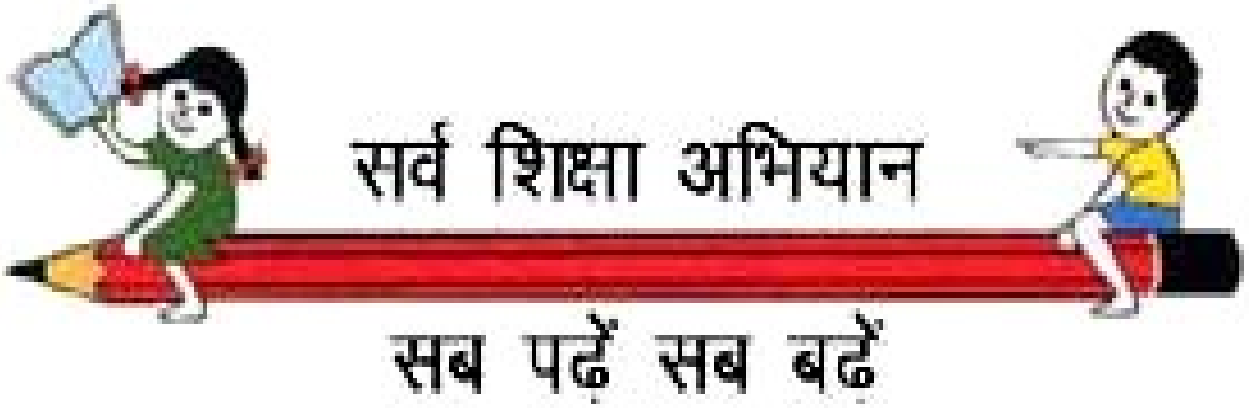
REPORT ON

SAMPLE CHECKING OF DISE DATA 2006-07



Association of Social Engineering Research and Training (ASSERT), Patna, Bihar

A REPORT ON

Sample Checking of DISE data 2006-07

BY

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List of Abbreviations

BSPP	-	Bihar Shiksha Pariyojna Parishad
BEEO	-	Block Education Extension Officer
BRC	-	Block Resource Center
BRCC	-	Block Resource Center Coordinator
CRC	-	Cluster Resource Center
CRCC	-	Cluster Resource Center Coordinator
DISE	-	District Information System for Education
DPEP	-	District Primary Education Programme
DCF	-	Data Collection Format
DLO	-	District Level Office
EMIS	-	Educational Management Information System
GOI	-	Government of India
HM/HT	-	Head Master / Head Teacher
MIS	-	Management Information System
NUEPA	-	National University of Educational Planning and Administration
NPE	-	National Policy on Education
POE	-	Programme of Action
PES	-	Post Enumeration Survey
SSA	-	Sarva Shiksha Abhiyan
VSS	-	Vidyalaya Shiksha Samiti

Glossary of Terms

Class Size:	Average number of students together in a class enrolled.
Completion rate:	The percentage of pupils/students enrolled at the beginning grade/year of the level of education who finished or graduated from the final grade/year at the end of the required number of years of that level of education.
Data:	Refers to the smallest unit or item, which represents a fact e.g. name, standard, age etc.\
Database:	Refers to all related filed compiled or put together as one group.
Drop-out rate:	Refers to the percentage of pupils/students who for any reason leave educational institutions during the school years (in any given grade or level) and did not come back to finish the grade or level during that school year to the total number of pupils/students enrolled during the previous school year.
Education Management Information system:	Refers to an organized group of information and documentation services that collects, stores, processes, and analyses and disseminates information for educational planning and management. It is a collection of component parts that include inputs, process, outputs and feedback that are integrated to achieve a specific objective. Its main purpose is to integrate information related to the management of educational activities, and to make it available in comprehensive yet succinct ways to a variety of uses.
Education system:	Refers to the entirely organized and sustained process of providing education to groups of people regardless of age according to their learning needs. The activities, structure and hierarchy may differ from one setting to another. The process of delivery to the learners comes in such basic forms as formal and non-formal by either a public/government entity or a private organization.

Educational Management:	A process of creating conditions or situations necessary for maintaining quality of education.
Gross enrollment Ratio:	Refers to the total enrolment of students in a grade or level of education, regardless of age, expressed as percentage of the corresponding eligible official age-group population in a given school year.
Net enrollment Ratio:	Refers to the number of students enrolled in the official specific age group expressed as a percentage of the total population in that age group.
Repetition Rate:	Percentage of pupil/Students /who enroll in the same grade/year more that once to the number of pupils/ students enrolled in that grade/year during the previous year.
Rural Area:	Refers to areas out side of the municipal and city corporation areas.
Transition Rate:	Percentage of students who graduated from one level of education e.g. primary, secondary, etc. and moved on or enroll to the next higher level.
Urban Area:	Refers to the area covered by municipalities and city corporations in the country irrespective of locality.

Executive Summary

District Information System for Education (DISE) is conceived as the backbone of an integrated educational management information system. The system collects detailed data through Data Capturing Format (DCF), on school location, management, teachers, school infrastructure and equipment, enrolment by gender, caste and age, incentives, the number of disabled children in various grades, minority children etc. Besides, there is flexibility for adding additional state specific variables at all sections of the DCF according to the need.

In Bihar DISE was an integral part of EMIS of DPEP-III programme since 1997-98 it is functional in 20 revenue districts of Bihar. Under SSA, DISE is being implemented in entire State.

Sample Checking of DISE Data

To ensure its consistency and accuracy, it has been decided to have a sample checking of DISE data on 5 percent basis to avoid discrepancies and to provide corrective measures to help in improving the quality of data being collected. It is, evident that all planning and monitoring of Elementary Education system is based on the DISE data. The DISE data provides the basic information on all elementary level schools to the project authorities. Further it has been made mandatory for all states to get the DISE data sample checked every year

Objectives

Main objectives of the sample checking of DISE data are to:

1. Verify the accuracy of the DISE data being collected in the state.
2. Measure the precision levels as well as deviation of the data.
3. Suggest appropriate remedial measures for strengthening the DISE system in Bihar.

Methodology

Keeping in view the broad goal of the sample checking of DISE data, the methodology of the study needs to be precision oriented.

Sampling

The universe of this study is all the elementary level schools of Bihar. The mandate under DISE is to cover all schools imparting elementary level education. Five percent of the schools appropriately representing schools across the state were selected for the survey. Six districts, two from each zone were sampled from North Zone, South Zone and Central Zone. All the blocks of sampled districts were undertaken for sample checking of DISE data. Five percent of schools were selected from each block through stratified random sampling and proportion to enrolment method by considering rural and urban schools, types of schools and management of schools, schools with pre-schooling and schools located in SC, ST and Minority areas. Finally 449 schools were selected for the purpose of checking.

Instrument Used

A set of tools developed by National University of Educational Planning and Administration (NUEPA), New Delhi was provided by the state Level Office (SLO) of Bihar Education Project Council (BSPP), Patna.

Reference Period

The DISE data pertains to the year 2006 with 30th September as reference date. The post enumeration survey was also of the same period.

Findings

- The overall deviation of DISE data from PES data, in respect of all comparable items, is 12% which is slightly higher than the permissible percentage of deviation i.e 10% and there by giving precision level of 88%.
- Out of 28 comparable variables 11 variables shows deviation of 10% or more from PES data. These variables are type of school (11.1%), repeaters (19.1%),

disability (33.5%), examination result (11.1%), teachers sanctioned post (24.1%), teachers in-position (21.5%), toilet for girls (9.8%), availability of furniture for children (11.8%) and distribution of textbooks.

- Indicators with less than 10% of deviation from PES data are location of school (2.7%), category of school (0.5%), lowest grade in schools (0.4%), highest grade in schools (2.7%), school management (5%), residential status (2%), part of shift school (2%), pre-schools (4.5%), children enrolment (7.2%), status of school building (4.2%), electricity (1.8%), common toilet (7%), source of drinking water (8%) and availability of play ground (6.2%).

- Major reasons for these deviations may be summarized as:

  - ***Types of school:*** Majority of schools was made co-educational especially primary school, but still schools are bearing its old name and same is used for DISE code.

  - ***Repeaters:*** Problem of definition and interpretation of repeaters.

  - ***Disability:*** Over reporting.

  - ***Teachers sanctioned post and In-position:*** Non-availability of record and knowledge about sanctioned post was found in majority of schools. Several new teachers were appointed but schools do not have the record of sanctioned post. In majority of cases, school received the appointed teachers. Schools do not have the information about the number of sanctioned post. High deviations in "in-position" may also be due to large teachers' choice of transfer, deputation of teacher on another schools, deputation on other activities and appointment of new teachers during June-July 2006 to December 2006.

  - ***Availability of Blackboards:*** Under reporting.

  - ***Condition of boundary wall:*** Interpretation of Pucca, Pucca but broken, wire fencing, hedge and others. There seems to be no clear-cut understanding.

- ***Availability of furniture for children:*** Interpretation of furniture for some and none.

- ***Distribution of textbooks:*** Distribution of books to poor children of other social category, who are not entitled for that.

- The students' attendance on the day of visit was 55.8% at elementary level and 55.9% at primary level.

- Teachers' absenteeism on the day of visit was found high. Overall teacher absence rate was 15.2% i.e. 15.2% of teachers were absent from school on the day of visit. The same was 14.3% for primary schools, 16.5% for primary with upper primary, 3% for only upper primary and 15.9% for primary with upper primary and secondary

- 9.3% of VSS are constituted in first three years of SSA (i.e 2001 to 2003); only 51.6% of VSS are constituted after 2004. The VSS act suggests reconstitution of VSS in every three years. But the record revealed that the reconstitution of VSS in every three-year was not taken care of. 59% of VSSs were found to be formed before three years and the same VSSs were continuing.

- 36.2% of schools do not have photocopy of filled DISE format.

- 60% of schools do not have School Report Card.

- 41% of schools do not received training on DISE format. Whereas only 38% schools received one day training and 20% received half day training. All the training were organised on the Guru Gosthi meeting at BRC or CRC level itself. Respondents interview reveald that DISE traning was one of the agenda of Guru Gosthi or CRC meeting, which held once in a month, and no separate training on DISE format was organised. This dilutes the seriousness of the DISE system.

- Only 47% of schools Headmaster/Head teacher are satisfied with DISE training.

- Specific problems faced by HM/HT in filling DISE format are calculation of class wise age of children, identification of repeaters, building blocks, teachers

positioning against sanctioned post, compilation of children data, calculation of total enrolment & new enrolment and calculation of school living certificate etc.

