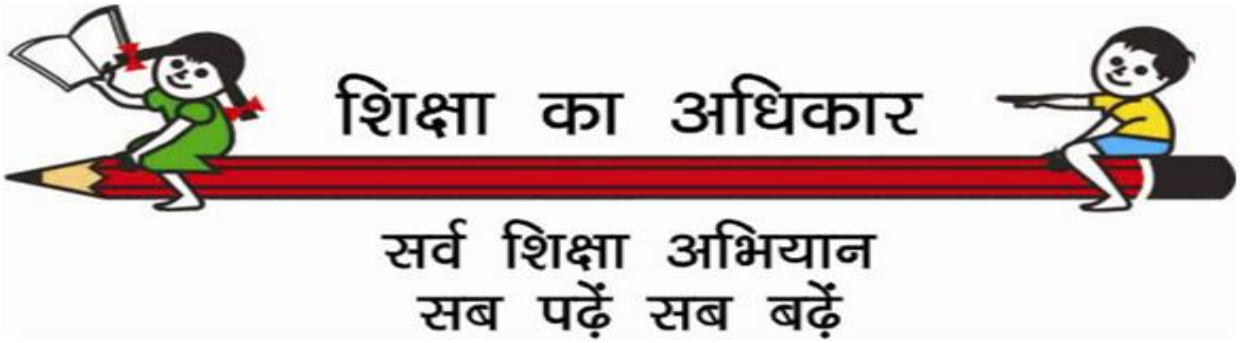

Post Enumeration Survey of DISE Data

Major Findings: 2010-11

A Compilation

By

Dr. Sunita Chugh

Department of Comparative Education and International Cooperation

National University of Educational Planning and Administration

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FOREWORD

DISE is a well developed educational management information system for systematic and scientific collection of data related to elementary education. Under the process districts are identified as a nodal point for aggregation, compilation, computerisation, analysis and use of data. DISE has undergone continuous reviews and modifications since its inception in 1995. Over the years it has not only extended its scope and coverage but has also adapted to the changing needs and requirements. The data is collected from all the schools having I to VIII standard. DISE has inbuilt system of continuous monitoring at each step. At the school level CRC need to cross check the data. Besides data entry, consistency check-up and compilation of data is done at block/district level, where the validation of data is done on a sample basis. To monitor the accuracy and reliability of data and also identifying the gaps and loopholes in the data collection and compilation, it has been made mandatory by the government to get 5% sample checking of data by an external agency. The purpose of this Post Enumeration Survey is to examine the veracity of data given in DCF under DISE as well as to identify and estimate the discrepancy in the DISE data, NUEPA made it obligatory for the States to get the PES done by an external agency and to send the report.

Dr. Sunita Chugh, Assistant Professor, Department of Comparative Education & International Cooperation, NUEPA has undertaken the task of collating and analysing the reports received from these States/UTs. The finding of the report discusses the precision level of data collected by different states on different items. I hope that the findings of this report will be useful for the states officials to improve the method of data collection, compilation and analysis which would further be helpful in the formulation of District Elementary Education Plan.

Arun C. Mehta
Professor & Head
Department of Educational
Management information System

ACKNOWLEDGEMENT

Good quality of data is essential to plan, execute and monitor various interventions to achieve universal elementary education and right to education. The DISE has been collecting and disseminating data on elementary education for the last several years. The DISE data is being increasingly used to prepare annual work plans, monitor the progress and also to undertake research. The DISE is used quite extensively in popular discussions on education. In this background it is essential that the quality of data is examined time to time and necessary steps are taken for improvement.

The DISE has introduced a mechanism to ascertain the reliability of DISE data through Post Enumeration Surveys that are to be carried by all states since 2006-07. A large number of states have been carrying out PES every year since then. An overall summary of findings of PES of various states is being prepared each year. The present report critically examines the PES of over 16 states for the year 2010-11. It is hoped the report provides useful insights on reliability of DISE data and PESs carried out by various states.

I wish to express my gratitude to Prof. Arun.C. Mehta for giving an opportunity to critically examine the PES reports for the year 2010-11. I am thankful to him for his valuable comments and observations on earlier drafts. I am thankful to Ms. Priyarani for providing necessary support and Ms. Ruchi for her secretarial assistance.

(Sunita Chugh)
Assistant Professor
Department of Comparative Education
and International Cooperation

LIST OF ABBREVIATION

BRC	Block Resource Center
BRCC	Block Resource Center Coordinator
CRC	Cluster Resource Center
CRCC	Cluster Resource Center Coordinator
DISE	District Information System of Education
DPEP	District Primary Education Programme
DCF	Data Collection Format
EMIS	Educational Management Information System
HM/HT	Head Master/ Head Teacher
MHRD	Ministry of Human Resource Development
NUEPA	National University of Educational Planning and Administration
PES	Post Enumeration Survey
RTE	Right to Free and Compulsory Education Act

CONTENTS

Post Enumeration Survey of DISE Data (2010-11)

The Context

Sound policy and good planning require reliable and timely data. The need for consistent and accurate data is ever increasing to monitor the progress made over a period of time. Also the need to monitor progress towards Education for All (EFA) goals and the implementation of Right to Free and Compulsory Education Act 2009 puts pressure on reliable, accurate and up to date statistics. India is one of the few countries, which has been collecting economic and social statistics since the middle of nineteenth century and several sets of time series data are available on large number of indicators. With the passage of time, the data requirements increased for the preparation of educational plans. To overcome the problem of inordinate delay, inaccuracy and unreliability of data an initiative was taken under District Primary Education Project (DPEP, 1994) to establish Educational Management Information System at the district level to create and maintain educational database. The task of developing a school based statistical system was initiated by NUEPA during 1995 and District Information System for Education (DISE) was established. The basic data is collected at the school level in the prescribed format. This data is sent to the block level which is verified by the Block Education Officer/ Block Resource Coordinator and further sent to EMIS in charge in the District Project Office where the data entry takes place. The validated data is stored at district level and also sent to the State Project Office. At state level the data is aggregated and sent to NUEPA for further analysis.

Under DISE, time series data are available on students enrolment, location of school, infrastructure of school, teacher profile etc for each school in the district. The scope and coverage of data collection has been extended to all the districts and all the recognised schools till elementary level of education. DISE is considered as a viable system for revitalization of school level educational statistics in the country.

Presently, DISE collates data from over 1.4 million schools imparting elementary education across the country on a variety of variables ranging from facilities in schools, profile of teachers, enrolment, information on various interventions like school grants, mid day meal, teacher grant to repeaters and examination results, etc. The range of variables include location, type (by gender, shift, level, management, etc.) of school, receipt and expenditure of school development funds and incentives, infrastructure (building, classrooms and their condition, room for headmaster, kitchen, library, laboratory, etc), facilities (from water, toilet to ramp), enrolment (by class, gender, caste, religion (Muslim), age), teachers (by age, educational and professional qualifications, gender, caste, etc.), examination results (by gender, caste, etc), incentives (by class, gender, caste), physical disability of children by type to mention some. In addition to

the core variables, the states can add supplementary variables at their discretion to meet their specific needs.

The aim is to improve the access and quality of education in terms of enrolment, retention, learning achievement through data assessment and analysis. Procedures for data validation and verification of the sample data capture formats at the district level have been prescribed and the districts have been reporting that appropriate measures are taken to ensure quality and reliability of data collection. DISE software also checks for many internal inconsistencies in the data and generates report for verification by the District Project Office. The State Project Office, while transferring the data from the district to the state database ensures that the data received from the district is complete and free from any inconsistency. Further, in order to verify the accuracy of DISE data, it has been made mandatory for all States/UTs to get the DISE data 5% sample checked by an independent external agency like university department, monitoring agency, research institute, etc. The Post Enumeration Survey is a way of estimating and understanding the errors taking place at the collection of data at the school stage. The survey is also expected to report the willingness, ability, and readiness of principals and/or head teachers to provide data and the proper maintenance of records for the same. It is now mandatory to submit the data along with the report of Post Enumeration Survey.

The procedure that needs to be adopted for PES is that 10% of districts need to be selected by state authorities in each state subject to a minimum of 2 districts- not to repeat the same district in subsequent year. 5% of schools from each block of chosen district shall be selected by the agency identified to carry out the survey. For making comparisons Filled in forms of DISE need to be handed over to the agency after PES data collection. The data shall be collected on the following components:

Table 1

Comparison of DISE DCF and PES Data on the Selected Items

Locations	**Rural/Urban**
School Characteristics	Year of Establishment School Category (Primary /Upper Primary etc.) Type of School (Boys/Girls/Co-educational) Lowest Class in the school Highest Class in the school School Management Residential School Type of Residential School (Ashram/Private, etc.) Shift School
School Management	Type of school Management Composition of Management Committees Performance of Management Committees Status of School Monitoring System School Fund Management
Staff	Educational qualification of the Principal Teacher Posts sanctioned and in position Number of year working as principal/ head teacher in the school Number of teachers (excluding principal/head teacher) Para-teachers Non-teaching staff Number of staff employed for mid-day meals and cleaning Number of teachers present on the day of survey
Facilities	Status and Type of building Number of blocks in schools Condition of class rooms and other rooms available in school Electricity, Common toilet, Separate toilet for girls & staff Conditions of boundary wall, source of drinking water, play ground Number of computers in good conditions, Seating Arrangement
Enrollment	Total Enrollment –Current and Previous Year-Class wise (Boys and Girls), ST and SC, OBC and children with disabilities. Repeaters – Current and Previous Year Class-wise Number of children who left school – Current and Previous Year, Class-wise
Enrollment and Attendance	Enrollment and Attendance on the day of survey class-wise, gender, total, SC and ST
Apart from the above items, questions on availability and maintenance of school records to provide data, field investigators' perception of cooperation extended by school headmasters in providing data are also included in the DCF for PES.	

States conducted Post Enumeration Survey

In 2010-11, 16 States and union territories have undertaken PES, the details for which are given in Table 2.

