort Dropout rates for grade 1 to 8 are also being reported in parenthesis in the same way as was done for 2009-10 in Table 10.1. It is seen that 38.3% children enrolled in grade 1 would drop out before reaching grade 8 when the data of all the schools was used for which enrolment data was available for 2009-10 and 2010-11. But the picture becomes more gloomy when the data of common schools was used, that is, the schools which had supplied data in both the years. In this case, we find that CDR became 44.6% which is 6.3 percentage points higher than that calculated from the data of all schools. The possible reason for the CDR becoming less when the data of all schools was used, is the same as was given in the case of CDR of the previous year, 2009-10. There were some schools with upper primary classes for which data was available for 2010-11 but not for 2009-10. While in most states the CDR was high, in some states/ UTs like Bihar, Chandigarh, Delhi, Haryana, Himachal Pradesh, Kerala and Punjab, the CDR was negative, which is absurd; the negative cohort dropout rates, however, became positive and more realistic when

the data of common schools was used, except in Delhi, Chandigarh and Himachal Pradesh. In all these cases, obviously the enrolment in any grade was much higher in 2010-11 than the enrolment in the previous grade in 2009-10. There is wide variation in values of CDR ranging from 4.3% in Kerala to 69.1% in Arunachal Pradesh even when CDR is calculated from the data of common schools.

In the last column of the table, the dropout rates as reported in the *Statistics of School Education*, 2010-11, published by the Ministry of HRD, are shown. The dropout rates are negative in some states and UTs like Goa, Himachal Pradesh, Kerala, Punjab and Chandigarh but the SES report did not show these and left the cells blank. The overall dropout rate for India was 40.8% which is close to the CDR for all schools, but there is large difference between the two dropout rates in some states such as Bihar, Chhattisgarh, Gujarat, Madhya Pradesh, Odisha and most of the North Eastern states. It should be realized that the data on enrolment at the upper primary level in 2009-10 and 2010-11 from DISE had some serious deficiencies mainly due to incomplete coverage of schools having classes up to grade 8. In such situation, more importance was given to the dropout rates reported in the annual publication of the Ministry of HRD, *Statistics of School Education*. These had greater credibility due to being simple to understand and being based on the enrolment data of all the schools of the different states and UTs in the country, and above all being a part of the official educational statistics of the Government of India.

### **10.3 Cohort dropout rate for the Elementary level in 2012-13**

The cohort dropout rates for the elementary level of education (grades 1 to 8) are presented in Table 10.3 for the year 2012-13 using the data of all schools as well as common schools for which the data of both the years 2011-12 and 2012-13 was available. This table is similar to Tables 10.1 and 10.2. The overall cohort dropout rate for the country was 26.9% which was substantially less than 38.3%, the cohort dropout rate of 2010-11. The cohort dropout rate based on the data of common schools was also less, 42.5% against 44.6% in 2010-11. In most of the states, the CDR in the case of common schools is higher than the CDR derived from the data of all the existing schools of the two years. In a few states like Manipur, Punjab, Rajasthan and Tamil Nadu, the CDR based on the data of common schools was much higher than that based on the data of all schools. The negative cohort dropout rates became positive in Haryana and Himachal Pradesh when derived from the data of common schools. But the CDR in the case of Chandigarh, Delhi and Kerala continued to remain negative. The most improbable values of CDR were found in the case of Kerala and Uttar Pradesh which were obviously due to erroneous data; in Kerala the CDR based on the data of all the schools that were covered in both the years, was -99.3 and the CDR based on the data of common schools in Uttar Pradesh was -88.2. In Goa too, CDR based on the data of schools was 72.9 but the same based on the data of common schools, was -67.9. Apparently many more schools were covered in 2012-13 than in 2011-12 in Kerala and Goa which led to inflation on enrolment in the second year. But the case of both Uttar Pradesh and Goa is puzzling since CDR based on the data of common schools should not be negative unless the schools admitted many more children directly in different classes in the second year, 2012-13. The obviously incorrect values of CDR are being reported in the table only to draw attention to the problems of incorrect data; such improbable values need not be taken as indicators of zero or low dropout rate, since negative dropout rates are not expected to occur in any class unless there are drop-ins in different classes who are not accounted for.