- Major suggestions provided by respondents (HM/HT) are:

o Micro level training at Block Resource Center by competent trainer in a participatory training mode with improved training methodology is needed.

o Supply of School summary report and feedback on filled DISE format should be ensured.

o Schools should be very clear on the basic indicators of schools at CRC before filling of DISE format. So that quality may be ensured.

Recommendations

Based on the findings of the survey, some of the recommendations were arrived at for improving DISE system. They are as follows:

- During the survey it was observed that major deviations are due to conceptual error (Definition not properly understood) made during filling up few needed information in the DCF by the concerned school Head Masters. As such it is suggested that rigorous training at BRC level is inevitable for conceptual clarity.
- Training at Block Resource Center by competent trainer in a participatory training mode with improved training methodology is needed. Period of training on DISE DCF should be third or fourth week of September.
- For better management of the training at each level it is further suggested that a hierarchical model right from the State to BRC level be devised and an observer/resource person (one level above) should be present during the training that the information loss basically made during the training is minimized.
- More emphasis should be given on issues like enrolment, class wise age of children, repeaters, dropout, building blocks, teachers sanctioned post,

calculation of total enrolment & new enrolment and calculation of school living certificate, where the deviations are on high side.

- Certain variables like school establishment, post sanctioned, budget released, location of school changed are generally not available at school level. So authority should make these information available before DISE data collection.
- In order to ensure complete coverage of all recognized schools, it is suggested that a check-list of all such schools existing in the Block should be prepared and cross-checked with the list provided by the Block Education Extension Officer.
- In order to minimize the deviation in the key variables such as type of schools, category of schools, Rural/Urban classification, year of establishment and all such variables which seldom changes, it is recommended that School Report Card be shared with respective schools along with the DCF. Feedback on DISE DCF should also be shared and corrective measures should be initiated sincerely.
- Outsourcing of DISE Data Entry from the open market should normally be avoided, as the agency involved in data entry may not have experience in handling the DISE software, which leads to inconsistency in data. It is suggested that the entire work should be carried out in close supervision of the MIS personnel at district level. For that the MIS infrastructure needs to be adequately strengthened.
- As far as validation of DISE data is concerned, CRCCs' should be entrusted the responsibility to thoroughly scrutiny each DCF and give feedback to respective schools immediately. As there are hardly 10-15 schools under the jurisdiction of the CRC, it is possible to share the feedback. CRC is the only smallest administrative unit where quality of data can be maximized.
- In order to improve the quality of data across the district it is further suggested that optimal utilization of DISE data should be made at all levels. As such it is essential that data at each level right from the School to district level be shared and discussed in details.

- MIS units should be strengthened right from the block level to state level.
- Districts should maintain the time line for DISE data collection. The DISE data should be collected in the month of October and completed before December and PES survey should be done in the month of December.

CHAPTER

1

Background

The '***Sarva Shiksha Abhiyan (SSA)'*** is a flagship programme of the Government of India for achievement of universalization of elementary education in a time bound manner, as mandated by the 86th amendment to the Constitution of India making free and compulsory education to children of ages 6-14 a fundamental right. The programme aims to achieve the goal of universalization of **elementary education of satisfactory quality** by 2010.

The programme seeks to open new schools in those habitations which do not have schooling facilities and strengthen existing school infrastructure through provision of additional class rooms, toilets, drinking water, maintenance grant and school improvement grants. Existing schools with inadequate teacher strength are provided with additional teachers, while the capacity of existing teachers is being strengthened by extensive training, grants for developing teaching-learning materials and strengthening of the academic support structure at a cluster, block and district level. SSA seeks to provide quality elementary education including life skills. SSA has a special focus on girl's education and children with special needs. SSA also seeks to provide computer aided education to bridge the digital divide.

In the perspective of effective implementation of such a massive programme the need of consistent and accurate timely information is inevitable for planning implementation, monitoring and identification of corrective measures, here comes the role of Management Information system (MIS) operating at the district, state and the national level since 1994. District Information System for Education (DISE) is conceived as the

backbone of an integrated educational management information system. The system collects detailed data through Data Capturing Format (DCF), on school location, management, teachers, school infrastructure and equipment, enrolment by gender, caste and age, incentives, the number of disabled children in various grades, minority children etc. Besides, there is flexibility for adding additional state specific variables at all sections of the DCF according to the need.

At the time of initiating District Primary Education Programme (DPEP) in 1994, it was felt that a sound information system is essential for successful monitoring and implementation of the programme. It was expressed that DPEP, with a focus on decentralized planning, required up-to-date and reliable school level information. The MHRD in 1994, as a part of the DPEP national endeavor, decided to design and develop a school based computerized information system, the main responsibility for which was entrusted to National University of Educational Planning and Administration (NUEPA), New Delhi. The first version (dbase) of the software, named as 'District Information System for Education' (DISE) was released by NIEPA during the middle of 1995. The first major review of the DISE software was undertaken during 1997- 98 (PowerBuilder/SQL). The software was later redesigned in 2001 in the light of requirements of the SSA (Power Builder/Oracle). Not only the coverage of DISE was extended to non-DPEP states but it was also extended from primary to the entire elementary level of education.

In Bihar DISE was an integral part of EMIS of DPEP-III programme since 1997-98 functional in 20 revenue districts of Bihar. Under SSA, DISE is being implemented in entire State. The DoE/MHRD has decided to treat DISE data as the official data for SSA from 2002.

In Bihar DISE data being collected through data capturing format filled up by the head teacher, countersigned by the VSS of school and cross-checked at the cluster/block level by Block Education Extension Officer (BEEO) and Cluster Resource Center Coordinator (CRCC). Efforts are being made to make CRC Coordinators accountable to ensure that all recognized schools falling under his/her jurisdiction are covered under DISE operations. CRC is the only level at which quality of data can be checked. Entry consistency checkup

and Compilation of data is done at district level. The validated data is stored at the district level software and made available to the State Level Office where it is consolidated and aggregated using DISE@S software which is specially designed for the state level analysis and report generation for the tracking of progress on key performance indicators.

Sample Checking of DISE Data

To ensure its consistency and accuracy, it has been decided to have a sample checking of DISE data on 5 percent basis to avoid discrepancies and to provide corrective measures to help in improving the quality of data being collected. It is, evident that all planning and monitoring of Elementary Education system is based on the DISE data. The DISE data provides the basic information on all elementary level schools to the project authorities. Further it has been made mandatory for all states to get the DISE data sample checked every year

Association of Social Engineering Research and Training (ASSERT) was entrusted by the State Level Office Of Bihar Education Project Council, Patna to undertake the sample checking of DISE data for the year 2006-20007.

CHAPTER

2

Methodology

Keeping in view the broad goal of the sample checking of DISE data, the methodology of the study needs to be precision oriented. Hence, careful sampling method and appropriate care for other aspect related to methodology were taken into account. The brief description of various components of the methodology followed in the study is provided in this chapter.

Objectives

Main objectives of the sample checking of DISE data are to:

4. Verify the accuracy of the DISE data being collected in the state.
5. Measure the precision levels as well as deviation of DISE data.
6. Suggest appropriate remedial measures for strengthening the DISE in Bihar.

Sampling

The universe of this study is all the elementary level schools of Bihar. The mandate under DISE is to cover all schools imparting elementary level education in Bihar. Five percent of the schools appropriately representing schools across the state were selected for the study. Ministry of HRD has already suggested the sampling criteria and procedure for the purpose of the study. Based on the same following criteria were adopted for sampling.

1. Six districts, two from each zone were sampled from North Zone, South Zone and Central Zone. Two districts were selected on the basis of highest and lowest Literacy Rate (Census 2001). For purpose of sampling, first of all districts were categorized in three regions i.e. South Bihar (12 districts), North Bihar (14 districts), and Central Bihar (11 districts). Keeping in view the number of districts in each region, a representative sample of six districts – two districts

from each region were identified on the basis of highest and lowest literacy rate (see table 1).

2. All the blocks of sampled districts were undertaken for sample checking of DISE data. Five percent of schools were selected from each block through stratified random sampling and proportion to enrolment method by considering rural and urban schools, types of schools and management of schools, schools with pre-schooling and schools located in SC, ST and Minority areas(see table 1).

TABLE 1: SAMPLED DISTRICTS, BLOCKS AND SCHOOLS

S.N.	Regions	Districts	Sampled Districts	Blocks	Sampled Schools
	South Bihar (1 districts)	Munger, Aurangabad, Jehanaba Gaya, Bhagalpur, Sheikhpur Begusarai, Lakhisarai, Nawada, Bank Jamui, Khagaria	Munger (59.5%	**9**	**50**
			Khagaria (41.3%)	**7**	**37**
	North Bihar (1 districts)	Samastipur, Darbhanga, Madhuba Saharsa, Paschim Champara Sitamarhi, Purbi Champaran, Supa Madhepura, Sheohar, Purnia, Katih Araria and Kishanganj	Samastipur (45.1%)	**20**	**94**
			Kishanganj (31.1%)	**7**	**33**
	Central Bih (11 districts)	Patna, Rohtas, Bhojpur, Buxar, Kaimu Nalanda, Saran, Siwan, Vaisha Muzaffarpur, Gopalganj	Patna (62.9%)	**24**	**173**
			Gopalganj (47.5%)	**14**	**62**
	Total			**81**	**449**

Figure in parenthesis – Literacy Rate

Thus the 81 blocks of the sampled districts were considered for sample checking. In each block a complete listing of all schools was done from the 2005-06 DISE school list and then categorization of schools by school category and location was done for appropriate proportion of schools. From each block, 5% of schools were drawn using enrolment to proportion method and systematic random sampling techniques (see table2). All blocks taken together, a total of 449 schools were selected for checking of DISE data.

Table 2: Sample distribution of schools by their category

S.N.	Category of School	Number of schools	Percentage
1	Primary	288	64.14
2	Primary with Upper Primary	143	31.85
3	Only Upper Primary	6	1.34
4	Upper Primary with Secondary	12	2.67
	Total	449	100

Instrument Used

A set of tools developed by National University of Educational Planning and Administration (NUEPA), New Delhi was provided by the state Level Office (SLO) of Bihar Education Project Council (BSPP), Patna. It covers the components of School Management, Students Participation (enrolment, attendance, repeaters etc.), School Infrastructure, Training on DISE, feedback and so on. Some state specific additions were made in data collection format (Annexure 1). Post Enumeration Survey also gathered qualitative information on the implementation of DISE mechanism of schools through enumerators' feedback schedule, which consist the quality of training provided, receipt of school summary report, supervision by CRC coordinator and problems faced by Headmasters/teachers in filling the DISE DCF.