Table 2

Number of Sample districts/blocks/ schools of the states and agency conducted Five Percent Random Sample Checking of Data: 2010-2011

S.No	State/UT	Number of Districts	Number of Sample Districts	Number of Sample Blocks	Number of Sample Schools	Agency conducted the PES
1.	Arunachal Pradesh	16	2	7	38	SSA Monitoring Institute (MI) Rajiv Gandhi University, Itanagar
2.	Assam	23	4	26	331	Nowgong Girls' College Nagaon, Assam
3.	Bihar	38	6	83	595	Chandragupt Institute of Management, Patna
4.	Chandigarh	1	-	-	20	Centre for Computational Engineering, PEC-University of Technology, Chandigarh
5.	Delhi	9	2		250	Datamation Consultants Pvt. Ltd
6.	Haryana	21	2			Department of Education Kurukshetra University
7.	Himachal Pradesh	12	2	23	139	SGI Enterprises, Sanjauli, Shimla
8.	Jammu and Kashmir	14	2	18	98	Directorate of Economics & Statistics, Planning and Development Department
9.	Lakshadweep	1	1	1	10	DIET, Department of Education Kavaratti
10.	Madhya Pradesh	50	4	20	342	Madhya Pradesh Institute of Social Science Research (An ICSSR Institute), Ujjain
11.	Mizoram	8	2	5	42	Education Department Mizoram University, Aizwal
12.	Punjab	22	20	142	990	Midstream Marketing & Research Pvt. Ltd. (MMR), Nebsarai, new delhi
13.	Rajasthan	33	3	17	401	Directorate of Economics and Statistics, Rajasthan
14.	Tamil Nadu -1 (Nilgiris) Tamil Nadu -2- (Pudukkotai)	30	1 1	4 13	37 81	Department of Extension, Career Guidance and Students Welfare, Bharathiar University, Coimbatore Alagappa School of Education, Alagappa University

	Tamil Nadu -3 (Dindigul)		1	16	116	Alagappa University Karaikudi
15.	Tripura	4	2		118	Centre for the Study of Social Exclusion and Inclusive Policy (CSSEIP) Tripura University
16.	Uttar Pradesh - 1 (Jhansi and Aligarh)	71	2	24	268	Centre of Advanced Development Research , Lucknow
	Uttar Pradesh-2 (Sitapur & Moradabad)	71	2	34	430	Giri Institute of Development Studies Aliganj, Lucknow
	Uttar Pradesh -3 (Mirzapur, Chanduali & Kaushambi)	71	3	30	298	G. B. Pant Social Science Institute Allahabad

States/UTs that did not undertake PES include Andhra Pradesh, Chhattisgarh, Goa, Gujarat, Jharkhand, Karnataka, Kerala, Maharashtra, Manipur, Meghalaya, Nagaland, Orissa, Sikkim, Uttarakhand, and West Bengal. It has been observed that the Quality of Survey and reporting varies significantly. Minor deviations in methodology can also be noticed which relate to selection of sample, sharing of data with state authorities, etc.

Objectives of Five Percent Post Enumeration Survey of DISE data 2010-11

- To verify the accuracy/correctness of collected DISE data 2010-11
- To assess the status of the sample schools as per the DISE information indicators
- To assess the authenticity of the data collected from the sample schools by the field functionaries of SSA
- To analyse the strengths and weaknesses of the DISE in the district right from school to district
- To measure the precision level as well as deviation of DISE data
- To assess the process of collection and analysis of DISE data as well as the use of DISE data at different level
- To verify and document the process adopted for DISE data collection at all level (collection, checking and compilation).
- To assess the data entry consistency checkup
- To assess the training of Head master/Teacher for filling up the DISE format

- To identify the gaps responsible for maintaining good quality data at all level and to suggest suitable remedial measures in order to enhance the accuracy of DISE data to be collected in future years.

Objectives of the Present Study

Sixteen states/UTs have carried out five percent post enumeration survey (PES) of DISE data in 2010-11. The present study makes an attempt to ascertain the level of deviation of PES data in comparison to DISE data in different states. The study also focuses on the reasons of deviation as described by different states and the difficulties encountered by them to carry out the PES survey.

Methodology of PES Survey

The states have been directed to adopt appropriate methodology to select the sample of district, block and schools to carry out the PES Survey and to calculate the deviation of PES in comparison to DISE data. However few states have described the details of methodology and some of the states have not given full details. The observations related to the methodology are discussed below

Arunachal Pradesh: Details on selection of sample has been described. Method of calculating deviation has not been described. List of all the selected schools has been given. The detailed schedule of the data collection is not given.

Assam: A three stage sampling design was adopted in the present investigation. The identified districts were the First Stage Units, educational blocks under the selected districts were the Second Stage Units and The govt., provincial and recognized schools in the identified blocks under the selected districts constitute the Third and Ultimate Stage Unit for the investigation. Out of the ultimate stage units from each of the second stage units from each of the first stage units a 5% sample was selected by Simple Random Sampling without Replacement (SRSWOR) technique using Lottery Method.

Details on data collection and analysis have been provided. A comparative analysis of the DISE and sample checking data pertaining to various aspects has been done and found out the deviation in number and variation in percentage. Reliability and validity indices were also calculated wherever applicable.

Deviation (in number) = | [(Value) survey data – (Value) DISE data] |

$$\text{Variation (in percentage)} = \frac{|\,[(\text{Value}) \text{ survey data} - (\text{Value}) \text{ DISE data}]\,|}{(\text{Value}) \text{ Survey data}} \times 100$$

Reliability Index

In the simplest and non technical language, reliability means consistency. If the tools of data collection are reliable it should give consistent results. In other words, a reliable tool will give trustworthy and stable results if it is applied to the same individuals or objects from time to time, provided the characteristics being measured has not itself changed in the meantime. Similarly a reliable test is one, which, when applied to same subjects (persons) on different occasions, yields stable and trustworthy results, relatively free from the errors of measurement.

In modern test theory every observed score may be thought of as being made up of two parts, a component which is called the true score[1] and a second component called the error score[2]. Symbolically, modern test theory can be expressed by the following linear model[3].

$$X_t = X_\alpha + X_e$$

Where X_t = Obtained or raw score or measure
X_α = True score or measure
X_e = Xt – Xα is error score or measure

The reliability of any set of measurements is defined as that part of the variance which is true variance. If we write r_{tt}, for the coefficient of reliability of a test then we have

$$r_{tt} = \frac{s^2_\alpha}{\overline{s^2_t}}$$

$$= 1 - \frac{s^2_e}{\overline{s^2_t}}$$

where,

s^2_t = Variance of the test score
s^2_e = Error Variance
s^2_α = True Variance

Coefficient of reliability r_{tt} defined above is merely an abstract idea. Operationally, it is some sort of self correlation of a test.

[1] True Score = Actual score
[2] Error Score = Observed score~ Actual score
[3] Linear model is a mathematical model, where the relationship between the variables involved in linear.

Statistically linear model mentioned above may be interpreted as the line of regression of X_t on X_α . The Karl Pearson correlation coefficient between X_t and X_α is known as the index of reliability and is written as $r_{t\alpha}$. From regression theory we know that the standard error of estimate is given by $S_{t\alpha} = S_t (1- r^2_{t\alpha})$ ½ But $S_{t\alpha}^2$ is the same as S^2_e and we get

$$r^2_{t\alpha} = r_{tt}$$

$$=> \quad r_{t\alpha} = \sqrt{r_{tt}}$$

There are several methods that are used for estimating the reliability. The Test Retest method is appropriate in our case. The Test Retest method consists in submitting a group of individuals or candidates to a particular test and compiling their respective scores. After some time the same test is repeated on the same candidates and their scores are noted again. The two series of scores are arranged pair-wise, a pair is being the scores of a candidate in the two repetitions of the test. Karl Pearson's coefficient of correlation between the two series is taken as the measure of coefficient of reliability.

Validity Index

In addition to reliability, another essential property of any measuring tool is its validity. A measuring tool is said to be valid if the measurement made by it are accurate and comparable with those made by a standard tool. The validity of a test depends upon the accuracy with which it measures what it is supposed or intended to measure.

The reliability of a test is determined by obtaining the coefficient of self-correlation between the scores of n individuals on two repetitions of a test or on two parallel forms of a test. On the other hand validity of a test is determined experimentally by obtaining the coefficient of correlation between the scores of n individuals on a given test (X) and some independent standard test (Y) called criterion. One of the most difficult aspects of the validity problem is the choice of a proper and adequate criterion variable and obtaining measures on the variable which are to be compared with the scores on the given test. A criterion may be an objective measure of performance of a qualitative measure such as judgment of characters or excellence of work done. These criterions are most often approximate and indirect, for if reliable criteria were easily available, they would be preferred for use rather than the test. A high correlation coefficient between X and Y is an evidence of validity provided that

(1) The criterion Y was set up independently and

(2) Both X and Y are reliable.

It may be pointed out that validity is a highly relative concept. A test may be valid for a particular purpose, trait, group or situation and not always.

To be valid, a test must be reliable. Index of reliability, $r_{t\,\alpha} = \sqrt{r_{tt}}$ is sometimes taken as a measure of validity. If reliability coefficient of a test is 'r' (say), then validity coefficient will be 'r^2', which implies that, the test measures true ability to the extent of r^2 percent. Thus theoretically a reliable test is valid.

All the items have been described using the reliability and validity index. List of selected schools is given.

Bihar: Field investigators and coordinators were identified and trained for data collection. Data was collected in hard-copy templates and then this information was processed and converted into desired soft-copy format.

A comparative analysis of DISE and PES data were done on specific comparable indicators. After data collection both the set of formats were scrutinized. The DISE format and questionnaire were subjected to comparison by using simple deviation analysis in reference to all the comparable items. The overall deviation has been calculated as per following formula:

$$\frac{(d1+d2+d3+d4\text{----------}dx)*100}{a+b+c+d+e\text{----------}+x}$$

where d1, d2, d3, d4---------- stands for deviation of DISE data from post enumeration data ignoring+ or - signs

a,b,c,------x indicates item of post enumeration survey data.

- Statistical techniques like T-test and regression analysis have been used and Software Package for Social Sciences (SPSS) was used.

Reference Period

The DISE data pertains to the year 2010-11 with 30th September as reference date and the Enumeration was also of the same period. List of the selected schools is not given.

Chandigarh: Information on sampling, organisation of data collection and data analysis has been provided. List of the selected schools is given but the methodology of calculating precision level is not given.

Delhi: Detailed process of selection of sample and data interpretation is not provided. List of selected schools is given. Detailed schedule of the data collection is not given.

Haryana: Methodology is not explained and the schedule is not given.

Himachal Pradesh: has explained the method of sample selection and list of all schools selected has been provided. Detailed schedule of the data collection is not given.

Jammu & Kashmir: Information on selection of sample and accuracy of sample value is presented in detail. Details on tabulation of data and calculation of deviation in PES data have been provided. List of the selected schools has also been given.

Lakshadweep: Method of sample selection has been given. Calculation of discrepancy rates has been described as follows:

Step I:

Total discrepancy for district, blocks, each type of school is obtained by adding number of discrepancies in the surveyed schools of the district, blocks and of each type.

Step II:

a). To obtain discrepancy rate for district, total discrepancy in all surveyed schools in the district is divided by number of schools surveyed in the district

b). To obtain discrepancy rate for blocks, total discrepancy in all surveyed schools in the block is divided by number of schools surveyed in the block

c). To obtain discrepancy rates according to school type, total discrepancy in all surveyed schools of the type is divided by number of schools of the type (primary, upper primary, secondary and senior secondary) surveyed.