In the table no comparative figures from the MHRD Statistics are given since the Ministry has not yet provided state-wise dropout rates as it did in 2010-11 or before that. The only provision dropout rate for grades 1 to 8 is reported for India, which is 39% indicating that 39% children admitted in grade 1 of the year 2005-06 dropped out before grade 8. This is

close to the cohort dropout rate (42.1%) derived from the data of common schools. But before drawing any conclusion we have to keep in mind that both are derived from different sets of data using different approaches.

**Table 10.3: Cohort Dropout Rate (grade 1 to 8) for 2012-13 based on the data of 2011-12 and 2012-13**

S. No.	State	All Schools	Common Schools
1	A&N Islands	2.9	7.6
2	Andhra Pradesh	32.2	37.8
3	Arunachal Pradesh	61.5	69.1
4	Assam	40.6	46.2
5	Bihar	67.9	71.1
6	Chandigarh	-20.0	-21.8
7	Chhattisgarh	14.9	24.6
8	D&N Haveli	-4.6	6.0
9	Daman& Diu	13.8	35.4
10	Delhi	-15.0	-8.4
11	Goa	72.9	-67.9
12	Gujarat	66.9	67.9
13	Haryana	-26.9	14.3
14	Himachal Pradesh	-2.5	3.9
15	Jammu & Kashmir	36.8	38.3
16	Jharkhand	37.0	47.9
17	Karnataka	15.7	17.4
18	Kerala	-99.3	-3.4
19	Lakshadweep	13.7	13.7
20	Madhya Pradesh	29.8	32.3
21	Maharashtra	8.0	20.4
22	Manipur	30.1	54.7
23	Meghalaya	56.5	66.7
24	Mizoram	48.6	50.5
25	Nagaland	30.0	25.2
26	Odisha	29.4	31.9
27	Puducherry	1.0	3.2
28	Punjab	6.4	17.2
29	Rajasthan	24.4	39.9
30	Sikkim	17.5	27.1
31	Tamil Nadu	5.2	11.1
32	Tripura	9.2	22.3
33	Uttar Pradesh	20.2	-88.2
34	Uttarakhand	16.1	26.4
35	West Bengal	37.9	42.9
	<b>All India</b>	<b>26.9</b>	<b>42.1</b>

#### 10.4 Cohort dropout rate for the Elementary level in 2013-14

Table 10.4 shows the cohort dropout rates for the elementary level in the different states and India for the year 2013-14. These are based on the data of all the existing schools in each of

the two years. The dropout rates derived from the data of common schools are not presented as NUEPA has also stopped reporting of dropout rates based on the data of common schools, assuming that now almost all schools are covered under DISE every year. Moreover the enrolment and repeaters data of common schools was not readily available. Also no comparative dropout rates from the statistical report of MHRD were available for 2013-14. Only provisional dropout rate (for children dropping out between grade 1 and 8) for India for 2013-14 is given; it is 36.3%. It is much higher than CDR (23.4%) derived for India from the data of 2012-13 and 2013-14. Compared to the CDR of the previous year (based on the data of all schools) it is 3.5 percentage points less. It can safely be concluded that the cohort dropout rate has declined considerably in 2013-14. Of course, values of CDR in some states are negative but most of them are small states/UTs; these will not make much difference to the overall CDR of the total of all the states.

The cohort dropout was highest in Mizoram (83.2%) but also quite high in the other North Eastern states. It was negative in Bihar, Kerala, Delhi, Chandigarh and Daman & Diu and close to zero in Goa and Dadra & Nagar Haveli. In most of the states/UTs the CDR values are lower than the corresponding CDR values of the previous year. The negative cohort dropout rates are again due to occurrence of direct lateral entry in different grades in 2013-14 as a result of which enrolments got inflated. Also it is possible that some schools which were covered under DISE in 2013-14 were not covered in 2012-13.