Collection of Data

For the purpose of data collection, a list of identified schools including standby schools was handed over to the study team. The study team made personal visit to all the schools for preliminary interaction with teaching staff and appraising themselves with the physical and academic conditions prevailing there of. Since the data collection is to be covered in a span of less time and the task is of gigantic proportion, required number of research investigators were identified and trained thoroughly in terms of appropriate data collection methods. Specific care has been taken to identify the research investigators keeping in

view the requirement of exposure to school education. Hence, Post Graduates having more than three year of research experience in the field of education were specifically drafted as research investigators for the purpose of the study. They were in turn given a two-day orientation on data collection and then placed for actual data collection in the field. The school management concerned was informed in advance to keep the records ready for providing secondary data as well. On the day of visit to the schools, the structured schedule was canvassed for primary data collection under the supervision of a research team.

Reference Period

The DISE data pertains to the year 2006 with 30th September as reference date. The post enumeration survey was also of the same period.

Data Analysis and Presentation

A comparative analysis of DISE and PES were done on specific comparable indicators. After data collection, scrutiny of both the sets of formats, already filled up DISE formats and special DCF, were subjected to comparison by using simple deviation method. The school-wise and category-wise data were analyzed by using the simple deviation analysis tools in reference to all the comparable items of the survey. The overall deviation of data has been calculated as per following formula.

$$\frac{(d1+d2+d3+d4+d5.....dx)}{a+b+c+d+.....+x} \times 100$$

Where d1, d2.d3… stands for deviation of items of DISE data from Post Enumeration Survey data ignoring + or – signs and a, b, c, denote items of Post Enumeration Survey data.

Based on the above cited formula, information pertaining to 449 schools, where commonality of data exists, is presented variable-wise providing actual data obtained through PES and DISE and deviation observed there of.

Chapterisation

Report is chapterised in six chapters. Chapter I consists of general introduction, role of MIS for effective discharge of programme activities and implementation of DISE in Bihar.

Chapter II consists of methodology followed for the study and limitation of the study. Chapter III consists of comparative data between the outcome of PES and DISE data in reference to various variables where commonality exists. Chapter IV contains information on data analyzed pertaining to additional data collected through PES survey format and information on which data is not available through DISE format. Chapter V deals with the quality information's generated through enumerator's feedback schedule. The final chapter, VI consists of summary of report and suggestive measures/recommendations derived through the survey for effective course of action in respect of SSA in Bihar.

CHAPTER

3

Comparative Data Analysis

Principal objective of the study was to measure the precision levels as well as deviation of DISE data from PES data. This chapter contains a comparative analysis of common variables existing between PES and DISE survey data among the common schools covered and verifiable data generated through these tools. All the 449 sampled schools were visited and filled up with the PES data capturing formats, DISE DCF of sampled schools were provided by District Level Offices for comparison and verification.

As the report aimed at comparing the data collect through DISE DCF the common variables where deviations were established is furnished below:

School Management

- Location of Schools
- Type of Schools
- Category of Schools
- Lowest Class in Schools
- Highest Class in Schools
- Management of Schools
- Residential status of Schools
- Part of Shift Schools
- Availability of Pre-Schools

Students Participation

- Children's Enrolment in 2006-07
- Enrolment of disabled children
- Status of Repetition
- Examination Results

School Infrastructure

- Status of Teachers Sanctioned Post
- Status of Teachers In-position
- Status of School Building
- Status of School Blocks
- Status of number of Classrooms
- Status of number of Others Rooms
- Electricity in Schools
- Separate Toilets for Girls in Schools
- Common Toilets in Schools
- Availability of Black Boards
- Condition of Boundary Walls in Schools
- Source of Drinking Water in Schools
- Availability of Play Ground in Schools
- Availability of Computers in Schools
- Availability of Furniture in School
- Distribution of Textbooks

For each indicator of comparable variables as cited above, the item-wise and sub-item-wise comparison of PES data with DISE data along with calculation of deviation ignoring positive and negative signs is presented. Further the precision level for each indicator and overall precision is calculated and presented in tables 3 to 54.

TABLE 3: COMPARISION OF PES DATA WITH DISE DATA ON SCHOOL CATEGORY

S.N.	Category of School	PES Data	DISE Data	Deviation	% age Deviation
1	Primary	288	287	1	0.3
2	Primary with Upper Primary	143	144	1	0.7
3	Only Upper Primary	6	6	0	0.0
4	Upper Primary with Secondary	12	12	0	0.0
	Total	449	449	2	0.45

1. Quantitative Value of items as per DISE data = 449
2. Quantitative Value of items as per PES data = 449
3. Quantitative Value of deviations ignoring $\pm$ sign = 2
4. % age deviation of DISE data from PES data = 0.45
5. Precision level of DISE data with relation to PES data = 99.95

Table 4: COMPARISION OF PES DATA WITH DISE DATA ON SCHOOL LOCATION

S.N.	Category of School	Rural			Urban		
		PES Data	DISE Data	Deviation	PES Data	DISE Data	Deviation
1	Primary	257	258	1	31	30	1
2	Primary with Upper Primary	119	123	4	24	20	4
3	Only Upper Primary	4	4	0	2	2	0
4	Upper Primary with Secondary	5	4	1	7	8	1
	Total	385	389	6	64	60	6

1. Quantitative Value of items as per DISE data = 449
2. Quantitative Value of items as per PES data = 449
3. Quantitative Value of deviations ignoring $\pm$ sign = 12
4. % age deviation of DISE data from PES data = 2.7
5. Precision level of DISE data with relation to PES data = 97.3

Table 5: COMPARISION OF PES DATA WITH DISE DATA ON TYPE OF SCHOOL

S.N.	Category of School	BOYS			GIRLS			CO-EDUCATION		
		PES Data	DISE Data	Deviation	PES Data	DISE Data	Deviation	PES Data	DISE Data	Deviation
1	Primary	1	16	15	1	5	4	286	267	19
2	Primary with Upper Primary	1	3	2	5	9	4	137	131	6
3	Only Upper Primary	1	1	0	0	0	0	5	5	0
4	Upper Primary with Secondary	2	2	0	5	5	0	5	5	0
	Total	5	22	17	11	19	8	433	408	25

1. Quantitative Value of items as per DISE data = 449
2. Quantitative Value of items as per PES data = 449
3. Quantitative Value of deviations ignoring $\pm$ sign = 50
4. % age deviation of DISE data from PES data = 11.1
5. Precision level of DISE data with relation to PES data = 88.9

Table 6: COMPARISION OF PES DATA WITH DISE DATA ON LOWEST CLASSES IN SCHOOLS

S.N.	Lowest Grades	PES Data	DISE Data	Deviation	%age Deviation
1	Class I	430	430	0	0.0
2	Class IV	1	1	0	0.0
3	Class VI	7	8	1	14.3
4	Class VII	6	6	0	0.0
5	Class VIIII	5	4	1	20.0
	Total	449	449	2	0.4

1. Quantitative Value of items as per DISE data = 449
2. Quantitative Value of items as per PES data = 449
3. Quantitative Value of deviations ignoring $\pm$ sign = 2
4. % age deviation of DISE data from PES data = .4
5. Precision level of DISE data with relation to PES data = 99.6

Table 7: COMPARISION OF PES DATA WITH DISE DATA ON HIGHEST CLASSES IN SCHOOLS

S.N.	Highest Grades	PES Data	DISE Data	Deviation	%age Deviation
1	Class III	2	1	1	50.0
2	Class V	297	294	3	1.0
3	Class VI	22	23	1	4.5
4	Class VII	63	68	5	7.9
5	Class VIII	53	51	2	3.8
6	Class X	12	12	0	0.0
	Total	449	449	12	2.7

1. Quantitative Value of items as per DISE data = 449
2. Quantitative Value of items as per PES data = 449
3. Quantitative Value of deviations ignoring $\pm$ sign = 12
4. % age deviation of DISE data from PES data = 2.7
5. Precision level of DISE data with relation to PES data = 97.3

Table 8: COMPARISION OF PES DATA WITH DISE DATA ON SCHOOL MANAGEMENT

		Education department			Welfare department			Private Aided			Private Unaided			Maktab/Madarsa		
S.N.	Category of School	PES Data	DISE Data	Deviation	PES Data	DISE Data	Deviation	PES Data	DISE Data	Deviation	PES Data	DISE Data	Deviation	PES Data	DISE Data	Deviation
1	Primary	278	285	7	1	0	1	1	2	1	1	1	0	7	0	7
2	Primary with Upper Primary	142	142	0	0	1	1	0	0	0	0	0	0	1	0	1
3	Only Upper Primary	4	4	0	0	1	1	2	1	1	0	0	0	0	0	0
4	Upper Primary with Secondary	10	10	0	0	1	1	2	1	1	0	0	0	0	0	0
	Total	434	441	7	1	3	4	5	4	3	1	1	0	8	0	8

1. Quantitative Value of items as per DISE data = 449

2. Quantitative Value of items as per PES data = 449

3. Quantitative Value of deviations ignoring $\pm$ sign = 22

4. % age deviation of DISE data from PES data = 5

5. Precision level of DISE data with relation to PES data = 95

Table 9: COMPARISION OF PES DATA WITH DISE DATA ON PART OF SHIFT SCHOOL

		Part of Shift School			Not Part of Shift School		
S.N.	Category of School	PES Data	DISE Data	Deviation	PES Data	DISE Data	Deviation
1	Primary	6	6	0	282	282	0
2	Primary with Upper Primary	5	7	2	138	136	2
3	Only Upper Primary	1	0	1	5	6	1
4	Upper Primary with Secondary	1	0	1	11	12	1
	Total	13	13	4	436	436	4

1. Quantitative Value of items as per DISE data = 449
2. Quantitative Value of items as per PES data = 449
3. Quantitative Value of deviations ignoring $\pm$ sign = 8
4. % age deviation of DISE data from PES data = 2
5. Precision level of DISE data with relation to PES data = 98

Table 10: COMPARISION OF PES DATA WITH DISE DATA ON PRE-SCHOOL

		With of Pre-Schooling			Without Pre-Schooling		
S.N.	Category of School	PES Data	DISE Data	Deviation	PES Data	DISE Data	Deviation
1	Primary	30	33	3	258	255	3
2	Primary with Upper Primary	20	27	7	123	116	7
3	Only Upper Primary	0	0	0	6	6	0
4	Upper Primary with Secondary	0	0	0	12	12	0
	Total	50	60	10	399	389	10