In addition to discrepancy rates for district, block and school type, the discrepancy rate is also calculated for groups of question, in order to identify where most of the discrepancies occur in recording data. Group wise discrepancy rate is calculated by dividing the total number of discrepancies in the group by the product of number of schools and number of queries in the group. List of the schools is not provided which were selected for the PES survey.

Madhya Pradesh: Sampling method has been explained but the data analysis technique is not given. List of the schools' name is given. Detailed schedule of the data collection is not given.

Mizoram: Method of sample selection has been given, but the data analysis technique is not given and the list of selected schools is not provided. Detailed schedule of the data collection is not given.

Punjab: Information on methodology of data collection, tabulation, analysis and comparison has been provided. List of all the selected schools has been given. The detailed schedule of the data collection is not given.

TamilNadu: *(Nilgiris, Dindigul and Pudukotai)* : Details on sample selection has been provided. Information on data collection and processing has also been given but the methodology of data analysis is not given. List of the selected schools is given.

Tripura: Sampling process has been explained but the list of school is not given.

Uttar Pradesh *(Jhansi and Aligarh)*: Details on sample selection has been provided. Methodology of data analysis is not given. List of the selected schools is given.

Uttar Pradesh *(Mirzapur, Chandauli and Kaushambi)*: Details on sample selection has been provided. Methodology of data analysis is not given. List of the selected schools is given.

Uttar Pradesh *(Sitapur and Moradabad)*: Details on sample selection has been provided. Methodology of data analysis and list of schools is not given.

Comparison of DISE Data Capture Format and Special DCF for Post Enumeration Survey

After analysing the information provided in the PES format, consistency of data between the DISE format and PES could be categorized with regard to school particulars, school location, facilities in school, student enrolment, staff details, investigators feedback schedule, etc. All the states have not reported on all the indicators and the present report reflects the deviation as per the information provided by the states. Tamil Nadu and Uttar Pradesh have submitted separate reports for three districts each and it has been reported accordingly.

Overall deviation of DISE data from PES data on all comparable items

Only few states have reported information on this aspect which is presented below:

Arunachal Pradesh: The average degree of deviation between the PES and DISE data came out to be 7.83 percent and the overall precision level of the DISE data was found 92.17 percent which is considered quite satisfactory in nature.

Assam: Deviation is within permissible limit.

Bihar: The average deviation of DISE data in relation to PES data is 10.79 percent, taking all the comparable indicators into consideration. Thus precision level is

89.21%, which is slightly higher than the 2008-09 figure 88.89% indicating some improvement in DISE DCF during 2010-11.

Chandigarh: It has been observed that the total deviation between DISE data and PES data for all comparable items together is 0.43% in all sample school.

Delhi: Information is not provided.

Haryana: The DISE data and PES data were analysed in order to ascertain the overall deviations of DISE data from PES data. The total deviation in this regard was 1.69% and a precision level is 98.3% which is revealed on the basis of comparison of DISE data with PES data.

Himachal Pradesh: The overall deviation of DISE data from PES data taken on all comparable items is less than 15%.

Jammu and Kashmir: The overall deviation of DISE data from PES data taken on all comparable items and sub-items into consideration was 2.56% and thereby giving a precision level of 97.44%

Lakshadweep: Around 8% discrepancies were observed.

Madhya Pradesh: No information is provided

Mizoram: The overall deviation of DISE data from PES data on all comparable items is 7.48% thereby giving a precision level as high as 92.52% for DISE data in relation to PES data.

Punjab: Out of 21 comparable variables, only two variables named availability of contract teachers (14%) and availability of playground (13.8%) have shown deviation of 10 percent or more, which is slightly higher than the permissible percentage of deviation i.e. 10 percent and their by giving precession level of 86 percent each. Information is not provided on overall deviation.

Rajasthan: Information is not provided

Tamil Nadu *(Dindigul)*: No significant deviation is found.

Tamil Nadu *(Pudukkotai)*: No information is provided.

Tamil Nadu *(Nilgiri)*: No deviation is found in this district.

Tripura: No information is provided.

Uttar Pradesh *(Jhansi and Aligarh)*: No information is provided

Uttar Pradesh *(Mirzapur, Chandauli and Kaushambi)*: No information is provided

Uttar Pradesh *(Sitapur and Moradabad)*: No information is provided

Table 3

Overall deviation of DISE data from PES data on all comparable items

Deviation	States
No deviation	Tamil Nadu (Dindigul, Nilgiri districts)
0-5%	Assam,Chandigarh, Haryana, Jammu & Kashmir, Punjab
5-10%	Arunachal Pradesh, Lakshadweep, Mizoram
10-15%	Bihar, Himchal Pradesh
> 15%	
No Information	Delhi, Madhya Pradesh, Punjab, Rajasthan, Tripura, Tamil Nadu (Pudukkotai) Uttar Pradesh(Jhansi and Aligarh, Mirzapur, Chandauli & Kaushambi, Sitapur and Moradabad District)

Comparison of PES data to DISE DCF with regard to Maintenance of School Records

On the basis of the analysis of the information provided by the states/UTS it is observed that majority of the schools do not maintain proper records and large number of schools do not possess photocopy of the DCF forms.

Arunachal Pradesh: It was found that 92% schools do not keep the school report cards and the forms are being sent to SPD at the state level but the schools do not keep those filled data capture formats.

Assam: In Bongaigaon district only 29.82 percent of the schools have School report cards. In Jorhat district only 35.11 percent of the schools have School report cards. In Marigaon district 76.00 percent of the schools have School report cards. Overall 56.80 percent of the schools have School report cards. Records are well maintained in most of the schools.

Bihar: School report cards for 2010-11 were available, in case of 67.6% schools. Records were well maintained in most of the school.

Chandigarh: Information is not provided

Delhi: In 32% schools the records are maintained well and in around 7 % schools they are maintained in very good condition and they are not very well maintained in around 61 % schools.

Himachal Pradesh: In 14% schools condition of record was found to be bad. In 15% schools records were not up-to-date. In 9% schools records were not easily available. 44% schools had not received the school report card.

Haryana: The school report card was available in 68% school. Records were well maintained in majority of the schools.

Jammu and Kashmir: Many of the schools did not properly maintain school records.

Lakshadweep: In more than 95% schools records were easily available.

Madhya Pradesh: No information is provided.

Mizoram: Records were available but improvement is needed in keeping the records more systematically.

Punjab: Around 97 percent of schools had well maintained records and they could provide information on enrolment without any difficulty.

Rajasthan: (*Churu, Dungarpur and Jhalawar)***:** The DISE Report cards are scantily available in private schools in Jhalawar. Records are well maintained in majority of the government schools.

Tripura: 36.8% schools did not have School Summary Report Card of the previous year. 68.2 percent have no school summary report cards and feedback on filled DISE format. The records are available but their proper maintenance need improvement.

Tamil Nadu *(Dindigul)* **:** No information is provided.

Tamil Nadu *(Nilgiris)*: Records are available in all the schools and they are well maintained.

Tamil Nadu *(Pudukkotai)***:** Records are available in all the schools and they are well maintained with the exception of one school.

Uttar Pradesh *(Jhansi and Aligarh)***:** No school report card was available in Aligarh district. In Jhansi district records were available in 79 % primary and 63% upper primary schools. In around 58% primary schools and 63% upper primary schools of Jhansi, photocopy of DISE DCF was available whereas in Aligarh only 21% of primary schools and 26% of upper primary schools had the photocopy of DISE DCF formats.

Uttar Pradesh *(Mirzapur, Chandauli and Kaushambi)*: In 94 percent of the sample schools, the school records were readily available. In around 87 percent of the sample schools, the physical condition of the school records was found to be good. In over 75 percent of the schools, the school records were found to be updated.

Uttar Pradesh *(Sitapur and Moradabad)***:** Out of the total 210 sample schools of Sitapur district, 90.96 percent have reported the availability of the year end summery details relating to the enrolled students whereas in Moradabad district this information has been obtained from 91.37 percent of total sample schools. The availability of report cards in the sample schools has not been satisfactory in both the districts.

Comparison of PES data to DISE DCF with regard to Type of School

Not much deviation is observed on this item except for the state of Haryana, Jammu & Kashmir, Lakshadweep, Punjab and Rajasthan.

Arunachal Pradesh: No deviation was observed.

Assam: No deviation was observed.

Bihar: Large deviation was observed on comparison of PES data with DISE data with regard to (87.50%) data on residential school, shift school (48.57%) schools with pre schooling (44.44%).

Chandigarh: No deviation was observed.

Delhi: No deviation was found.

Haryana: High deviation of 10% in PES data in comparison to DISE data was found for school category. Before 2006, Govt. Primary Schools were independent. They were not merged with upper primary schools housed in Middle, High & Senior Secondary Schools. Since 2007, they were put under the control of the Heads of Upper Primary Schools. All the Primary and Upper Primary Schools are filling their DISE DCF separately.

Himachal Pradesh: No deviation was found.

Jammu & Kashmir: 6% deviation was measured on type of school.

Lakshadweep: 9.35% deviation was observed

Madhya Pradesh: No deviation was found

Mizoram: No deviation was found

Punjab: 5.9 % deviation was reported in PES data in comparison to DISE data.

Rajasthan: In Rajasthan variation is observed with respect to school type with 177 primary schools being reported by PES compared to 167 schools reported in DISE data. Large discrepancy was found due to the fact that the survey had been carried out according to the reference date of as on September 30, 2010 when all the schools were under School Education Department and subsequently a circular had been issued by the Govt. of Rajasthan on October 2, for devolution of primary education to the Local bodies.

Tamil Nadu *(Dindigul)***:** No deviation was found

Tamil Nadu *(Nilgiris)***:** No deviation was found

Tamil Nadu *(Pudukkotai)***:** No deviation was found

Tripura: Around 2.5% deviations was found

Uttar Pradesh *(Jhansi and Aligarh)***:** Insignificant deviation was observed.

Uttar Pradesh *(Mirzapur, Chandauli and Kaushambi)***:** In over 99% of the schools, the DISE data matched with sample survey data in providing school type and school category information.

Uttar Pradesh *(Sitapur and Moradabad)***:** No deviation was found

Comparison of PES data to DISE DCF with regard to Establishment year of School

The information relating to school particulars such as school category, type, management, year of establishment etc. are found correct in most of the states and there is no deviation between PES & DISE data. Not much deviation is found with regard to the year of establishment except in Assam (7%) Himachal Pradesh (20%), Uttar Pradesh (Jhansi and Aligarh). It has been suggested by number of states that this kind of information may be collected from the block or district office and need not be collected annually.

Arunachal Pradesh: No deviation on category of school, location of school but this information on establishment year was not provided.

Assam: 7.02% deviation was observed**.**

Bihar: No information was provided.

Chandigarh: No deviation was observed.