**Table 10.4: Cohort Dropout Rate (grade 1 to 8) for 2013-14 based on the data of all Schools of 2012-13 and 2013-14**

S. No.	State	CDR - All Schools	S. No.	State	CDR - All Schools
1	A&N Islands	4.6	19	Lakshadweep	19.3
2	Andhra Pradesh	20.0	20	Madhya Pradesh	33.9
3	Arunachal Pradesh	55.8	21	Maharashtra	9.1
4	Assam	30.4	22	Manipur	42.5
5	Bihar	-7.1	23	Meghalaya	41.7
6	Chandigarh	-33.7	24	Mizoram	83.2
7	Chhattisgarh	24.2	25	Nagaland	38.8
8	D&N Haveli	-0.3	26	Odisha	21.6
9	Daman& Diu	-33.6	27	Puducherry	3.8
10	Delhi	-27.2	28	Punjab	9.7
11	Goa	-0.2	29	Rajasthan	37.7
12	Gujarat	17.2	30	Sikkim	23.1
13	Haryana	4.7	31	Tamil Nadu	15.5
14	Himachal Pradesh	1.9	32	Tripura	17.6
15	Jammu & Kashmir	28.5	33	Uttar Pradesh	4.5
16	Jharkhand	32.8	34	Uttarakhand	2.0
17	Karnataka	13.2	35	West Bengal	32.5
18	Kerala	-13.3		<b>All India</b>	23.4

## 11. Conclusion and Recommendations

The study has provided estimates of grade-wise dropout rates, average dropout rates and Cohort Dropout Rates for primary and elementary (primary + upper primary) levels of education. For the primary level dropout rates are given under two different assumptions (1)



dropping out before reaching grade 5 and (2) dropping out before entry in grade 6 which is the first grade of upper primary cycle. The Cohort Dropout rates have been calculated for both situations, (1) when the data of all schools was used and (2) when the data of common schools, that is, the schools that had supplied data in both of the two consecutive years, was used (the schools for which the data of only one year was available were excluded). These rates have been reported for all the years from 2009-10 to 2013-14. The dropout rates have declined gradually over the years. In a few states and UTs, the dropout rates were found to be very low or negative (implying that the children entered grade 2 or a higher grade directly without being in the school system in the previous year. On the other hand, the dropout rates in some states were very high. There while some students could be genuine dropouts, others perhaps were not dropouts but had moved to other schools which were not covered under DISE in the following year.

In order to arrive at reliable values of Dropout rates, it is important that the quality and coverage of DISE data on enrolment and repeaters improves. Some specific suggestions and **recommendations** in this regard are being made below:

- (1) The data on late entrants in grade 1 and lateral entrants in other grades should be collected and analysed so that in calculation of dropout rate, adjustment can be made for such cases. At present, in some states like Kerala, it appears that the dropout rates are negative only because of ignoring lateral entry in different grades. As RTE Act of 2009 has made provision for entry in school in age appropriate grade, the children who had remained out of school for any reason can take admission as new entrants in any grade for which they are eligible according to age.
- (2) RTE Act also provides for Special Training of Dropout children to make them fit for continuing their studies in a regular school so that they are able to complete education up to grade 8. DISE should collect data about enrolment in Special Training programmes. Such data should be analyzed separately to assess dropout rates from Special Training programmes and also their re-entry in regular schools.
- (3) Effort should be made to have complete coverage of all schools that have any primary or upper primary class. Particularly the coverage of schools with upper primary classes and in particular class 8 should be ensured. As most of the upper primary classes are in secondary schools in many states, these schools are now covered under U-DISE. It is important that grade-wise enrolment and repeaters data is available for all the grades irrespective of the type and level of school in which the children are studying.
- (4) There are recognised private unaided schools that do not provide DISE data easily. Collection of at least enrolment and repeaters data from such schools should be ensured. The children in private unrecognised schools, if any, will have to be treated as out of school.
- (5) Data should be collected on successful completers of primary and upper primary education. For calculation of CDR or Retention rate, it is appropriate to use the criterion of completion and not just reaching the last grade or of getting promoted to the first grade of upper primary level. This data can be collected for the previous school year when the data of DISE are collected with 30<sup>th</sup> September as the reference date.
- (6) In the case of the states that have negative or very low dropout rates or very high dropout rates, it is desirable to conduct special studies to find out the reasons of that. The studies may help in taking steps for improving the quality of data and getting more reliable indicators of dropping out and retention.