1. Quantitative Value of items as per DISE data = 449
2. Quantitative Value of items as per PES data = 449
3. Quantitative Value of deviations ignoring $\pm$ sign = 20
4. % age deviation of DISE data from PES data = 4.5
5. Precision level of DISE data with relation to PES data = 95.5

Table 11: COMPARISION OF PES DATA WITH DISE DATA ON PART OF SHIFT SCHOOL

		Part of Shift School			Not Part of Shift School		
S.N.	Category of School	PES Data	DISE Data	Deviation	PES Data	DISE Data	Deviation
1	Primary	6	6	0	282	282	0
2	Primary with Upper Primary	5	7	2	138	136	2
3	Only Upper Primary	1	0	1	5	6	1
4	Upper Primary with Secondary	1	0	1	11	12	1
	Total	13	13	4	436	436	4

1. Quantitative Value of items as per DISE data = 449
2. Quantitative Value of items as per PES data = 449
3. Quantitative Value of deviations ignoring $\pm$ sign = 8
4. % age deviation of DISE data from PES data = 2
5. Precision level of DISE data with relation to PES data = 98

Table 12: COMPARISION OF PES DATA WITH DISE DATA ON RESIDENTIAL SCHOOL

		Residential School			No Residential School		
S.N.	Category of School	PES Data	DISE Data	Deviation	PES Data	DISE Data	Deviation
1	Primary	0	1	1	288	287	1
2	Primary with Upper Primary	0	0	0	143	143	0
3	Only Upper Primary	0	0	0	6	6	0
4	Upper Primary with Secondary	0	1	1	12	11	1
	Total	0	2	2	449	447	2

1. Quantitative Value of items as per DISE data = 449
2. Quantitative Value of items as per PES data = 449
3. Quantitative Value of deviations ignoring $\pm$ sign = 2
4. % age deviation of DISE data from PES data = .4
5. Precision level of DISE data with relation to PES data = 99.6

Table 13: COMPARISON OF PES DATA WITH DISE DATA ON BOYS ENROLMENT

S.N.	Category of School	PES Data	DISE Data	Deviation	%age Deviation
1	Primary	52549	49364	3185	6.1
2	Upper Primary	12033	10832	1201	10.0
3	Elementary	64582	60196	4386	6.8

Table 14: GRADEWISE COMPARISON OF PES DATA WITH DISE DATA ON BOYs ENROLMENT

S.N.	Grade	PES Data	DISE Data	Deviation	%age Deviation
1	Grade I	15574	14869	705	4.5
2	Grade II	11040	10648	392	3.6
3	Grade III	9653	8903	750	7.8
4	Grade IV	8495	7871	624	7.3
5	Grade V	7787	7073	714	9.2
6	Grade VI	5256	4650	606	11.5
7	Grade VII	4075	3696	379	9.3
8	Grade VIII	2702	2486	216	8.0
	Total	64582	60196	4386	6.8

Table 15: COMPARISON OF PES DATA WITH DISE DATA ON GIRLS ENROLMENT

S.N.	Category of School	PES Data	DISE Data	Deviation	%age Deviation
1	Primary	47477	44582	2895	6.1
2	Upper Primary	10562	8996	1566	14.8
3	Elementary	58039	53578	4461	7.7

Table 16: GRADEWISE COMPARISON OF PES DATA WITH DISE DATA ON GIRLs ENROLMENT

S.N.	Grade	PES Data	DISE Data	Deviation	%age Deviation
1	Grade I	14622	13916	706	4.8
2	Grade II	10056	9507	549	5.5
3	Grade III	8637	8031	606	7.0
4	Grade IV	7567	7042	525	6.9
5	Grade V	6595	6086	509	7.7
6	Grade VI	4180	4144	36	0.9
7	Grade VII	3607	3137	470	13.0
8	Grade VIII	2775	1715	1060	38.2
	Total	58039	53578	4461	7.7

Table 17: COMPARISON OF PES DATA WITH DISE DATA ON TOTAL ENROLMENT

S.N.	Category of School	PES Data	DISE Data	Deviation	%age Deviation
1	Primary	100026	93946	6080	6.1
2	Upper Primary	22595	19828	2767	12.2
3	Elementary	122621	113774	8847	7.2

Table 18: GRADEWISE COMPARISON OF PES DATA WITH DISE DATA ON TOTAL ENROLMENT

S.N.	Grade	PES Data	DISE Data	Deviation	%age Deviation
1	Grade I	30196	28785	1411	4.7
2	Grade II	21096	20155	941	4.5
3	Grade III	18290	16934	1356	7.4
4	Grade IV	16062	14913	1149	7.2
5	Grade V	14382	13159	1223	8.5
6	Grade VI	9436	8794	642	6.8
7	Grade VII	7682	6833	849	11.1
8	Grade VIII	5477	4201	1276	23.3
	Total	122621	113774	8847	7.2

Table 19: COMPARISON OF PES DATA WITH DISE DATA ON SC BOYs ENROLMENT

S.N.	Category of School	PES Data	DISE Data	Deviation	%age Deviation
1	Primary	8857	8480	377	4.3
2	Upper Primary	1513	1335	178	11.8
3	Elementary	10370	9815	555	5.4

Table 20: GRADEWISE COMPARISON OF PES DATA WITH DISE DATA ON SCs BOYs ENROLMENT

S.N.	Grade	PES Data	DISE Data	Deviation	%age Deviation
1	Grade I	2957	2847	110	3.7
2	Grade II	1862	1788	74	4.0
3	Grade III	1502	1431	71	4.7
4	Grade IV	1352	1307	45	3.3
5	Grade V	1184	1107	77	6.5
6	Grade VI	705	670	35	5.0
7	Grade VII	486	393	93	19.1
8	Grade VIII	322	272	50	15.5
	Total	10370	9815	555	5.4

Table 21: COMPARISON OF PES DATA WITH DISE DATA ON SC GIRLs ENROLMENT

S.N.	Category of School	PES Data	DISE Data	Deviation	%age Deviation
1	Primary	7367	6953	414	5.6
2	Upper Primary	1160	978	182	15.7
3	Elementary	8527	7931	596	7.0

Table 22: GRADEWISE COMPARISON OF PES DATA WITH DISE DATA ON SCs GIRLs ENROLMENT

S.N.	Grade	PES Data	DISE Data	Deviation	%age Deviation
1	Grade I	2731	2747	16	0.6
2	Grade II	1524	1382	142	9.3
3	Grade III	1197	1130	67	5.6
4	Grade IV	1049	945	104	9.9
5	Grade V	866	749	117	13.5
6	Grade VI	482	465	17	3.5
7	Grade VII	385	385	0	0.0
8	Grade VIII	293	128	165	56.3
	Total	8527	7931	596	7.0

Table 23: COMPARISON OF PES DATA WITH DISE DATA ON SC TOTAL ENROLMENT

S.N.	Category of School	PES Data	DISE Data	Deviation	%age Deviation
1	Primary	16224	15433	791	4.9
2	Upper Primary	2673	2313	360	13.5
3	Elementary	18897	17746	1151	6.1

Table 24: GRADEWISE COMPARISON OF PES DATA WITH DISE DATA ON SCs TOTAL ENROLMENT

S.N.	Grade	PES Data	DISE Data	Deviation	%age Deviation
1	Grade I	5688	5594	94	1.7
2	Grade II	3386	3170	216	6.4
3	Grade III	2699	2561	138	5.1
4	Grade IV	2401	2252	149	6.2
5	Grade V	2050	1856	194	9.5
6	Grade VI	1187	1135	52	4.4
7	Grade VII	871	778	93	10.7
8	Grade VIII	615	400	215	35.0
	Total	18897	17746	1151	6.1

Table 25: COMPARISON OF PES DATA WITH DISE DATA ON ENROLMENT OF BOYs DISABLED CHILDREN

S.N.	Category of School	PES Data	DISE Data	Deviation	%age Deviation
1	Primary	451	603	152	33.7
2	Upper Primary	97	117	20	20.6
3	Elementary	548	720	172	31.4

Table 26: GRADEWISE COMPARISON OF PES DATA WITH DISE DATA ON ENROLMENT OF BOYs DISABLED CHILDREN

S.N.	Grade	PES Data	DISE Data	Deviation	%age Deviation
1	Grade I	120	164	44	36.7
2	Grade II	88	123	35	39.8
3	Grade III	78	93	15	19.2
4	Grade IV	87	106	19	21.8
5	Grade V	78	117	39	50.0
6	Grade VI	43	59	16	37.2
7	Grade VII	33	46	13	39.4
8	Grade VIII	21	12	9	42.9
	Total	548	720	172	31.4

Table 27: COMPARISON OF PES DATA WITH DISE DATA ON ENROLMENT OF GIRLs DISABLED CHILDREN

S.N.	Category of School	PES Data	DISE Data	Deviation	%age Deviation
1	Primary	306	442	136	44.4
2	Upper Primary	56	53	3	5.4
3	Elementary	362	495	133	36.7

Table 28: GRADEWISE COMPARISON OF PES DATA WITH DISE DATA ON ENROLMENT OF GIRLs DISABLED CHILDREN

S.N.	Grade	PES Data	DISE Data	Deviation	%age Deviation
1	Grade I	87	127	40	46.0
2	Grade II	58	67	9	15.5
3	Grade III	54	82	28	51.9
4	Grade IV	56	86	30	53.6
5	Grade V	51	80	29	56.9
6	Grade VI	25	25	0	0.0
7	Grade VII	18	20	2	11.1
8	Grade VIII	13	8	5	38.5
	Total	362	495	133	36.7

Table 29: COMPARISON OF PES DATA WITH DISE DATA ON ENROLMENT OF DISABLED CHILDREN

S.N.	Category of School	PES Data	DISE Data	Deviation	%age Deviation
1	Primary	757	1045	288	38.0
2	Upper Primary	153	170	17	11.1
3	Elementary	910	1215	305	33.5

Table 30: GRADEWISE COMPARISON OF PES DATA WITH DISE DATA ON ENROLMENT OF DISABLED CHILDREN

S.N.	Grade	PES Data	DISE Data	Deviation	%age Deviation
1	Grade I	207	291	84	40.6
2	Grade II	146	190	44	30.1
3	Grade III	132	175	43	32.6
4	Grade IV	143	192	49	34.3
5	Grade V	129	197	68	52.7
6	Grade VI	68	84	16	23.5
7	Grade VII	51	66	15	29.4
8	Grade VIII	34	20	12	35.3
	Total	910	1215	305	33.5