Delhi: Around 2% deviation was observed.

Haryana: No information was provided.

Himachal Pradesh: About 20% deviation recorded in year of establishment. This was due to non availability of proper records in schools about establishment year of school.

Jammu and Kashmir: 2% deviation was recorded.

Lakshadweep: Information was not provided.

Madhya Pradesh: No information was provided.

Mizoram: No information was provided.

Punjab: No information was provided.

Tamil Nadu *(Dindigul)***:** No information was provided.

Tamil Nadu *(Nilgiris)***:** No information was found

Tamil Nadu *(Pudukkotai)***:** No information was provided

Tripura: No information was provided.

Uttar Pradesh *(Jhansi and Aligarh***):** Around 20% deviation in Aligarh and around 4% deviation in Jhansi were found. The reason was that these schools were first started in a private building and their own building was constructed later on. PES data gave the year in which the classes started even in private building and that year was taken as the year of establishment. But the DISE format gave the year of construction of its own building.

Uttar Pradesh *(Mirzapur, Chandauli and Kaushambi)***:** In about 85 percent cases, the DISE data matched with sample survey data on information regarding establishment year.

Uttar Pradesh *(Sitapur and Moradabad)*: No deviation was found

Comparison of PES data to DISE DCF on School related indicators like classrooms, boundary walls, etc.

Low to high deviation is found in different states. States like Assam, Chandigarh, Delhi, Mizoram, Uttar Pradesh (Mirzapur, Chandauli & Kaushambi districts) negligible deviation is found whereas in states like Arunachal Pradesh (13.15%) ,Bihar (25.12%), Haryana (8%), Jammu & Kashmir (19%) high deviation is found with regard to information on boundary wall and in state of Haryana (21%) Himachal Pradesh (36%), Lakshadweep (23%) very high deviation is found with regard to condition of classrooms.

Arunachal Pradesh: The deviation found in boundary wall was 13.15%.

Assam: It was found that in all districts of Assam that is Bongaigaon, Jorhat , Kamrup,Marigaon there was insignificant variation between DISE and survey data existed in boundary wall condition and seating arrangement in one or two categories of schools. As regards total rooms in the selected schools in all districts, very small variations were observed.

Bihar: Deviation of 25.12 % was found in the condition of boundary walls. 33.33% of deviation was found in the availability of furniture in schools. Detailed comparison of the DISE data from PES data on status of school buildings shows that there was deviation of 22.69%.

Chandigarh: The DISE data shows there were 18 schools which had pucca boundary wall whereas according to PES data number of schools having pucca boundary wall were 17. There was also a difference of one school in case of partial boundary wall; according to DISE data it was only 1 school which was having partial boundary wall but PES data shows that there were 2 schools which had partially boundary wall.

Delhi: Deviation was negligible less than 1 percent

Haryana: Condition of boundary wall shows 8% deviation in DISE data from PES data and shows 92% precision level. Deviation found was based on the varying interpretation regarding condition of Boundary Wall i.e. 'Pucca' and 'Pucca but broken'. No deviation was found in other category. Deviation of 12% in DISE data was found for Availability of Furniture. Deviation was found in terms of furniture for some students and no furniture for students. Deviation was more in primary schools rather than other schools. High deviation of DISE data from PES data was found regarding condition of other rooms. Data reveals that overall deviation of DISE data from PES data on condition of other rooms was 21%. It was difficult for Heads to decide which rooms fall in Minor Repair on major repair category. It depends only upon perception/ observation of Heads. Maximum deviation was found in the two categories i.e. good and need minor repairs. On the basis of PES data, there was 3% deviation found in DISE data in Status of Schools Building, Electricity in Schools and Availability of Playground.

Himachal Pradesh: No deviation was found with regard to status of school building but around 36.7% deviation was observed with regard to number of classrooms.

Jammu & Kashmir: 8 % deviation was reported on status of school building and 19% deviation was reported on condition of boundary wall, 8% on availability of computers, and 6% on electricity in schools.

Lakshadweep: No deviation was found with regard to boundary wall however as high as 23% deviation was found related to number of classrooms.

Madhya Pradesh: Data relating to status of school building in terms of private, rental, government building, etc. was found to be matching for 94.2 percent schools. The data on number of classrooms was similar in the case of 73% schools. In 36.8 percent schools mismatch of data was observed in terms of availability of playground in schools. The information on boundary wall in schools in terms of its condition, type and construction revealed similarity in the two sets of data for 71 percent schools. The variation is in 24% schools were observed for availability of library in schools and variations in 39.5% schools were found for the number of books available in libraries. In 36.8% schools mismatch of data was noticed in terms of availability of playgrounds in schools.

Mizoram: No deviation was found

Punjab: Little to high variation (less than 1% to 8%) was observed in Punjab with regard to total classrooms in the schools, location of school by area, category of school, type of school management, condition of boundary wall. Around 5.6 % deviation was found on total classroom in the school; location of schools by area (0.4%); category of schools (8%); condition of boundary wall (6%); availability of sitting arrangement (4.8%).

Rajasthan: In case of availability of facilities in schools very high variation of 19.25 percent was found in Rajasthan. 2.29 % and 13.53% deviation was found in availability of electricity and playground in the schools respectively.

Tamil Nadu *(Dindigul)***:** No deviation was recorded.

Tamil Nadu: *(Nilgiri)***:** Insignificant variation was observed

Tamil Nadu *(Pudukkotai)***:** The deviation was 2.27% in the number of classrooms

Tripura: For condition of classrooms 2.54% deviation was observed. Schools having a playground the deviation was 3.39%. Little variation was also observed in relation to computer facility (PES and DISE formats having 125 and 121 respectively) which was due to the current purchase of computers in the academic year (2010-11) in private schools and of higher secondary category. In Tripura deviation was only 0.85% with regard to availability of electricity as well as condition of boundary wall.

Uttar Pradesh *(Jhansi and Aligarh)***:** Jhansi and Aligarh had reported the percentage of schools having boundary wall (81.8%) playground (72.7%) but did not give figures related to deviation.

Uttar Pradesh *(Mirzapur, Chandauli and Kaushambi)***:** As far as type of building is concerned 5% deviation was observed and with regard to number of classrooms 6% deviation was found.

Uttar Pradesh *(Sitapur and Moradabad)*: Marginal deviation was found with regard to electricity facility, toilet for girls within the range of 0.15% to 4.17%.

Comparison of PES data to DISE DCF with regard to School Related facilities like toilet, drinking water, etc

In number of states -Assam, Bihar, Delhi, Lakshadweep, Tamil Nadu Tripura insignificant deviation is found. In states like Chandigarh Haryana deviation is in the range of 6 to 7%. In states like Arunachal Pradesh (18.42%), Jammu & Kashmir (27% on source of drinking water, 17% on separate toilet for girls), Mizoram (14.3%) Rajasthan (19.25 percent with regard to availability of girls' toilet) high deviation was recorded.

Arunachal Pradesh: Deviation was 18.42 % with regard to toilet facility, 15.78% on drinking water facility.

Assam: It was found that in all districts of Assam that is Bongaigaon, Jorhat, Kamrup, Marigaon there was slight variation between DISE and survey data existed in some characteristics like common toilet, girls' toilet and drinking water.

Bihar: Low deviation of 1.95 from PES data was found on the source of drinking water. The overall deviation of DISE data from PES data was 3.13% and the precision was 96.87% with regard to separate toilets for girls and as far as common toilet is concerned the deviation was as high as 17.70 percent.

Chandigarh: There was deviation of 6.68% in case of separate toilets for girls.

Delhi: Not significant deviation was observed with regard to availability of facilities in schools with 0.40 % on electricity facility, 0.80 on separate toilet for girls, 0.8 % playground. However 5.5% deviation was observed related to common toilet facility.

Haryana: 7% deviation in DISE data from PES was found in the common toilet facility. There was confusion in the term 'Common toilet'. No deviation was found with regards to girls toilet.

Himachal Pradesh: No information was provided.

Jammu & Kashmir: Very high deviation (27%) was observed on source of drinking water, 17% on separate toilet for girls, 9% on availability of play ground.

Lakshadweep: No deviation was found.

Madhya Pradesh: Comparing two set of data (DISE DCF and PES) on source of drinking water facility, its functionality and availability of electricity in schools, the deviation was observed as 26 and 15 percent respectively.

Mizoram: High deviation (14.3%) was found with regard to source of drinking water as well as availability of common toilet and 9.5% deviation was observed on separate toilet for girls

Punjab: : Little variation was observed in Punjab with regard to source of drinking water (4.6%), availability of sitting arrangement (4.8%) and availability of toilets (6%).

Rajasthan: In case of availability of facilities in schools the variation was 19.25 percent with regard to availability of girls' toilet, 2.29 % was found with regard to availability of common toilet.

Tamil Nadu *(Dindigul)***:** No deviation was found.

Tamil Nadu *(Nilgiri)***:** The deviation on the availability of electricity, common toilet, drinking water and number of computers was reported 14.29%; Huge variations (77 per cent schools) in the two sets of data on the number of meals served during the previous academic year were noted.

Tamil Nadu *(Pudukkotai)***:** Insignificant deviation on availability of common toilet facilities was observed.

Tripura: 1.69% deviation was found with regard to availability of common toilets and for condition of classrooms 2.54% deviation was observed. Schools having a playground the deviation was 3.39%. As far as drinking water facility in selected schools of Tripura is concerned deviation was as high as 7.63%. DISE data shows that out of two schools, one school having no sources of drinking water and another having other source of drinking water, but PES data gives that these two schools having tap water as their drinking water sources.

Uttar Pradesh *(Jhansi and Aligarh)***:** provides information about the percentage of schools having facility but does not give any information on deviation.

Uttar Pradesh *(Mirzapur, Chandauli and Kaushambi)***:** No information was given.

Uttar Pradesh *(Sitapur and Moradabad)*: In Sitapur the deviation was 13.33 % on the availability of toilet facility for boys and 15.38 % on the availability of toilet for girls. In Moradabad the deviation on the availability of toilet for girls is 25%. But if we look in absolute number the difference is of two schools only.

Comparison of PES data to DISE DCF with regard to incentives like mid-day meals, free books, uniforms

Very few states have provided information on these items. In Bihar high deviation was found with regard to distribution of text books (around 10% at primary level and around 20% at the upper primary level). In Madhya Pradesh discrepancy of two data set on the midday meal is around 15%. In Mizoram no deviation is found and in Uttar Pradesh as well as in Assam insignificant deviation is observed.

Arunachal Pradesh: Information was not provided.

Assam: Insignificant variation (less than 1 percent) deviation was reported.

Bihar: Deviation between 10 to 20% were observed in indicators like text books, free uniform. 9.92% deviation was observed on distribution of text books at primary level whereas at the upper primary level it was estimated to be 20.39%.