- (7) Along with the steps to be taken to improve the quality of data and coverage of schools, the method of calculating grade-wise dropout rates and average dropout rates for primary and elementary levels of education should be standardised. The data on repeaters, late entrants in grade 1 and lateral entrants in other grades should be made use of in calculation of Dropout rates or Retention rate. Also the Reconstructed Cohort method should be applied for calculating these rates, making the necessary modification to take into account the lateral entrants and late entrants.
- (8) The states should calculate the dropout rates suggested above for the state as well as every district in order to find out the extent of district to district variation and to pay due attention to districts showing high dropout rates. They may make the same available in their Annual Work Plans.
- (9) For monitoring the progress in reduction of dropout rates, it is sufficient to report the annual grade-wise and average dropout rates for primary/elementary levels of education. There is no need to report retention rates which are at present based on old grade 1 enrolment data, for example, grade 1 data of 2009-10 was used for computing the retention rate up to grade 5 in 2013-14 for different states reported in the NUEPA's publication '*Elementary Education in India: Progress towards UEE*' of 2013-14. Retention rates do give an idea of the percentage of children who after taking admission in grade 1 would continue up to grade 5, 6, 7 or 8, but for monitoring year to year progress in reduction of dropout rates, the focus should be on annual dropout rates computed from the data of latest two consecutive years.
- (10) The definition of 'dropouts' should be made clear and precise so that one can decide whether a child has to be considered as enrolled and attending school or treated as a dropout from school. For example, we may consider a child a dropout if he/she has been absent for more than a month without valid reasons but she/he should not be considered a dropout on re-entering school after long absence. This is particularly important for identifying dropouts in household surveys in which data on dropouts are collected.

### Reconstructed Cohort Method

In the Reconstructed Cohort method, it is assumed that the grade-wise repetition and promotion rates based on the data of the two consecutive years (say,  $y$  and  $y+1$ ) will be operative for the hypothetical cohort of 1000 grade I students year after year till all the children of the cohort leave school either after completing the last grade of the cycle or by dropping out any time before that. Thus it is assumed that the repeaters of grade 1 will again repeat grade 1 with the same repetition rate or get promoted to grade 2 with the same promotion rate as were for the initial cohort of 1000. The repetition rate of grade 1 repeaters is thus assumed to be the same as of the initial cohort of 1000 children. Thus if 10% is the repetition rate in grade 1, out of 1000 children in grade 1 cohort, 100 will be in grade 1 again in the following year. It is assumed that 10% of these 100 repeaters, that is, 10 students will repeat grade 1 again and out of the ten, 10%, that is, 1 student will repeat grade 1 third time. Similar assumption is made about dropout rate. If 8% is the dropout rate for grade 1, then it is assumed that 8% of the 100 repeaters that is, 8 repeaters will drop out. Let us consider this in more detail to understand the assumptions of Reconstructed Cohort method.

Let us start with a cohort of 1000 children in grade 1 in year 1. Suppose from the data of latest 2 years, say 2009 and 2010, we find that the 82% children of grade 1 got promoted to grade 2 in 2010 and 8% dropped out. If these rates hold good, what will happen to the 1000 grade 1 children enrolled in year 1 in the succeeding years? In year 2, there will be 820 promotees from grade 1 to grade 2, 100 repeaters in grade 1 and 80 dropouts.

In year 3, out of 100 repeaters, 10 will be 2<sup>nd</sup> time repeaters in grade 1, 82 will go as promotees to grade 2 and 8 will be dropouts.

In year 4, out of 10 repeaters, 82%, that is, 8 will be promoted to grade 2; 10%, that is, one will again repeat grade 1 and 8%, that is, 1 student will become a dropout.

In year 5, the one student who is a third time repeater, will get promoted to grade 2.

Thus out of 1000 students, the total number of those who would drop out before reaching grade 2 will be  $80+8+1=89$ .

In the same way, we follow the cohort of 82 promotees to grade 2 in year 2, using the promotion, repetition and dropout rates of grade 2 derived from the data of 2009 and 2010.

Often there is criticism of the method due to the assumptions made about repetition, promotion and dropout rates of the repeaters. Why should the repetition rates of repeaters be assumed to be the same as of the initial cohort of 1000 children entering grade 1? True, the rates may not be the same but then since we lack data on repetition rate of repeaters we assume it to be the same as that of the initial cohort. If it is known that repeaters will not be allowed to continue education if they repeat twice as is the case in some professional courses, necessary adjustment can be made for that in the model. But at the primary level, there is no need to make any such assumption since every child is supposed to remain in school till he/she completes elementary education. But more important than that is the fact that the assumption about repetition or dropping out for repeaters has only marginal impact on the cohort Dropout rate, when the grade-wise repetition and dropout rates are not very high. To illustrate this let us consider the following example.