Table 31: COMPARISON OF PES DATA WITH DISE DATA ON BOYS REPEATERS

S.N.	Category of School	PES Data	DISE Data	Deviation	%age Deviation
1	Primary	8401	6967	1434	17.1
2	Upper Primary	571	333	238	41.7
3	Elementary	8972	7300	1672	18.6

Table 32: GRADEWISE COMPARISON OF PES DATA WITH DISE DATA ON BOYs REPEATERS

S.N.	Grade	PES Data	DISE Data	Deviation	%age Deviation
1	Grade I	4391	3787	604	13.8
2	Grade II	1520	1196	324	21.3
3	Grade III	1264	1003	261	20.6
4	Grade IV	715	571	144	20.1
5	Grade V	511	410	101	19.8
6	Grade VI	314	172	142	45.2
7	Grade VII	200	125	75	37.5
8	Grade VIII	57	36	21	36.8
	Total	8972	7300	1672	18.6

Table 33: COMPARISON OF PES DATA WITH DISE DATA ON GIRLS REPEATERS

S.N.	Category of School	PES Data	DISE Data	Deviation	%age Deviation
1	Primary	7557	6166	1391	18.4
2	Upper Primary	333	178	155	46.5
3	Elementary	7890	6344	1546	19.6

Table 34: GRADEWISE COMPARISON OF PES DATA WITH DISE DATA ON GIRLs REPEATERS

S.N.	Grade	PES Data	DISE Data	Deviation	%age Deviation
1	Grade I	4168	3569	599	14.4
2	Grade II	1482	1075	407	27.5
3	Grade III	904	789	115	12.7
4	Grade IV	607	447	160	26.4
5	Grade V	396	286	110	27.8
6	Grade VI	180	83	97	53.9
7	Grade VII	109	70	39	35.8
8	Grade VIII	44	25	19	43.2
	Total	7890	6344	1546	19.6

Table 35: COMPARISON OF PES DATA WITH DISE DATA ON TOTAL REPEATERS

S.N.	Category of School	PES Data	DISE Data	Deviation	%age Deviation
1	Primary	15958	13133	2825	17.7
2	Upper Primary	904	511	393	43.5
3	Elementary	16862	13644	3218	19.1

Table 36: GRADEWISE COMPARISON OF PES DATA WITH DISE DATA ON TOTAL REPEATERS

S.N.	Grade	PES Data	DISE Data	Deviation	%age Deviation
1	Grade I	8559	7356	1203	14.1
2	Grade II	3002	2271	731	24.4
3	Grade III	2168	1792	376	17.3
4	Grade IV	1322	1018	304	23.0
5	Grade V	907	696	211	23.3
6	Grade VI	494	255	239	48.4
7	Grade VII	309	195	114	36.9
8	Grade VIII	101	61	40	39.6
	Total	16862	13644	3218	19.1

Table 37: COMPARISON OF PES DATA WITH DISE DATA ON TEACHERS POST SANCTIONED

S.N.	Category of School	PES Data	DISE Data	Deviation
1	Primary	786	1083	297
2	Primary with Upper Primary	942	1064	122
3	Only Upper Primary	43	50	7
4	Upper Primary with Secondary	198	150	48
	Total	1969	2347	474

1. Quantitative Value of items as per DISE data = 2347
2. Quantitative Value of items as per PES data = 1969
3. Quantitative Value of deviations ignoring $\pm$ sign = 474
4. % age deviation of DISE data from PES data = 24.1
5. Precision level of DISE data with relation to PES data = 75.9

Table 38: COMPARISON OF PES DATA WITH DISE DATA ON TEACHERS IN-POSITION

S.N.	Category of School	PES Data	DISE Data	Deviation
1	Primary	1150	907	243
2	Primary with Upper Primary	1004	801	203
3	Only Upper Primary	58	46	12
4	Upper Primary with Secondary	189	131	58
	Total	2401	1885	516

1. Quantitative Value of items as per DISE data = 1885
2. Quantitative Value of items as per PES data = 2401
3. Quantitative Value of deviations ignoring $\pm$ sign = 516
4. % age deviation of DISE data from PES data = 21.5
5. Precision level of DISE data with relation to PES data = 78.5

Table 39: COMPARISON OF PES DATA WITH DISE DATA ON STATUS OF SCHOOL BUILDING

S.N.	Category of School	Private			Ranted			Government			Rent free building			No Building		
		PES	DISE	Deviation	PES	DISE	Deviation	PES	DISE	Deviation	PES	DISE	Deviation	PES	DISE	Deviation
1	Primary	2	5	3	4	4	0	252	248	4	5	5	0	25	26	1
2	Primary with Upper Primary	0	1	1	1	2	1	137	134	3	3	4	1	2	2	0
3	Only Upper Primary	0	1	1	0	0	0	6	5	1	0	0	0	0	0	0
4	Upper Primary with Secondary	1	2	1	1	0	1	10	10	0	0	0	0	0	0	0
	Total	3	9	7	6	6	2	405	397	8	8	9	1	27	28	1

1. Quantitative Value of items as per DISE data = 449
2. Quantitative Value of items as per PES data = 449
3. Quantitative Value of deviations ignoring $\pm$ sign = 19
4. % age deviation of DISE data from PES data = 4.2
5. Precision level of DISE data with relation to PES data = 95.8

Table 40: COMPARISON OF PES DATA WITH DISE DATA ON NUMBER OF BUILDING BLOCKS IN THE SCHOOLS

S.N.	Category of School	PES Data	DISE Data	Deviation	%age Deviation
1	Primary	453	442	11	2.4
2	Primary with Upper Primary	360	364	4	1.1
3	Only Upper Primary	19	13	6	31.5
4	Upper Primary with Secondary	28	41	13	46.4
	Total	860	860	34	4

1. Quantitative Value of items as per DISE data = 860
2. Quantitative Value of items as per PES data = 860
3. Quantitative Value of deviations ignoring $\pm$ sign = 34
4. % age deviation of DISE data from PES data = 4
5. Precision level of DISE data with relation to PES data = 96

Table 41: COMPARISON OF PES DATA WITH DISE DATA ON NUMBER OF CLASSROOMS

S.N.	Category of School	PES Data	DISE Data	Deviation	%age Deviation
1	Primary	675	651	24	3.5
2	Primary with Upper Primary	667	613	54	8.1
3	Only Upper Primary	34	26	8	23.5
4	Upper Primary with Secondary	94	102	8	8.5
	Total	1576	1392	94	6

1. Quantitative Value of items as per DISE data = 1392
2. Quantitative Value of items as per PES data = 1576
3. Quantitative Value of deviations ignoring $\pm$ sign = 94
4. % age deviation of DISE data from PES data = 6
5. Precision level of DISE data with relation to PES data = 94

Table 42: COMPARISON OF PES DATA WITH DISE DATA ON NUMBER OF OTHERS ROOMS

S.N.	Category of School	PES Data	DISE Data	Deviation	%age Deviation
1	Primary	166	164	2	1.20
2	Primary with Upper Primary	140	144	4	2.9
3	Only Upper Primary	10	12	2	20.0
4	Upper Primary with Secondary	49	38	11	22.4
	Total	365	358	19	5.2

1. Quantitative Value of items as per DISE data = 358
2. Quantitative Value of items as per PES data = 365
3. Quantitative Value of deviations ignoring $\pm$ sign = 19
4. % age deviation of DISE data from PES data = 5.2
5. Precision level of DISE data with relation to PES data = 94.8

Table 43: COMPARISON OF PES DATA WITH DISE DATA ON NUMBER OF BLACKBOARDS

S.N.	Category of School	PES Data	DISE Data	Deviation	%age Deviation
1	Primary	775	633	142	18.3
2	Primary with Upper Primary	764	588	176	23.0
3	Only Upper Primary	33	28	5	15.2
4	Upper Primary with Secondary	108	84	24	22.2
	Total	1680	1333	347	20.7

1. Quantitative Value of items as per DISE data = 1680
2. Quantitative Value of items as per PES data = 1333
3. Quantitative Value of deviations ignoring $\pm$ sign = 347
4. % age deviation of DISE data from PES data = 20.7
5. Precision level of DISE data with relation to PES data = 79.3

Table 44: COMPARISON OF PES DATA WITH DISE DATA ON AVAILABILITY OF COMMON TOILETS

		Common Toilet Available			Common Toilet Not Available		
S.N.	Category of School	PES Data	DISE Data	Deviation	PES Data	DISE Data	Deviation
1	Primary	169	157	12	119	131	12
2	Primary with Upper Primary	102	103	1	41	40	1
3	Only Upper Primary	5	5	0	1	1	0
4	Upper Primary with Secondary	7	9	2	5	2	3
	Total	238	224	15	166	174	16

1. Quantitative Value of items as per DISE data = 449
2. Quantitative Value of items as per PES data = 449
3. Quantitative Value of deviations ignoring $\pm$ sign = 31
4. % age deviation of DISE data from PES data = 7
5. Precision level of DISE data with relation to PES data = 93

Table 45: COMPARISON OF PES DATA WITH DISE DATA ON AVAILABILITY OF SEPARATE GIRLS TOILET

		Separate Toilet Available			Separate Toilet Not Available		
S.N.	Category of School	PES Data	DISE Data	Deviation	PES Data	DISE Data	Deviation
1	Primary	36	29	7	252	259	7
2	Primary with Upper Primary	52	38	14	91	105	14
3	Only Upper Primary	2	1	1	4	5	1
4	Upper Primary with Secondary	6	7	1	6	5	1
	Total	106	75	23	353	274	23

1. Quantitative Value of items as per DISE data = 449
2. Quantitative Value of items as per PES data = 449
3. Quantitative Value of deviations ignoring $\pm$ sign = 46
4. % age deviation of DISE data from PES data = 10.2
5. Precision level of DISE data with relation to PES data = 89.8

Table 46: COMPARISON OF PES DATA WITH DISE DATA ON AVAILABILITY OF ELECTRICITY

		Electricity Available			Electricity Not Available		
S.N.	Category of School	PES Data	DISE Data	Deviation	PES Data	DISE Data	Deviation
1	Primary	8	7	1	280	281	1
2	Primary with Upper Primary	12	12	0	131	131	0
3	Only Upper Primary	1	1	0	5	5	0
4	Upper Primary with Secondary	6	3	3	6	9	3
	Total	27	23	4	422	426	4

1. Quantitative Value of items as per DISE data = 449
2. Quantitative Value of items as per PES data = 449
3. Quantitative Value of deviations ignoring $\pm$ sign = 8
4. % age deviation of DISE data from PES data = 1.8
5. Precision level of DISE data with relation to PES data = 98.2