Chandigarh: It is observed that out of 20 sample schools this facility is available in only 15 schools. Mid Day Meal (MDM) scheme is available only for Government and Government aided schools and it is meant for primary and upper primary classes. In the present sample of 20 schools 13 are managed by Govt. and 2 schools are Govt. aided and 5 are private schools.

Delhi: No information was provided

Haryana: No information was provided

Himachal Pradesh: No deviation was found.

Jammu and Kashmir: No information was provided

Lakshadweep: Information was not provided.

Madhya Pradesh: The comparative analysis of data regarding MDM reveals assorted picture. Regarding status of MDM in terms of giving MDM in schools and its preparation in schools or at any other place is found to be alike in two sets for 86.5 % schools. The infrastructural aspects of MDM facility in terms of status of kitchen sheds available for cooking meal data mismatch was about 27 percent schools.

Mizoram: No deviation was found.

Punjab: Ninety eight percent sampled schools had reported the provision of mid-day meal programme in the schools and 89 percent schools had reported on the availability of display board.

Rajasthan: Overall, in the 3 districts, in 95.42 percent government and 26.80 % private schools, midday meal facility was available. Overall, in the 3 districts, in 93.84 percent of schools, the quality of midday meal was good, in 6.16 percent schools; the quality of midday meal was satisfactory. In case of Private schools in 50.00 % schools, the quality of midday meal was good whereas in 38.46% schools its quality was satisfactory and whereas in 11.54% schools, its quality was not satisfactory.

Tamil Nadu *(Dindigul)***:** No deviation was observed

Tamil Nadu *(Nilgiris)***:** No deviation was observed

Tamil Nadu *(Pudukkotai)***:** No deviation was observed

Tripura: Information is not provided.

Uttar Pradesh *(Jhansi and Aligarh)***:** provides information about the percentage of schools having facility but does not give any information on deviation.

Uttar Pradesh *(Mirzapur, Chandauli and Kaushambi)***:** No information is provided.

Uttar Pradesh *(Sitapur and Moradabad)*: Not significant difference (less than 1%) was found with regard to free text book, uniform, scholarship and midday meal scheme.

Deviation related to Enrolment, facilities in the school etc are discussed in the ensuing section:

Deviation related to Enrolment of Children

All the states have provided information related to deviation in two set of data on enrolment of students. Arunachal Pradesh. Madhya Pradesh, Rajasthan (Pvt. Schools) are having high deviation (more than 15%).

Arunachal Pradesh: Deviation in enrolment was estimated to be 15.01% at both the levels of education. The two items need a little attention to be paid for bringing them to the category of least degree of deviation.

Assam *(Jorhat)***:** All the variations in relation to enrolment in all categories of schools are under permissible limits. The minimum variation being 0.00 percent and the maximum 5.71%. Reliability Index for the total enrolment of the schools .using DISE data and survey data were also calculated and was found to be 0.98. Similarly, the validity index was found to be 0.99. Thus the enrolment data obtained as DISE exercise is highly reliable as well as valid.

Assam *(Kamrup)***:** All the variations in relation to enrolment in all categories of schools are under permissible limits. The minimum variation being 0.00 percent and the maximum being 8.70 %.Reliability Index for the total enrolment of the schools using DISE data and survey data were also calculated and was found to be 0.94. Similarly, the validity index was found to be 0.97.

Assam *(Marigaon):* All the variations in relation to enrolment in all categories of schools are under permissible limits. The minimum variation being 0.00 percent and the maximum being 8.70 percent. Reliability Index for the total enrolment of the schools using DISE data and survey data were also calculated and was found to be 0.94. Similarly, the validity index was found to be 0.97. Thus the enrolment data obtained as DISE exercise is highly reliable as well as valid.

Assam *(Bongaigaon):* All the variations in relation to enrolment in all categories of schools are under permissible limits. The minimum variation being 0.00 percent and the maximum being 9.09 percent. Reliability Index for the total enrolment of the schools using DISE data and survey data were also calculated and was found to be 0.94. Similarly, the validity index was found to be 0.97. Thus the enrolment data obtained as DISE exercise is highly reliable as well as valid.

Assam Overall: All the variations in relation to enrolment in all categories of schools are under permissible limits. The minimum variation being 0.00 percent and the **maximum** being 3.88 %. Reliability Index for the total enrolment of the schools using DISE data **and** survey data were also calculated and was found to be 0.97. Similarly, the validity index was found to be 0.98. Thus the enrolment data obtained as DISE exercise was highly reliable as well as valid.

Bihar: The deviation on total enrolment between PES and DISE data is high. 9.97% deviation was observed in the total enrolment of children in schools. Gender-wise deviations were found 8.43% in case of boys and 11.52% in case of girls for the aggregate elementary level. At primary level the deviation was 10.8% and at the upper primary level it was 6.9%. Deviation was very high for ST girls at upper primary level with 34.17%. Further analysis show that this deviation was very high at upper primary level with 40.43 % at Grade VII and 42.42% at Grade VIII. Percentage deviation for Maha dalit children was as high as 12.65%. For children with special needs deviation was found to be 27.3%.

Chandigarh: The deviation is negligible with 0.12 percent.

Delhi: Deviation at the primary level is less than 1 percent both for general **category** and scheduled caste students. However at the upper primary level deviation for other backward classes i.e. 5.19 % but for general category and scheduled caste children is less than 1 percent.

Haryana: The less deviation was found in Enrolment. Deviation in overall enrolment **was** found 0.7%, in SC enrolment it was 0.33% and OBC enrolment it was 1.39%. Overall deviation was at Primary level (0.46%) as compared to Upper Primary level.

Himachal Pradesh: It was found that overall enrolment of school does not vary too much, but some variation was found that overall enrolment of boys and girls separately. So **teachers** should be instructed to take care while DCF was filled by them. Deviation in enrolment at primary level varied from 0% to 16.5% among different schools. It was found that in some schools the DCF were not properly filled by the teachers. At upper primary level deviation in enrolment varied between 0.16% to 14.0%. Major deviation was reported for ST children with 10.79%. As far as total students are concerned the deviation was 0.37% and for SC the deviation was found to be 0.31%.

Jammu & Kashmir: There is very close matching in the enrolment figures given in the DISE format and collected through sample survey Deviation was negligible with around 1 percent.

Lakshadweep: During cross verification of DISE data regarding enrolment, it emerged that in 50 percent of the schools having primary classes and 25 percent of these having upper primary classes; **either** the data regarding enrolment was matching or was internally consistent in the information provided. 0.21% deviation was observed.

Madhya Pradesh: Enrolment in **Primary** schools of urban areas was found in 50 percent of the surveyed schools. **As far as enrolment in middle schools is concerned the variations are visible in** 40% of the total schools. The variations in enrolment data in Primary schools were found to be highest in Neemuch district (66.7 per cent schools), followed by Mandla, Burhanpur and Ujjain districts with variations in 62.5, 44.4 and 33.3 percent schools respectively. In 11 percent schools of Burhanpur district the information was not made available to PES team.

Comparative analysis of data regarding enrolled students in Primary schools and Middle schools located in rural **areas** reveals variations in the two sets of data in 46.2 percent of the surveyed **schools**. As far as enrolment in Middle schools is concerned the variations are visible in 32% of the total schools. The two sets of data (PES and DISE) are found to be **identical** for 80% schools of Burhanpur districts followed by Ujjain, Neemuch and Mandla districts.

Mizoram: The deviation found on total enrolment was 8.05%, the highest deviation was found in the **number** of students with disabilities. The deviation is as high as 41.5% is much better as compared to the deviation of last year which was more than 80%.

Punjab: Indicators with less than 10 percent of deviation from PES data are enrollment in the present academic year, grade 1 4.2%, grade II 3.8% grade III 3.9%, grade IV 3.4%, grade V (4.2%) **grade** VI (1%) Grade VII (0.9%) grade VIII (0.04%), Primary (3.9%) and upper primary 0.7%

Rajasthan: 21% deviation is found between 5% PES and DISE data in total enrolment in schools of three districts and more in the case of private schools. There is negligible discrepancy in the enrolment figures given in the DISE format and collected through sample survey in government schools. In government schools the discrepancy is around 3.6 % and in private schools it is as high as around 42%.

Tamil Nadu *(Pudukkkotai)***:** The **deviation** between PES data and DISE data with regard to enrolment at primary level is 5.93% for all the categories and for SC category it is as high as 30.12%. In the upper primary classes the deviation in the enrolment for all the categories combined is 5.96% and for SC category it is 3.43%.

Tamil Nadu *(Nilgiri)***:** Regarding **enrollment** of children at the primary and upper primary levels is concerned a maximum deviation of 3.3% was observed in Standard I. As far as the enrolment of SC is concerned the deviation was noted in the range of 1.6 to 4.2%. High deviation was estimated for children with special needs in III rd standard (50%).

Tamil Nadu *(Dindigul)***:** Deviation is around 5 percent at primary classes and 6.23% at upper primary level. For schedules Caste it was as high as 17 percent.

Tripura: In enrollment there is **deviation** of 2% for boys and deviation of 1% for girls.

Uttar Pradesh *(Jhansi and Aligarh)*: It is very close matching in the enrolment figures given in the DISE format and collected through sample survey. Less than 1% deviation was observed.

Uttar Pradesh *(Mirzapur, Chandauli and Kaushambi)***:** The variation between DISE and sample survey data at the primary level as well as at upper primary level enrollment figures was found to be **quite** marginal and insignificant (less than 1 percent). Except for the disabled girls at the upper primary level (around 9%) the variation between DISE and sample survey data at both the primary and upper primary level (4-5%) was quite marginal.

Uttar Pradesh *(Sitapur and Moradabad)***: Negligible** variation was observed at the primary level (0.2%) in Sitapur district and (0.04%) at Moradapur district similarly at Upper Primary Level, negligible deviation was recorded.

Table 4

Comparison of DISE and PES data regarding Enrolment of Children

Deviation	States/UTS
No deviation	Punjab
0-5%	Assam (Jorhat, Kamrup, Bongaigaon, Marigaon), Chandigarh, Delhi, Haryana, Himachal pradesh, Jammu & Kashmir, Lakshadweep, Rajasthan (Government schols), Tamil Nadu (Pudukkkotai, Nilgiri), Tripura, Uttar Pradesh
5-10%	Bihar, Mizoram, Tamil Nadu (Dindigul):
10-15%	
>15%	Arunachal Pradesh. Madhya Pradesh, Rajasthan (Pvt. schools)
No information	

Comparison of DISE and PES data regarding Repeaters

Most of the states have provided information related to repeaters whereas few states have not given the information; the details are given in Table 4.

Arunachal Pradesh: The degree of deviation regarding repeaters is 41.60%. This is considered high degree of deviation and low level of precision which needs to be looked after.