The cohort dropout rate derived for India on the basis of 2008 and 2009 data was 22.3% in the case of Approach A in which retention was defined only as reaching grade 5 and being in school in grade 5 up to 30 September. Because of the repetition phenomenon, some children who would reach grade 5 in more than 5 years have to be counted as ‘retained’ and not dropouts. The dropouts are those who did not reach grade 5 in 5 years or even in 6 or more years in case they repeated any grade. It is seen that there are 223 dropouts out of the cohort of 1000; among them,  $82+40+42+35=199$  are dropouts who had not repeated any grade even once; 22 are those who were one-time repeaters and 2 are those who had dropped out after repeating the same grade twice. It may be noted that any assumption about the dropout rate of repeaters being same as that of non-repeaters is not a serious limitation; the assumption about the dropout rate of repeaters being different from that of non-repeaters has only marginal effect on the cohort dropout rate. For example, if the dropout rate of repeaters in every class is 1.5 times that of the dropout rate of promotees, the total dropouts would be  $(22+2) \times 1.5 = 36$  and as a result the cohort dropout rate would become  $\{(199+36) \div 1000\} \times 100$ , that is, 23.5 which is only 1.2 points more than the cohort dropout rate derived on the assumption that the dropout rate of both repeaters and non-repeaters is the same in every grade. Thus the assumptions made in the Reconstructed Cohort method are not too restrictive and do not ordinarily lead to any noteworthy distortion.

Chart I shows the flow of students in the system for a cohort of 1000 using the promotion and repetition rates of 2008-09 for the whole country. We find the total dropouts from the primary level are  $88+44+49+42=223$  out of 1000 cohort if we consider those who reach grade 5 as non-dropouts, but if we consider those students also who do not reach grade 6 as dropouts from the primary level, then in the above example, the total number of children who drop out would be  $223+112=335$ , as shown in the chart.

If a flow chart is prepared for the same year on the basis of the data from common schools, we find that the total dropouts from the system would be  $109+61+50 = 281$  if retention is defined only as ‘reaching grade 5’ but if it is defined as ‘reaching grade 6’, then the total dropouts would be  $281+117= 398$ . Chart 2 shows the follow of students based on the data of common schools from DISE 2008 and 2009. The sum of all dropouts and graduates should be 1000 as every child either completes primary education eventually or drops out after 1 or more years of primary education. The total of graduates and dropouts is not exactly 1000 in Charts 1 and 2 due to rounding the numbers at various stages.

One important point to be noted about the limitation in computation of dropout rate, is that it is only for the schools that are supposed to be in the system; any child who leaves and joins a school that is outside the system is considered a dropout. Thus the children going out of the country (or state in the case of state level dropout rates) or those who leave and go to attend an unrecognised school are treated as dropouts. Generally such cases are relatively very few, but if their numbers are large it can have serious effect on dropout rate and, in that case, it will be necessary to collect and use the data on such school leavers for arriving at correct survival and dropout rates. In particular, if there is large scale shifting of children from government to unrecognised private schools or other such schools as are not covered in the annual data collection programme, the dropout rate will be certainly be over-reported since such children will be counted as dropouts, while actually they are not.

The assumption that the cohort of grade 1 children consists of those enrolled in grade 1 as on 30<sup>th</sup> September implies that no child is admitted in grade 1 after 30<sup>th</sup> September, but if the number of such children is substantial it affects the computation of dropout rate. In grade 2 these late entrants in grade 1 will figure in the enrolment of grade 2 next year, whereas they did not belong to the grade 1 cohort on 30<sup>th</sup> September. They will be treated as promotees from grade 1 and as a result the grade 1 dropout would be reduced and become less than the

actual grade 1 dropout rate. The solution for this problem is to add the late entrants to grade 1 cohort before calculating the promotion and repetition rates of grade 1 before applying the Reconstructed Cohort method.