Table 47: COMPARISON OF PES DATA WITH DISE DATA ON AVAILABILITY OF PLAYING GROUND

		Play Ground Available			Play Ground Not Available		
S.N.	Category of School	PES Data	DISE Data	Deviation	PES Data	DISE Data	Deviation
1	Primary	68	71	3	220	217	3
2	Primary with Upper Primary	68	59	9	75	84	9
3	Only Upper Primary	5	5	0	1	1	0
4	Upper Primary with Secondary	11	9	2	1	3	2
	Total	151	144	14	297	305	14

1. Quantitative Value of items as per DISE data = 449
2. Quantitative Value of items as per PES data = 449
3. Quantitative Value of deviations ignoring $\pm$ sign = 28
4. % age deviation of DISE data from PES data = 6.2
5. Precision level of DISE data with relation to PES data = 93.8

Table 48: COMPARISON OF PES DATA WITH DISE DATA ON CONDITION OF BOUNDARY WALL OF SCHOOLS

S.N.	Category of School	Pucca			Pucca but broken			Barbed wire fencing			Hedges			Others			No boundary wall		
		PES	DISE	Deviation	PES	DISE	Deviation	PES	DISE	Deviation	PES	DISE	Deviation	PES	DISE	Deviation	PES	DISE	Deviation
1	Primary	20	17	3	13	22	9	3	1	2	4	1	3	7	9	2	241	238	3
2	Primary with Upper Primary	28	22	6	12	10	2	0	0	0	1	0	1	2	4	2	100	107	7
3	Only Upper Primary	0	0	0	1	2	1	0	0	0	0	0	0	0	0	0	5	4	1
4	Upper Primary with Secondary	4	3	1	6	7	1	0	0	0	0	0	0	0	0	0	2	2	0
	Total	52	42	10	32	41	13	3	1	2	5	1	4	9	13	4	348	351	11

1. Quantitative Value of items as per DISE data = 449
2. Quantitative Value of items as per PES data = 449
3. Quantitative Value of deviations ignoring $\pm$ sign = 44
4. % age deviation of DISE data from PES data = 9.8
5. Precision level of DISE data with relation to PES data = 90.2

Table 49: COMPARISON OF PES DATA WITH DISE DATA ON SOURCE OF DRINKING WATER

S.N.	Category of School	Hand Pump			Well			Tap Water			No facility		
		PES	DISE	Deviation	PES	DISE	Deviation	PES	DISE	Deviation	PES	DISE	Deviation
1	Primary	230	240	10	2	4	2	4	5	1	52	39	13
2	Primary with Upper Primary	129	131	2	4	5	1	1	2	1	9	5	4
3	Only Upper Primary	5	4	1	0	0	0	0	1	1	1	1	0
4	Upper Primary with Secondary	10	10	0	0	0	0	2	2	0	0	0	0
	Total	374	385	13	6	9	3	7	10	3	62	45	17

1. Quantitative Value of items as per DISE data = 449
2. Quantitative Value of items as per PES data = 449
3. Quantitative Value of deviations ignoring $\pm$ sign = 36
4. % age deviation of DISE data from PES data = 8
5. Precision level of DISE data with relation to PES data = 92

Table 50: COMPARISON OF PES DATA WITH DISE DATA ON AVAILABILITY OF FURNITURE'S FOR STUDENTS IN SCHOOLS

S.N.	Category of School	Furniture for all			Furniture for some			Furniture for none		
		PES Data	DISE Data	Deviation	PES Data	DISE Data	Deviation	PES Data	DISE Data	Deviation
1	Primary	11	11	0	61	57	4	216	214	2
2	Primary with Upper Primary	24	30	6	96	74	26	23	34	11
3	Only Upper Primary	3	2	1	3	3	0	0	1	1
4	Upper Primary with Secondary	7	5	2	5	6	1	0	0	0
	Total	45	48	8	165	140	31	239	249	14

1. Quantitative Value of items as per DISE data = 449
2. Quantitative Value of items as per PES data = 449
3. Quantitative Value of deviations ignoring $\pm$ sign = 53
4. % age deviation of DISE data from PES data = 11.8
5. Precision level of DISE data with relation to PES data = 88.2

Table 51: COMPARISON OF PES DATA WITH DISE DATA ON ANNUAL EXAMINATION OF GRADE 5

		Enrolled			Appeared			Passed		
S.N.	Category of School	PES Data	DISE Data	Deviation	PES Data	DISE Data	Deviation	PES Data	DISE Data	Deviation
1	Primary	6218	5628	590	5185	5340	155	5076	5221	145
2	Primary with Upper Primary	7105	6788	317	6031	5887	144	5949	5674	275
3	Only Upper Primary	0	0	0	0	0	0	0	0	0
4	Upper Primary with Secondary	0	0	0	0	0	0	0	0	0
	Total	13323	12416	907	11216	11227	299	11025	10895	420

Table 52: COMPARISON OF PES DATA WITH DISE DATA ON ANNUAL EXAMINATION OF GRADE 8

		Enrolled			Appeared			Passed		
S.N.	Category of School	PES Data	DISE Data	Deviation	PES Data	DISE Data	Deviation	PES Data	DISE Data	Deviation
1	Primary	0	0	0	0	0	0	0	0	0
2	Primary with Upper Primary	2093	2174	81	1874	2068	194	1838	2021	183
3	Only Upper Primary	1110	842	268	987	763	224	987	763	224
4	Upper Primary with Secondary	2122	1389	733	2116	1083	1033	2428	1351	1077
	Total	5325	4405	1082	4977	3914	1451	5253	4135	1484

1. Quantitative Value of items as per DISE data = 449

2. Quantitative Value of items as per PES data = 449

3. Quantitative Value of deviations ignoring $\pm$ sign = 53

4. % age deviation of DISE data from PES data = 11.8

5. Precision level of DISE data with relation to PES data = 88.2

Table 53: COMPARISON OF PES DATA WITH DISE DATA ON DISTRIBUTION OF TEXTBOOKS

S.N.	Category of School	BOYS			GIRLS		
		PES Data	DISE Data	Deviation	PES Data	DISE Data	Deviation
1	Primary	7468	6157	1311	17835	15044	2791
2	Primary with Upper Primary	8549	5510	3039	18435	14305	4130
3	Only Upper Primary	244	0	244	960	704	256
4	Upper Primary with Secondary	29	0	29	22	15	7
	Total	16290	11667	4623	37252	30068	7184

6. Quantitative Value of items as per DISE data = 53542

7. Quantitative Value of items as per PES data = 41735

8. Quantitative Value of deviations ignoring $\pm$ sign = 11807

9. % age deviation of DISE data from PES data = 22.1

10. Precision level of DISE data with relation to PES data = 77.9

Table 54: Comparative analysis in percentage deviations and precisions level of DISE data with PES data on comparable indicators

S.N.	Comparable Items	DISE	PES	Deviation	% Deviation	% Precision
1	Location of Schools	449	449	12	2.7	97.3
2	Type of Schools	449	449	50	11.1	88.9
3	Category of Schools	449	449	2	0.5	99.6
4	Lowest Class in Schools	449	449	2	0.4	99.6
5	Highest Class in Schools	449	449	12	2.7	97.3
6	Management of Schools	449	449	22	5.0	95.0
7	Residential status of Schools	449	449	2	2.0	98.0
8	Part of Shift Schools	449	449	8	2.0	98.0
9	Availability of Pre-Schools	449	449	20	4.5	95.5
10	Children's Enrolment in 2006-07	113774	122621	8847	7.2	92.8
11	Enrolment of disabled children	1215	910	305	33.5	66.5
12	Status of Repetition	13644	16862	3218	19.1	80.9
13	Examination Results	46992	51119	5643	11.1	88.9
14	Status of Teachers Sanctioned Post	2347	1969	474	24.1	75.9
15	Status of Teachers In-position	1885	2401	516	21.5	78.5
16	Status of School Building	449	449	19	4.2	95.8
17	Status of School Blocks	860	860	34	4.0	96.0
18	Status of number of Classrooms	1392	1576	94	6.0	94.0
19	Status of number of Others Rooms	358	365	19	5.2	94.8
20	Electricity in Schools	449	449	8	1.8	98.2
21	Separate Toilets for Girls in Schools	449	449	46	10.2	89.8
22	Common Toilets in Schools	449	449	31	7.0	93.0
23	Availability of Black Boards	1333	1680	347	20.7	79.3
24	Condition of Boundary Walls in Schools	449	449	44	9.8	90.2
25	Source of Drinking Water in Schools	449	449	36	8.0	92.0
26	Availability of Play Ground in Schools	449	449	28	6.2	93.8
27	Availability of Furniture in School	449	449	53	11.8	88.2
28	Distribution of Textbooks	41735	53542	11807	22.1	77.9
		233168	**261538**	**31699**	**12**	**88**

Analysis of Comparative data between PES & DISE data

The above mentioned table (Table-54) depicts the overall deviations of DISE data from PES data taken together all comparable indicators, the average deviation is **12%** and there by yielding precession level of **88%** to DISE data with relation to PES data.

The highest deviations of data are seen in those indicators, which involve degree of interpretation, understanding and under/ over reporting. These indicators are types of Schools, enrolment of disabled children, repeaters, examination result, teachers sanctioned post, teaches in-position, separate toilets for girls, availability of black boards, condition of boundary wall in school, availability of furniture in schools and distribution of textbooks.

The indicators which involved high degree of deviation of DISE data from the Post Enumeration Survey (PES) data and consequently low precision level are given in following tables with their due explanations (Table 55):

Table 55: COMPARATIVE INDICATORS WITH DEVIATIONS MORE THAN 10 PERCENT

S.N.	Comparable Items	DISE	PES	Deviation	% Deviation	% Precision
1	Type of Schools	449	449	50	11.1	88.9
2	Enrolment of disabled children	1215	910	305	33.5	66.5
3	Status of Repetition	13644	16862	3218	19.1	80.9
4	Examination Results	46992	51119	5643	11.1	88.9
5	Status of Teachers Sanctioned Post	2347	1969	474	24.1	75.9
6	Status of Teachers In-position	1885	2401	516	21.5	78.5
7	Separate Toilets for Girls in Schools	449	449	46	10.2	89.8
8	Availability of Black Boards	1333	1680	347	20.7	79.3
9	Condition of Boundary Walls in Schools	449	449	44	9.8	90.2
10	Availability of Furniture in School	449	449	53	11.8	88.2
11	Distribution of Textbooks	41735	53542	11807	22.1	77.9

Analysis and interpretation of comparable indicators with high degree of deviations are as follows:

Types of Schools: High deviations found in type of School. Figure shows the deviations of 11%, Majority of the deviations are in primary Schools. All primary level School were made co-education, but the coding of schools are still based on their name like girls-2 for Kanya Prathamic Vidyalaya, though they are providing education to both boys & girls.