Assam: Some variation existed in case of repeaters in some classes within school categories but the exact figure are not given.

Bihar: Deviation in repeaters is high with 22.58% at primary level and was found to be very high at upper primary level with 41.98 percentage.

Chandigarh: DISE and PES data matches exactly, no deviations.

Delhi: High deviation is observed both at primary and upper primary levels. At primary level it was estimated to be around 16 percent and for upper primary it was as high as 39 percent updating the records.

Haryana: Deviation in number of Repeaters in DISE data was found as compared to PES data in Primary schools. Overall deviation was found 10%. DISE defines repeaters on the basis of three categories i.e.

1. Failed and retained in same class
2. Retained in the same class for prolonged absence

3. Readmission after a gap of more than 3 months. But in practice, it was observed during survey that the teacher treated only them the failed ones.

Himachal Pradesh: Information is not provided.

Jammu and Kashmir: Very high deviation of 30% was observed

Lakshadweep: Information is not provided.

Madhya Pradesh: The data for primary schools in urban areas revealed mismatch of information in 19% of the total surveyed schools and in middle schools the data was found to be dissimilar in 40% of the total survey schools. The data for rural areas revealed mismatch of the information in 32% of the total surveyed schools at primary and the deviation was of around 35% at upper primary level.

Mizoram: No information is provided**.**

Punjab: No information is provided**.**

Rajasthan: No information is provided**.**

Tripura: No information is provided**.**

Tamil Nadu *(Pudukkotai)***:** There is no deviation observed on repeaters in the district.

Tamil Nadu *(Nilgiri)***:** There is no deviation observed on repeaters in the district.

Tamil Nadu *(Dindigul)***:** There is no deviation observed on repeaters in the district.

Uttar Pradesh *(Jhansi and Aligarh)***:** High level of consistency and compatibility was observed between DISE and sample survey data on repeaters, at the primary level.. In the smaller proportion of cases the variation between the two sets of information was found at the upper primary level, the variation was highly insignificant.

Uttar Pradesh *(Mirzapur, Chandauli and Kaushambi)***:** About 7% and 5% of variation was found between DISE data and sample survey data on boys and girls respectively who are repeaters at the primary level. About 33% and 28% of variation was found between DISE data and sample survey data on boys and girls respectively who are repeaters at the upper primary levels. There is a need to address the issue of inconsistency through appropriate strategies like strengthening the supervision and monitoring, periodically

Uttar Pradesh *(Sitapur and Moradabad)*: No variation was found in Sitapur District and the difference in Moradabad was around 3.6 % in Moradabad with regard to repeaters.

Table 5

Comparison of DISE and PES data on Enrolment of Children

Deviation	States/UTS
No deviation	Tamil Nadu: (Pudukkotai, Dindigul, Nilgiri)
0-5%	Assam, Uttar Pradesh (Sitapur, Moradabad, Aligarh and Jhansi)
5-10%	Uttar Pradesh: Mirzapur, Chandauli and Kaushambi at primary level, Haryana
10-15%	
>15%	Arunachal Pradesh (41%), Bihar (23% at primary level and 41% at upper primary level) Uttar Pradesh: Mirzapur, Chandauli & Kaushambi at upper primary level (33% for boys 28% for girls), Jammu & Kashmir, Delhi (16% at primary level &39% at upper primary level)
No information	Himachal Pradesh, Lakshadweep, Mizoram, Punjab, Rajasthan, Tripura

Comparison of DISE and PES data on Staff Position

Arunachal Pradesh: 2.07% deviation was observed.

Assam: It is observed that range of variations (less than 1 percent to 20 percent) is observed with regard to different category of staff under different category of schools. In Jorhat it is observed that as regards total number of sanctioned post there is 0.91 percent variation in Primary schools, 13.68 percent variation in Upper primary and 8.47 percent variation in Primary with Upper primary schools. As regards teachers in position there is 7.94 percent variation in Primary, 1.08 percent variation in Upper primary and 2.00 percent variation in Primary with Upper primary schools. As regards non teaching staff, there is 0.00 percent variation in Primary and Primary with Upper primary each and 10.00 percent variation in Upper primary schools. As a whole, in Jorhat district, there is 4.81 percent variation as regards total posts sanctioned, 4.52 percent variation as regards teachers in position and 5.88 percent variation as regards non teaching staff.

There is no significant variation as regards the characteristics under staff details in the selected schools of Kamrup district.

For Bongaigaon district it is observed that as regards total number of sanctioned post there is 15.00 percent variation in Primary schools, 20.00 percent variation in upper primary and 3.45 percent variation in Primary with upper primary schools. As regards teachers in position there is 5.21 percent variation in Primary, 24.14 percent variation in upper primary and 3.57 percent variation in Primary with upper primary schools. As regards non teaching staff, there is no variation. As a whole, in Bongaigaon district, there is 2.12 percent variation as regards total posts sanctioned and 9.89 percent variation as regards teachers in position. The variations in overall situation thus observed are well within permissible limits.

In Bongaigaon district it is observed that only small variations as regards different category of staff under different category of schools. Insignificant variation (in the range of 1.34% to 1.61%) was observed as regards non teaching staff in Upper primary school.

As far as staff details of selected districts are concerned, the variations are concerned, the variations are within permissible limits.

Bihar: On teachers in position 7.53% deviation on comparison of PES data with DISE data was observed**.**

Chandigarh: The DISE data shows there are 665 sanctioned posts but according to PES data total number of sanctioned posts are 670 so the deviation is of 0.75% and in case of in position teaching staff the difference between DISE and PES data is only 0.16%.

Delhi: Information was not provided

Haryana: No information was provided.

Himachal Pradesh: Deviation for teachers was 1.58% for males and 1.48% for females. However for head teachers the deviation for male was as high as 34.1%. The deviation was high because in upper primary, secondary and senior secondary schools teachers not filled Principal and Head master as head teacher. Therefore the DCF should make it clearer.

Jammu and Kashmir: The comparison could not be made as in DISE DCF format information was not asked.

Lakshadweep: Information is not provided.

Madhya Pradesh: In 22% schools variation in sanctioned posts of teaching staff were observed as the school authorities were not aware of sanctioned posts in their schools.

Mizoram: No information is provided.

Punjab: Deviation of 2% was found on the availability of regular teachers in sampled schools of study districts and 14% deviation was found on the availability of contractual teachers.

Rajasthan: Detailed information about the male and female teachers is given but the deviation in two data set is not reported.

Tamil Nadu *(Pudukkotai)***:** As far as the data regarding teachers in position is concerned the difference between PES and DISE data ranges from 7.35% to 10.53%

Tamil Nadu *(Nilgiri)***:** Deviation regarding teachers in position is concerned, the difference between PES data and DISE data ranges from 5-10 in numbers.

Tamil Nadu *(Dindigul)***:** Deviation regarding teachers in position is concerned, the difference between PES data and DISE data ranges from 3.88 to 5.21 percent.

Tripura: Deviation related to total number of teachers in position was 4.24%.

Uttar Pradesh *(Jhansi and Aligarh)***:** No information was provided

Uttar Pradesh *(Mirzapur, Chandauli and Kaushambi*): In about 64% of government schools PES data regarding the number of teacher in position was found to be matching with the DISE survey data. In case of private schools for over 29% of the schools the two sets of data matched with each other. The overall proportion of the schools where the DISE data was found to be matching with the survey data was over 57%.

Uttar Pradesh *(Sitapur and Moradabad)***:** No variation was found between the survey and DISE date.

Presence of teachers on the day of visit

Eight schools have not provided information on this aspect. In the schools of Bihar, Himachal Pradesh and Punjab absenteeism rate of teachers was found to be high.

Arunachal Pradesh: All the teachers were present but around 29% teachers were not punctual.

Assam: 96.37 percent of the teachers present arrived at the school on time.

Bihar: 40.3% teachers were absent on the day of visit. Lowest absentees (24.4%) were observed in Nalanda district and highest (79.4%) in Kaimur district.

Chandigarh: No information is provided.

Delhi: Information is not provided

Haryana: Information is not provided.

Himachal Pradesh: Schools having 1-2 teachers, 29% schools had one teacher absent; schools having 3-5 teachers, 37% schools had one teacher absent and 26% schools had more than one teacher absent. Schools having more than 6 teachers, it was found that in 45 % schools more than one teacher was absent**.**

Jammu and Kashmir: No information is provided

Lakshadweep: Not all the teachers were present but how many were absent is not given.

Madhya Pradesh: Information on the punctuality of teachers separately (which range from 80% to 96%) for each district is given but the attendance of the teachers on the day of visit is not given.

Mizoram: No information is provided.

Punjab: Only 46% teachers were present in primary schools and 54 percent in the upper primary schools.

Rajasthan: 76% of teachers were present. The highest percent of teachers were present in Dungarpur district (84.89%) followed by Jhalawar (76.36%) and lowest was in Churu(67.39%).

Tamil Nadu *(Pudukkotai)***:** No information is provided.

Tamil Nadu *(Nilgiri)***:** No information is provided.

Tamil Nadu *(Dindigul)*: No information is provided.

Tripura: 3% of the schools were closed on the first date of the visit. CRC/BRC should ensure that the school remains open regularly. Overall absence rate was 17.4%

Uttar Pradesh *(Jhansi and Aligarh)***:** Percentage of teachers including para teachers who were present on the day of visit in primary schools in Jhansi and Aligarh districts were 93.0 and 79.2 percent respectively. In Upper primary schools the percentage of present teachers was 91.5 in Jhansi and 83.8 in Aligarh.

Uttar Pradesh *(Mirzapur, Chandauli and Kaushambi)*: Over 19% of the sample schools have one to two teachers. Over 70% of the schools were having 3 to 5 teachers. About 10% of the schools were having 6 teachers or more. In about 61% of the schools, no incidence of absenteeism has been found on the day of visit by

validating team. In about 29% of the schools one teacher was found to be absent and in about 10% of schools more than one teacher was found to be absent. This absenteeism was more conspicuous in those schools having 3 teachers or more.

Uttar Pradesh *(Sitapur and Moradabad)***:** In Sitapur 8 percent of male head teachers, 8 % of male assistant teachers and 8% of male shiksha mitras were found to be absent on the day of visit. In Moradabad around 20% of male head teachers and 17 % of female head teachers were absent on the day of the visit. Around 3 to 5 % of assistant teachers were absent and 2 % of female shiksha mitras were also absent.

Attendance of Children on the day of Visit

Arunachal Pradesh: No information is provided.

Assam: All the boy students of the selected schools, those studying in Primary schools were present in the school in highest percentage and those of Primary with Upper primary schools in lowest percentage on the day of survey. As regards the girl students, those studying in Primary schools were present in the school in highest percentage and those of Upper primary schools in lowest percentage. Around 53 to 60 percent children were present across the four districts.