Similarly, if the number of lateral entrants in any grade is substantial, it affects the computation of dropout rate of students in that class. For example, if we have a cohort of 1000 in grade 1 in year 1 and 200 children taking admission in grade 2 directly in year 2, perhaps after having studied at home, they will be counted as promotees in grade 2 as a result of which the promotion rate would be inflated. If there were 800 promotees from grade 1, it will appear that all of them (800+200) got promoted to grade 2, which would imply that there are no repeaters and no dropouts from grade 1. But if the data shows that there are some repeaters (say, 100 out of 1000), then the number of dropouts would appear to be  $1000 - 100 - (800 + 200)$ , that is -100 ! Thus the dropout rate sometimes becomes negative just because drop-ins in the form of lateral entrants get counted as promotees from grade 1. Again the remedy is to count the lateral entrants separately while reporting enrolment data and exclude them before applying the Reconstructed Cohort method. Of course, the lateral entrants in any grade in school would be only those who take admission directly in that grade after studying at home or in an unrecognised school, and not those who come (with or without transfer certificate) from another recognised school that is covered in the data collection programme. Here an implicit assumption is that all recognised schools are covered in the data collection programme every year. But even when correction for lateral entrants is made, it is to be noted that only those who take admission before 30 September will be covered and not those who get admitted as new entrants after this date. Perhaps it is safe to assume that such lateral entrants will be very few and the omission of those who got admitted after 30 September, will not make any serious difference.

The Reconstructed cohort method can be used to provide cohort dropout rates with Approach A or Approach B but for Approach C additional data on successful completers of the last grade (grade 5 at primary level and grade 8 at upper primary level) is needed which is at present not available from DISE. As already pointed out, Approach C is most sound for calculation of dropout rate from grade 5 as well as cohort dropout rate. It is suggested that DISE should have provision for collection and reporting the number of successful completers of grade 5 and grade 8 out of those enrolled in these grades on 30 September.

**Chart 1. Flor chart for estimating Cohort Dropout Rate and Internal Efficiency for Primary level (All India) based on DISE data of all schools 2008-09 and 2009-10**

Flow rates	Grade 1		Grade 2		Grade 3		Grade 4		Grade 5		
Promotion	0.846		0.915		0.914		0.923		0.829		
Repetition	0.072		0.037		0.032		0.027		0.030		
Dropout	0.082		0.048		0.054		0.050		0.140		
Year	ENR	DR	ENR	DR	ENR	DR	ENR	DR	ENR	DR	
0	1000	82									
1	72	6	846	40							
2	5	0	92	4	774	42					
3	0	0	8	0	109	6	707	35			
4	0	0	0	0	11	1	119	6	653	92	
5			0	0	0	0	13	1	130	18	Graduate 542
6					0	0	0	0	16	2	108
7							0	0	0	0	13
8									0	0	0
Total	1077	88	946	44	894	49	839	42	799	112	663
	4555										
Number of graduates = 663 Total pupil-years studied by the cohort = 4555 <b>Cohort ropout Rate to the last Grade (graduation) of the stage = 33.5%</b> Average no. of pupil-years invested per graduate = 6.87 Ideal number of pupil-years for a graduate = 5 <b>Coefficient of Internal Efficiency = 72.8%</b>											

Chart 2 : Flow chart for estimating Cohort Dropout Rate and Internal Efficiency for Primary level (All India) based on DISE data of all schools 2007-08 and 2008-09

Flow rates	Grade 1		Grade 2		Grade 3		Grade 4		Grade 5					
Promotion	0.831		0.916		0.916		0.921		0.822					
Repetition	0.083		0.048		0.043		0.036		0.044					
Dropout	0.086		0.037		0.041		0.043		0.134					
Year	ENR	DR	ENR	DR	ENR	DR	ENR	DR	ENR	DR				
0	1000	86												
1	83	7	831	31										
2	7	1	108	4	761	32								
3	1	0	11	0	131	5	697	30						
4	0	0	1	0	16	1	145	6	642	86				
5			0	0	2	0	20	1	162	22	528	Graduate		
6					0	0	3	0	26	3	133			
7							0	0	4	1	21			
8									0	0	3			
Total	1091	94	951	35	910	38	865	37	834	112	685			
	4651													
												Number of graduates =	685	
												Total pupil-years studied by the cohort =	4651	
												Cohort dropout Rate to the last Grade (graduation) of the stage =	31.6%	
												Average no. of pupil-years invested per graduate =	6.79	
												Ideal number of pupil-years for a graduate =	5	
												Coefficient of Internal Efficiency =	73.6%	