Number of Disabled Children: Table 25 to 30 reveals information on enrolment of disabled children. Data shows high deviations of DISE data from PES data, 33.5% deviation at elementary level, 38.8% at primary level and 11.1% at upper primary level. Grade wise analysis shows more deviation in lower class than upper classes. The DISE figures are in higher side than PES figures on number of disabled children. This may be a case of over reporting of disabled children in DISE DCF.

Number of Repeaters: On number of repeaters in schools, data reveals that overall deviation of DISE data from PES data is 19.1% and the precision level is 80.9%. DISE data has lower repeaters than PES data. DISE define repeaters in three categories, i.e. failed and retained in same class, prolonged absence (more than 3 months) and retained is same class and lastly readmission after a gap of more than one academic session. But in practice it is visualized during survey that teachers treated repeaters only the failed ones and some portion of the prolonged absent students. They treat readmission as new admission. So major problem is the understanding/interpretation of the term “Repeaters”. Grade wise analysis shows more deviation in girl’s repeaters (19.6%) than the Boys (18.6%).

Annual Examination: Data regarding annual examination shows overall deviation of 11.04% with respect to PES data and precision is 88.9%. While deviation in total enrolment is 10.67%, deviation in total appeared is 10.81% and deviation in total passed out is 11.7%. Data for Class 5 annual examination reveals that the deviation in enrolment is 6.8%, appeared 2.7 and passed out children is 3.8.

Whereas data for class 8 annual examination results revealed that the deviation in enrolment is 20.3%, in appeared examination is 29.2 and in passed out students is 28.3. Here the main reason of high deviation in class 8 examination – is the missing data in the DISE formats.

Teachers Sanctioned Post, In-Position: Table 37 and 38 suggests the deviation of 24.1% in sanctioned post and 21.5% in teachers in position. State of Bihar is passing through transition phase in teacher's recruitment. Data on teachers sanctioned post and in-position is very much cumbersome now a days. Several innovations, changes in policies, different types and layers of teachers, make the teachers' database more complex. It is very difficult to get clear picture of sanctioned posts and teachers in-positions at any level of management, especially at lowest level i.e. schools.

Earlier appointments of regular teachers were made through centralized recruitment process against sanctioned posts (earlier at district level and than at state level). To actualize the PTR at 40:1, in 2002-03 provisions were made for appointment of one teacher per rural school. These recruitments were made by Gram Panchayats under SSA. Again in 05-06, under SSA, 80,512 additional teachers post were sanctioned to actualize the PTR 40:1. These appointments were made by PRIs and known as Panchayat Shiksha Mitras (PSM) and in 2006 they were converted to Panchayat/Prakhand Shikshaks. In 06-07, 79152 new teachers' posts (additional as well as new primary school teachers) were sanctioned under SSA and recruited by Panchayats/Prakhand-Panchayat/Nagar and also known as Panchayat/Prakhand/Nagar Shikshaks.

Teachers Vacancies were identified at District level on the basis of enrolment and PTR were allotted (according to school needs and segregated at Panchayat and Prakhand Level) to concerned Panchayats for recruitment in concerned schools. In majority of cases, school received the appointed teachers and not the sanctioned post. So, that there is a large deviation in sanctioned post data.

High deviations in "in-position" may be due to large teachers' choice of transfer, deputation of teacher on another schools, deputation on other activities and appointment of new teachers during June-July 2006 to December 2006. The period of DISE data collection was between October to December 2006. Whereas, the PES data was collected in March-April 2007. These may be the potential reasons for deviation in teacher's "in-position" data.

Separate Toilets for Girls in Schools: A detail comparison of separate toilets for girls is presented in Table 46. It indicates that the overall deviation of DISE data from PES data is 10.2%, which yield precision level of 89.8%. School category wise analysis shows more deviations in Primary and upper primary schools.

Availability of Black Boards: A detail comparison on availability of Blackboard in schools is presented in Table 44. Figures resemble that the deviation of data from PES data is 20.7% consequently the precision level is 79.3%. Here also the DISE data shows under reporting on availability of Blackboards in schools. Major deviations found in Primary from upper primary schools and Upper primary from secondary schools.

Condition of Boundary Walls in Schools: Detail on condition of boundary walls in schools depicted in Table 49, which illustrate 9.8% deviation from PES data and shows 90.2% precision level. Deviation found due to interpretation on the condition of boundary wall. Maximum deviation found in two sets of category i.e., first, between Pucca and Pucca but broken and secondly, among wire fencing, Hedges and others.

Availability of Furniture in School: Deviation of 11.8% from PES data found for availability of furniture in schools. Major deviations found between furniture for “some” and furniture for “none” especially in primary with upper primary school category. It may be a clear case of interpretation to the indicator.

Distribution of Textbooks: High deviation of 22.1% from PES data found for distribution of textbooks. During survey it is found that after distributing the books to SC/ST boys and all girls, and the extra books should be kept in library for general use, but in practice schools distribute rest of the books to other students. Majority of school never show it in DISE format.

Indicators with deviations, which show less than 10 percent, are illustrated in following table:

Table 56: COMPARATIVE INDICATORS WITH DEVIATIONS LESS THAN 10 PERCENT

S.N.	Comparable Items	DISE	PES	Deviation	% Deviation	% Precision
1	Location of Schools	449	449	12	2.7	97.3
2	Category of Schools	449	449	2	0.5	99.6
3	Lowest Class in Schools	449	449	2	0.4	99.6
4	Highest Class in Schools	449	449	12	2.7	97.3
5	Management of Schools	449	449	22	5.0	95.0
6	Residential status of Schools	449	449	2	2.0	98.0
7	Part of Shift Schools	449	449	8	2.0	98.0
8	Availability of Pre-Schools	449	449	20	4.5	95.5
9	Children's Enrolment in 2006-07	113774	122621	8847	7.2	92.8
10	Status of School Building	449	449	19	4.2	95.8
11	Status of School Blocks	860	860	34	4.0	96.0
12	Status of number of Classrooms	1392	1576	94	6.0	94.0
13	Status of number of Others Rooms	358	365	19	5.2	94.8
14	Electricity in Schools	449	449	8	1.8	98.2
15	Common Toilets in Schools	449	449	31	7.0	93.0
16	Source of Drinking Water in Schools	449	449	36	8.0	92.0
17	Availability of Play Ground in Schools	449	449	28	6.2	93.8

Location of Schools: Table 56 Shows the precision level of DISE data from PES data on location of School is 97.3%. A slight deviation is found (2.7%) where PES data do not matched with DISE data. It may be due to lack of clear understanding about geographical urban and rural areas. Recently, Patna district witnesses an extension of urban area, i.e, some area of 3 blocks, which were presently covered under the Patna Municipal Area. Time to time, District Level Office should communicate the Schools regarding changes of Schools location, whether it fall in urban area or rural area.

Category of Schools: As regards the category of schools, 99.6% of the cases the DISE data were found to be completely matching with DISE data.

Lowest and highest classes in schools: Table 6 & 7 further infers that precision level of 99.6% in lowest classes and 97.3% in highest classes in schools match with DISE data.

Management of Schools: 95% precision level is found in management category of schools. The deviations may be due to interpretation of private aided, aided Makleh/Madarsasa and government schools.

Enrolment of Boys and Girls: Data regarding enrollment in schools have been analyzed at primary (Grad 1-V), upper primary (VI-VIII) and elementary level (I-VIII). DISE Reports yield result in same format, Enrollment Tables (table 13-24) resembles that the overall deviations of DISE data form PES data on total level enrolment is 7.2% giving precision level of 92.8%. Maximum deviations found in upper primary level (VI-VII), which is 12.2, 10% for boys and 14.8% for girls. Deviation at primary level classes (I-V) is 6.1 across gender. Grade wise analysis of enrolment figure shows that as the grade increased, the deviations of DISE data from PES data also increases. Figure shows that on an average the DISE enrolment figures are lower than PES enrolment figures. These may be due to computational error, improper maintenance of records.

Caste wise analysis of enrolment shows that the deviation of SC enrolment is 6.1% which, reveals that where the students number is smaller the deviations is less and where the students number is higher the deviations is high. The DISE format requires the schools to make manual compilations and give category wise details breakup of the enrolment figures in a cross tabulated form of each class. In such cases there is a significant chance of committing computation errors. In 33% of schools enrolment figures of DISE are not matching with PES data, which is 29% for primary, 36% for primary with upper primary, 39% for upper primary only and 34% for upper primary with secondary school.

Status of School Building: Detail comparison of DISE data from PES data on status of school building is given in Table 39. Table shows 4.2% of deviation and 95.8% precision. Major deviation found in the category of private school building.

Number of School Building Block: Detail comparison of DISE data with PES data on number of building blocks in schools is given in Table 40, which shows 4% of deviation and 6% precision. Majority of deviations are in the school category of upper primary with secondary. During field visit it is observed that teacher also count those blocks, which are not part of the school, but they are in the boundary of school. These buildings may be CRC, BRC, government or community building. DISE should precise and clear on these types of situations.

Number of classrooms: Detail comparison of DISE data with PES data on number of classrooms in the schools is provided in Table 41, which depicts 6% of deviation and 94% precision level. This deviation is due to the under reporting of classrooms. In few cases, it is observed that additional classrooms have been constructed and presently being used by the schools, but they are not officially handed over to school management and the school is not counting them in its data.

CHAPTER 4

Analysis of Non Comparable Variables

This chapter contains an analysis of non-comparable variables, which consists indicators on students attendance, teachers presence, VSS formation, VSS meetings held and availability of updated proceeding of VSS meeting. Indicator wise analyses of these non – comparable indicators are as follows:

Student's attendance

During sample checking, grade wise and social category wise students' enrolment and attendance on the day of visit were also recorded and the same is presented in table 57.

TABLE 57: Students attendance on the day of visit.