Bihar: The total attendance on the day of visit was 60.1% and in Aurangabad district it was the lowest. Poor monitoring by BEOs/District administration was found to be the major reason for low attendance which needs corrective measures.

Chandigarh: No information is provided.

Delhi: No information is provided

Haryana: Around 91% boys and 93% girl students were present in District of Panipat and around 95% boys and around 94% girls students were present in Kurukshetra district.

Himachal Pradesh: 86% of students were present on the day of visit of primary and upper primary level.

Jammu and Kashmir: No information is provided

Lakshadweep: 99.9% students were present.

Madhya Pradesh: No information is provided.

Mizoram: No information is provided.

Punjab: Around 87 percent children were reported to be present. Highest attendance was found in Sangrur district (93%) followed by Barnala and Nawanshehar (90%each) Faridkot and Firozpur (85%).

Rajasthan: Around 62 percent students of primary grades were present on the day of survey and around 65.69% of upper primary grades were present.

Tamil Nadu*(Pudukkotai)***:** Percentage of attendance exceeds 90% and in VI, VII, VIII standards exceeding 94%. However information related to the attendance of students on the day of visit is not given.

Tamil Nadu *(Nilgiri)***:** In primary classes the attendance was 89 percent and at upper primary level it was found to be 95 percent.

Tamil Nadu *(Dindigul)***:** No information is provided.

Tripura: 68.92% students were present and efforts should be made to increase the attendance.

Uttar Pradesh (*Jhansi and Aligarh)*: Absenteeism among the children was found to be very high. In Jhansi only 51 % children at the primary level and around 57 % at the upper primary level were present. In Aligarh around 58 percent children at the primary level and around 71 percent children were found to be present.

Uttar Pradesh: *(Mirzapur, Chandauli and Kaushambi):* The percentage of children in primary classes and upper primary classes present on the day of visit was found to be 52 percent. No difference was reported between the government and private schools. Efforts need to be made to encourage, motivate and sensitise the parents and children about the importance of attending the schools on regular basis through appropriate strategies.

Uttar Pradesh *(Sitapur and Moradabad)***:** Around 55.4% children of primary grades and 62.5% of upper primary grades were present.

Information related to Teacher training

Few states have provided information related to teacher training the details for which are presented below:

Bihar: Academic supervision (by district officials): 19.57% deviation was observed.

Number of visits by CRCC 26.88% deviation was observed

Number of Visits by BRCC: 21.83% deviation was observed

Teacher training: It was observed that 80.9% schools had received training for filling the DISE format. 19.1% schools had not received training during this year. It was also observed that 43.4% of the schools received training at CRCs and 53.8% received training at BRCs level. It was also reported that the teachers/head teachers and even trainers had not taken training seriously and only formalities had been completed.

Himachal Pradesh: During survey it was found that in 31% of schools the head teachers did not receive the training during the academic year 2010-11 for proper implementation of DISE. It was found that mostly training was conducted by BRCC.

Tamil Nadu *(Pudukotai)***:** Training was conducted for all the teachers for all schools for filling up of DISE forms. 97% of teachers have fully understood the DCF concept. 61% of the schools selected for PES have been visited by the BRTE.

Tamil Nadu *(Dindigul)***:** All the teachers and heads of schools selected in Dindigul district have undergone DISE training at Block level. All the teachers have understood the DCF concept. Most of the schools have been visited by the BRTEs more than four times in the last three months.

Uttar Pradesh *(Jhansi and Aligarh)***:** All coordinators of BRC/NRPC were imparted training in these two districts for filling the DISE format.

Uttar Pradesh *(Mirzapur, Chandauli and Kaushambi)***:** In majority of the sample schools (over 75%) the Principal/Head teachers received training on DISE. In about 14% of the sample schools, the teachers asserted that VECs had not met even once during the last 3 months. However in the remaining schools it was being regularly held.

Uttar Pradesh *(Sitapur and Moradabad)***:** Head teachers of primary schools are reported to have received in-service training from 7 to 10 days in the sample schools of Sitapur district. In Moradabad district such days were 2 to 9. The variation between survey and DISE data ranged from 10% in Sitapur district to 50% in Moradabad district. Detailed information on the educational qualification of the teachers has been provided.

Reasons for Deviation as given by various states are as follows:

Major reasons for these deviations may be summarized as:

Three items of PES data could not be compared with DISE data as the items like types of building, No. of blocks and condition of classrooms were not available in school cards (DISE) data.

Repeaters: Problem of definition and interpretation of repeaters.

Teachers sanctioned post and In-position: Record and knowledge about sanctioned posts was not available in majority of the schools. Several new teachers were appointed but schools do not have the record of sanctioned posts. In majority of the cases, appointed teachers joined the schools, but schools do not have the information about the number of sanctioned posts.

Academic supervision, visit of CRCC, visit of BRCC: Records are not maintained and replies are generally based on assumption/memory.

Condition of boundary wall: There seems to be no clear-cut understanding regarding the condition and type of boundary wall- interpretation of Pucca (Pucca but broken), wire fencing, hedge or any other.

Classrooms: Under reporting by many schools

Problems in filling DISE Data capture format and PES

Tentative calendar of activities prescribed was not adhered to at district level in few states like Bihar. The blank DCF was not supplied to the district in the last week of November/first week of December 2011 which should have been supplied by 1st week of September; therefore data collection was not complete till February which should have been completed by mid October.

It has been observed by a number of states that two different sets of DISE formats have been used by schools; one containing details of children from pre-primary to 12th class and the other from pre-primary to 8th class.

Some informative items in DISE Format not in conformity with similar items in the PES format. During 2010 certain modifications are found in the special DCF for PES, there are still quite a good of items of which information is sought in the Special DCF for PES, but are excluded in the DCF for DISE. Similarly, many new items are found in the DCF for DISE for which no comparative items are found in the special DCF for PES. This drastically brought down the number of comparable items which in turn affects the deviation and precision level of the DISE with PES. The items and parameters on which information had been collected in the PES and are non -existent in the DISE format and as such non comparable are as follows

(1) Educational qualification of the principals

(2) Number of years working as principal in the Present School

(3) Number of years experience as Principal

(4) Student enrolment of last academic year

(5) Enrolment and attendance details of children on the day of the survey

(6) Grade wise examination details for the last academic year

(7) Grade wise examination details for the present academic year

The revised DISE Schedule was too exhaustive.

The process of filling up of DISE Formats was seemingly carried out without any supervision.

No effective scrutiny system seems in place at the Zonal/ District level. This transpires from the fact that various items were reported blank but were never noticed at any level whatsoever.

On some items of the revised DISE format, the schools may not ordinary be having information with themselves and may have to enquire from other offices/ sources.

This year, yet again, the Data Capture Formats for DISE was distributed later than the previous years and it could not reach even the District Project Officers as per national schedule (30th September). As a result of this, information was collected for PES even before the DISE formats were received by the districts.

Although the DISE was filled up this year with the help of CRCC of their cluster, there are still some items left blank by some of the schools in the DCF for DISE. This depicts the casual approach of the school taking the task as a routine work and not giving due importance to it. This can result in error at time of compiling. DISE for the district as well as the whole state, which in turn can affect planning for the whole state. Many items were left blank in the DCF for PES. This is considered to be a very serious issue as this will positively affect the DISE data for the whole state as well as the whole country.

However, many of the items, it was learnt, were on issues related to RTE which were not in operation.

Specific problems faced are calculation of class wise age of children, identification of repeaters, teachers positioning against sanctioned post, compilation of children data, calculation of school leaving certificate etc.

Suggestions and Recommendations by the States

The states have provided useful suggestions to improve the DISE and PES formats which have been compiled together. While observing the whole process of data collection under DISE, particularly on the basis of scrutiny of DISE Formats of sample schools the following suggestions are offered to make the data collection process more effective, reliable and error free. It is suggested that DISE report is very exhaustive so it should be made simple and easy to understand.

It needs special mention that data collection plan under DISE is logically and theoretically sound enough but whatever problems have been observed are on the implementation and practical front.

It is also suggested that the system of DISE needs to be popularized by the School education department by making it usable at the district administration level to identify low performing panchayat samitis and panchayats and by the schools.

A fix time scheduled should be followed strictly regarding the Training of CRCC/BRCC, Scrutiny of DCF by CRCC/BRCC, 5% sample checking study and Supply of summary report card.

Awareness on the Importance of DISE data and training of Head teachers

The purpose and object of the data collection should always be precise and clear not only in the minds of those who plan for these surveys and studies but must be disseminated to the respondent data collectors well before the launch of the study.

Many of the states have suggested that data variations or discrepancy is due to lack of proper training and guidelines. In most of the schools it is observed that Head Teachers/Principals were not aware about the purpose and importance of the information for which it was required. Teachers should be made aware of the importance of DISE data so that they do not take it lightly.

The Headmasters / principals of the schools must be given orientations on the purpose of DISE data collection. They should be informed about the need for and utility of the DISE data which would definitely motivate them to respond precisely and reliably.. They should be given training and it should be conducted twice a year with proper guidelines. It would certainly be more appropriate to outsource the entire DISE training to any well-experienced professional agency, rather than the existing system. Organising comprehensive training of the HMs for conceptual clarity would reduce deviation. Training programs need to be taken up seriously and with missionary zeal and in this regard help of professionals and personnel conducting PES may also be taken.

The awareness regarding DISE, its importance and utility at each level needs to be created. The awareness needs to be extended to the community level. This would ensure the seriousness with respect to the data collection and thereby also increase the authenticity of the data collected. This can be done by arranging workshops for field investigators, and community leaders. This would also increase the chances of filling of DISE DCF within the stipulated time.

Proper filling of data

The main problems observed in DISE were almost at the implementation front and as such every positive step must be taken towards improving the implementation system of the DISE data collection process. Supervision or ensuring that the formats are filled in correctly and the entries are neither left blank nor made ambiguous. Every attempt should be made to ensure that no item is left blank by the school while filling up the formats. The person filling up the format should also be instructed clearly that if there is any confusion, he/she should contact the DPO office immediately instead of leaving it blank Supervision would also pave way for timely submission of information which always remains the essence of data collection, compilation and use. Exclusion of undesirable items from the format so that it contains irreducible minimum items that would pave way for providing complete information from the respondent schools.

Data collection and data processing

It is necessary to encourage the sharing of data with all the VEC members and others facilitating school administration. Regular monitoring of data capture, data sharing and data usage will be helpful in filling the gaps in the implementation of SSA.

Monitoring by BRCCs and CRCCs

Proper selection of CRCCs and their capacity building by professionals needs to be done. District/State Resource Persons, CRCC/BRCC should ensure through proper monitoring that the schools remain open regularly. CRCCs should be given the responsibility to scrutinize and verify the DCF of the schools under their jurisdiction by visiting the schools.

BRCCS and CRCCs need to be more responsible and get the data filled up with care and sincerity. These functionaries are to visit the schools frequently and they must remind headmasters and teachers to fill up the Data Capturing Formats properly. The Xerox copy of these filled up formats must be with the headmaster/concerned.

As far as validation of DISE data is concerned, CRCs should be entrusted the responsibility of thoroughly scrutinizing each DCF & give feedback to respective schools immediately to maximize the quality of data. As the BRCCs and CRCCs are to handle the Data Capture Formats, they must be trained intensively regarding the importance of collecting different information, the nature and objectives of various types of school data, as well as the manner in which it should be filled up

It is observed that head masters/ CRCC / BRCC do not keep up with the time schedule and hence there is delay at the data collection stage itself. This needs to be planned and strictly implemented. Delay in the filling up of DISE DCF even by one block interrupts the entire chain.

Providing Report Cards to each school

Each school must be provided the school Report Card for looking into the status of the school and its inputs and responsibility for this may be entrusted on the CRCC/BRCC

All the schools must be instructed to keep and update their school records carefully. For this, training must be organized as frequently as possible with the help of external experts.

MIS Unit

MIS Units should be strengthened right from the Cluster level to state level to ensure quality data. It is suggested that the entire DISE data entry work should be carried out in the close supervision of the MIS personnels at district level to ensure the consistency check. For that, the MIS at the district level needs to be adequately strengthened.

School facilities like boundary walls, toilets, etc

Facilities like Map, Globe, Syllabus, Primary Health Kit etc, should be provided in all school. Additional classrooms are required in most of the schools.

A special attention needs to be paid on the items like boundary wall, enrolment of previous year, Children with Special Need (CWSN), repeaters etc as the deviations of these item are greater than the average deviation of the state.

School Related Indicators like Enrollment, dropouts, attendance, etc

The major area of errors is data in enrolment section. There needs to be proper coordination between Administration section of the schools and teacher/ Principal so that every new admission, transfer gets reflected timely in DISE data.

The focus needs to be on other indicators in addition to Gross and Net enrolment ratio. The focus needs to be on girls' enrolment as it has shown a decline. The variation in the enrolment figures in the private schools in Churu (Rajasthan) is quite high between the PES and DISE DCF. Proper reporting should be encouraged.

More emphasis should be laid on issues relating to performance indicators such as enrolment, retention, and dropout, attendance rate and achievement in the data capture format resulting in effective enumeration of vital statistics. Teachers are though taking attendance every day, but the attendance registers are not maintained properly by teachers and neither signed by headmasters regularly. Therefore strict actions should be taken in this respect to ensure complete and correct information in the registers.

More emphasis should be given on issues like enrollment, class wise age of children, repeaters, dropout, building blocks, teachers sanctioned post calculation of total and new enrollment, contractual teachers and availability of playground.

Efforts should be made to increase the attendance of students. Printed Student Attendance Register should be used and the caste of each student should be written in brackets in front of their names in the Attendance Register.

It should be made mandatory for the class teachers to prepare the attendance of learners at the end of every month indicating the number of boys, girls, SC, ST, OBC, General, differently able students, repeaters etc. A duplicate of the data to be submitted to the Head Teacher every month and these accounts would facilitate the Head teacher to complete the year end summary details easily.

School Related Issues

Data on variables like school establishment, number of posts sanctioned for teaching staff are generally not available at school level. The authorities should therefore make this information available to schools before the DISE data collection exercise.

DISE should give information regarding budget, sanctioned posts, and change in status of schools every year by August.

The information which is common for all schools like school particulars, number of sanctioned posts, etc should not be included in DCFs, as it unnecessary creates burden on teachers and at times encourage filling some false/incorrect information as well.

Precise Form of DCF

To make the DCF more condensed and attractive for the persons who are to fill it up, permanent status of the schools like year of establishment of school, Village name, pin code, distance of school from BRC/CRC may be deleted from the DCF which may be collected from District or State Projects Offices.

DISE format filled by the teachers in schools should further be checked properly by the concerned CRC, so that inconsistency of data can be removed.

The DCFs were found to be very lengthy. The questions in DCFs should be clear and focused. It is needed to be kept simple and short.

Maintain DISE data in schools

All the schools must be instructed to keep a copy of the filled in DISE data format in the schools for checking and maintaining the truthfulness of recorded data.

Photocopy of DISE-DCF should be kept as record in the schools,

It should be made mandatory for the Head Teachers to keep a Xerox copy of the filled in DISE DCF in the school.

Summary

This report reviews the studies on PES of DISE data carried out by states for the year 2010-11. In all 16 states have carried out PES of DISE data for this year. Some of the major states that carried out PES include Bihar, Delhi, Haryana, Himachal Pradesh, Madhya Pradesh, Punjab, Rajasthan, Tamil Nadu and Uttar Pradesh. It may be noted that some big states like Andhra Pradesh, Chattisgarh, Jharkhand, Gujarat, Karnataka, Kerala, Uttarakhand and West Bengal have either not carried out or not submitted the report to NUEPA.

From a preliminary scrutiny the PES reports submitted by various states it is found that either no or very sketchy description on the methodology adopted, conventions followed is given barring Assam, Bihar and Lakshadweep. This would of course raise question on the findings of PES studies and conclusions based on PES reports. The analysis of data, tabulation plan of several PES studies ought to be improved.

One also notices several reports wittingly or unwittingly have not carried any analysis on several variables. For example Himachal Pradesh, Lakshadweep, Mizoram, Punjab, Rajasthan and Tripura Reports do not include any analysis on repeaters, etc. Though the same DISE DCF and Special DCF for PES are provided to all the states/UTs but there is no uniformity in the reports of the states. On few items like type and category of school, enrolment of students most of the states have given information comparing the two type of data sets; whereas on some of the items like deviation in, repeaters, distribution of text books, midday meal, staff position, academic supervision by CRCC/BRCC the information is not provided by all the states who have undertaken Post Enumeration Survey.

From an examination of PES reports it can be said that the reliability and validity of DISE is somewhat satisfactory in states like Tamil Nadu, Chandigarh, and Punjab. But in several other states like Arunachal Pradesh Bihar, Delhi the reliability of DISE needs to be improved substantially. It may also be noted that in all states one notices substantial variation between DISE and PES data with respect to one or other variable.

It is heartening to note that in large number of states the variation between DISE and PES data with respect to enrolment is small. Some of the states/UTs where not much variation can be observed include Assam, Chandigarh, Delhi, Himachal Pradesh, Jammu & Kashmir, Punjab, Rajasthan (Government schools), TamilNadu, Tripura, Uttar Pradesh But in few other states like Arunachal Pradesh and Madhya Pradesh one find variation between DISE and PES more than 15%.

It has been observed that level of consistency was found to be good with respect to the location of school, category and type of school. With respect to overall deviation of DISE data from PES data on all comparable items (Table 1) less than 5% deviation was found in Chandigarh, Haryana, Jammu & Kashmir and 10 to 15% deviation was estimated in Bihar and Himachal Pradesh. Seven states (Assam, Delhi, Madhya Pradesh, Pnjab, rajasthan, Tripura, Tamilnadu(Puddukotai) Uttar Pradesh did not provide information on this item.

With regard to repeaters less than 10% deviation is observed in Uttar Pradesh and Haryana. More than 15% deviation was observed in the states of Arunachal Pradesh (41%), Bihar (23% at primary level and 41% at upper primary level) Uttar Pradesh: Mirzapur, Chandauli & Kaushambi at upper primary level (33% for boys 28% for girls), Delhi (16% at primary level &39% at upper primary level). Himachal Pradesh, Lakshadweep, Mizoram, Punjab, Rajasthan and Tripura did not provide information on this item,

Therefore the reliability of data doe not depend on timely availability of DISE DCF but how the data is filled up by various states which in turn is dependent upon the capacity building of teachers/head teachers and how effectively the CRC supervises the filling up of DISE DCF formats.

Most of the Head Teachers' initial reactions towards the investigators were positive in the selected schools. On the basis of the analysis of the information provided by the states/UTs it may be said that majority of the schools do not maintain proper records and large number of schools do not possess photocopy of the DCF forms. This reflects the casual approach of the head teacher and loose monitoring of the CRC/BRC Coordinators.

The information with regard to attendance of teachers and students on the date of PES survey was not provided by half of the states and the absenteeism rate was found to be quite high in most of the school.

Few states like Assam, Bihar, Jammu & Kashmir have explained the methodology of data collection and how to calculate the validity index. However several states have not detailed the methodology adopted and conventions followed while collecting data as PES. This would make the findings of PES questionable. The states may share their reports mutually as it would be useful to bring uniformity in the5% enumeration survey data and they can mutually learn.

Though the DISE has been established e for around fifteen years but the capacity building of the local staff and teachers is still not satisfactory. Therefore the concepts and terms like repeaters, year of establishment of school, *pucca* boundary wall etc are not understood clearly. Training of teachers/ head teachers and other supporting staff is required for improving the quality of data.

Several state reports have not reported the findings on all items though a few states like Uttar Pradesh (Sitapur and Moradabad district) has given detailed description on the investigators observation about various aspects of schools, and on the utilization of grants. The agency conducting PES survey should be given clear guidelines and capacity building programmes for agencies may be orgnaised by NUEPA. This would help in improving the quality of PES and PES reports and also the quality of DISE data.

Annexure I

List of the Sample Districts of Selected States

S.No	State	Total Districts in the State	Name of Sample Districts
1	Arunachal pradesh	16	Lower Subansiri Upper Subansiri
2	Assam	23	Jorhat Kamrup Bongaigaon Marigaon
3	Bihar	38	Aurangabad Banka Madhubani Araria Nalanda Kaimur
4	Chandigarh	1	
5	Delhi	9	East North East
6	Haryana	21	Panipat Kurukshetra
7	Himachal Pradesh	12	Kinnaur Mandi
8	Jammu & Kashmir	14	Jammu Gander bal
9	Lakshadweep	1	Lakshadweep
10	Madhya Pradesh	50	Ujjain Mandla Burhanpur Neemuch
11	Mizoram	8	Aizwal Mamit

S.No	State	Total Districts in the State	Name of Sample Districts
12	Punjab	22	Amritsar Barnala Bathinda Faridkot Fatehgarh sahib Ferozepur Gurdaspur Hoshiarpur Jalandhar Kapurthala Ludhiana Mansa Moga Mohali Muktsar Nawanshahr Patiala Ropar Sangrur Tarn Taran
13	Rajasthan	33	Churu Dungarpur Jhalawar
14	Tamil Nadu	30	Dindigul Pudukkotai Nilgiris
15	Tripura	4	West District Dhalai
16	Uttar Pradesh	71	Mirzapur, Chandauli Kaushambi Jhansi Aligarh Sitapur Moradabad