Grade	Attendance Rate					
	Boys	Girls	Total	SC Boys	SC Girls	SC Total
I	52.4	52.8	52.6	48.2	50.9	49.5
II	55.5	56.5	56.0	52.3	53.7	53.0
III	56.4	56.9	56.7	59.1	57.8	58.5
IV	58.4	60.1	59.2	56.7	59.1	57.7
V	58.1	59.7	58.8	57.9	49.2	54.0
Primary	**55.5**	**56.4**	**55.9**	**53.4**	**53.5**	**53.4**
VI	55.8	60.0	57.7	54.3	48.5	51.8
VII	54.6	53.6	54.2	51.6	49.5	50.7
VIII	54.2	47.5	51.0	49.8	46.3	48.4
Upper Primary	**55.0**	**55.0**	**55.0**	**52.5**	**48.4**	**50.8**
Elementary	**55.5**	**56.2**	**55.8**	**53.3**	**52.8**	**53.1**

Table 58 presents overall picture of the student's attendance of various categories in 444 schools, which was found to be very low. The attendance percentage at elementary level schooling was 55.8%, - 55.5% for Boys and 56.2% for girls. The attendance percentage

for Scheduled Caste (SC) was 53.1%, - 53.3% for boys and 52.8% for girls. At Primary level schooling the overall attendance percentage was 55.9%, whereas the boys and girls attendance was 55.5% and 56.4% respectively. Similarly, the attendance percentage among SCs was 53.4%, whereas the boys and girls attendance was 53.4% and 53.5% respectively.

These figures suggest consistently low attendance rate across all categories (grade, level of schooling and social categories. No signification difference was found in attendance across categories. Following charts presents the actual number enrolment and students presence across categories.

CHART 1: STUDENTS ATTENDANCE AT PRIMARY LEVEL

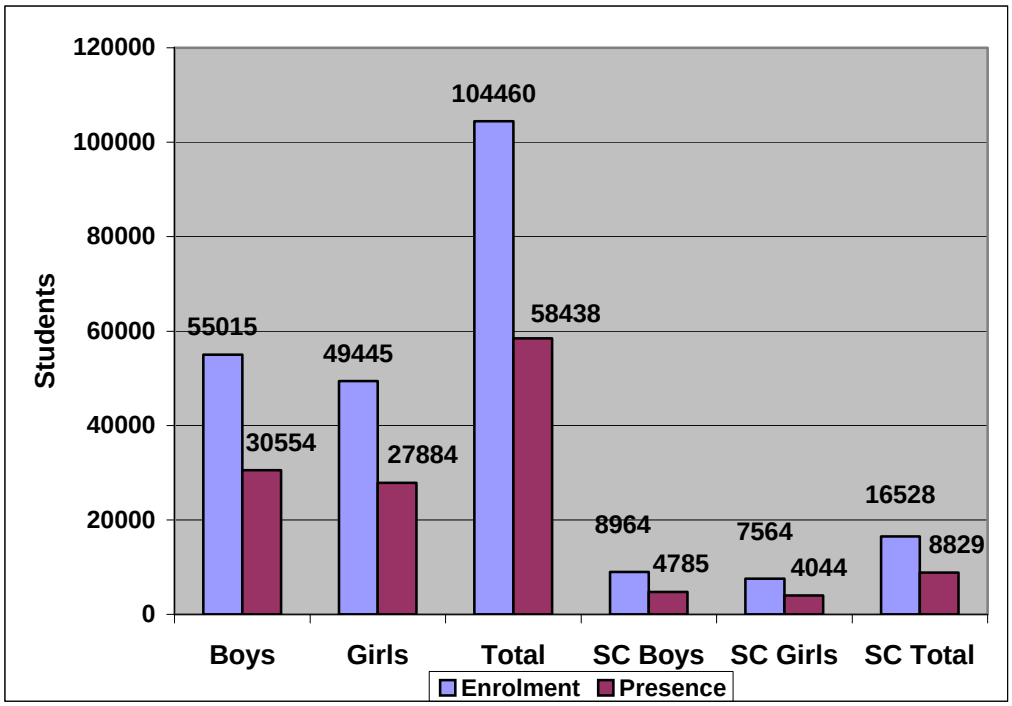
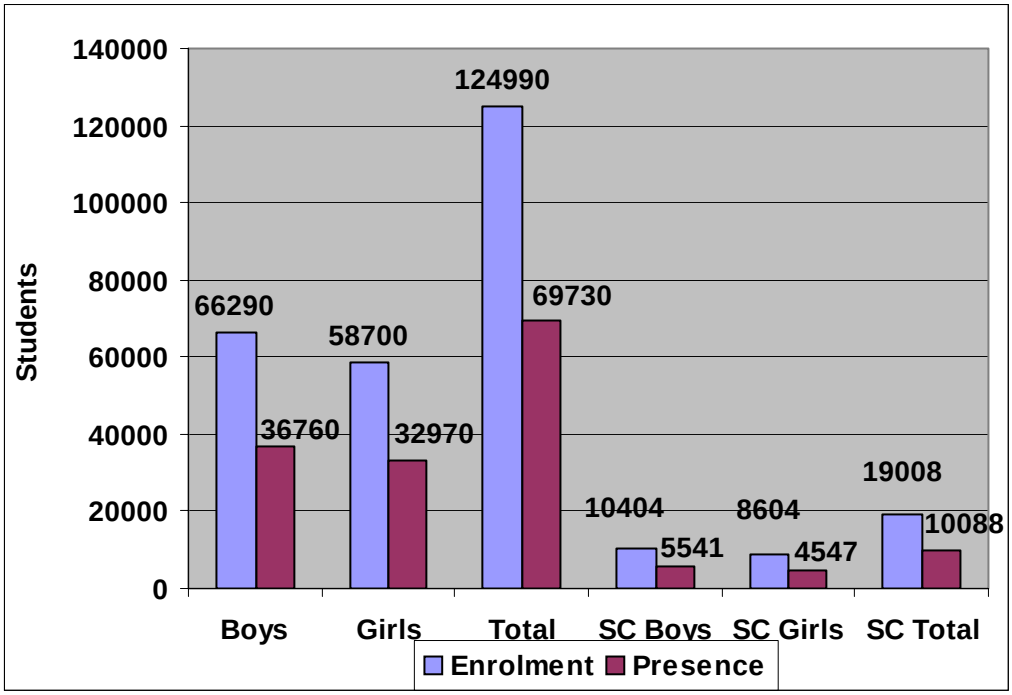


CHART 2: STUDENTS ATTENDANCE AT ELEMENTARY LEVEL



Teachers' absenteeism

Besides teachers sanctioned post and teachers in-position, data was also collected on number of teachers present on the day of visit. Table 58 expresses the school category wise presence of teachers on the day of visit.

TABLE 58: NUMBER OF TEACHERS ABSENTEEISM ON THE DAY OF VISIT

School category	Percentage of teachers present	Percentage of teachers absent
Primary	85.7	14.3
Primary with upper primary	83.5	16.5
Only Upper Primary	97.1	2.9
Upper Primary with Secondary	84.1	15.9
Total	**84.8**	**15.2**

It is observed from the above-mentioned table that teacher's absenteeism is slightly high – 15.2%, which means that approximately one third of teachers remained absent during school time. School category wise analysis shows that lowest absenteeism of teachers is at Upper Primary level (2.9%) and as the level increases the cases of absenteeism also increases. The rate of absenteeism was 14.3% in primary schools, 16.5% in primary with upper primary schools and 15.9% in upper primary with secondary schools.

TABLE 59: PERCENTAGE DISTRIBUTION OF SCHOOLS ACROSS TEACHERS ABSENTEEISM

Teachers absenteeism	Number of Schools	Percentage of schools
No teacher absent	258	57.5
One teacher absent	104	23.2
Two teachers absent	44	9.8
More than two teachers absent	43	9.6
Total	**449**	**100.0**

It is evident from table 59, that in 57.5% of schools no teachers were absent from the schools, whereas in 23.2% of schools one teacher was absent from the school. In approximately 20% of schools, two or more than two teachers were absent from the school.

Vidyalaya Shiksha Samiti (VSS)

The Sarva Shiksha Abhiyan aims to achieve its goal through community involvement, it treated community as a one of the stockholder of school management. That's why Vidyalaya Shiksha Samiti (VSS) was formed for each school to look after the overall management of school. During field visit the indicators on which data collected are – year of formation of VSS, number of VSS meetings held in this year and keeping updated proceeding of the VSS meetings.

TABLE 60: YEAR OF VIDYALAYA SHIKSHA SAMITI FORMATION

S.N.	Year of VSS formation	VSS	% age
1	2001	6	1.3
2	2002	17	3.8
3	2003	19	4.2
4	2004	160	35.6
5	2005	142	31.6
6	2006	85	18.9
7	2007	5	1.1
	No Response	15	3.3
	Total	**449**	**100.0**

Table 59 reveals that approximately 9.3% of the VSS are constituted in first three years. Only 51.6% of schools are updated in VSS formation. As Vidyalaya Shikhsa Samiti act 2000 suggest reconstitution of VSS in every three years. So half of the schools do not follow the criteria.

CHART 3: NUMBER OF VSS MEETINGS HELD (CURRENT YEAR)

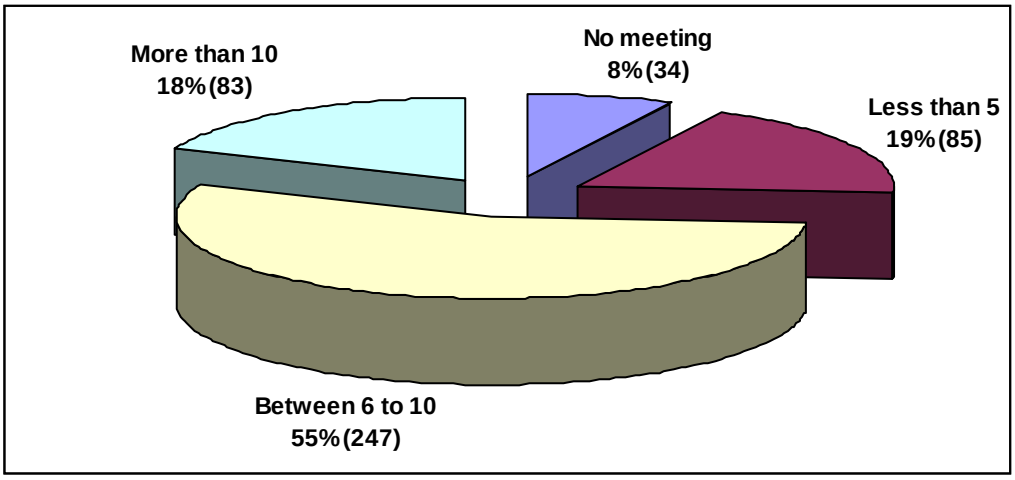


CHART 4: AVAILABILITY OF UPDATED PROCEEDING OF VSS MEETINGS

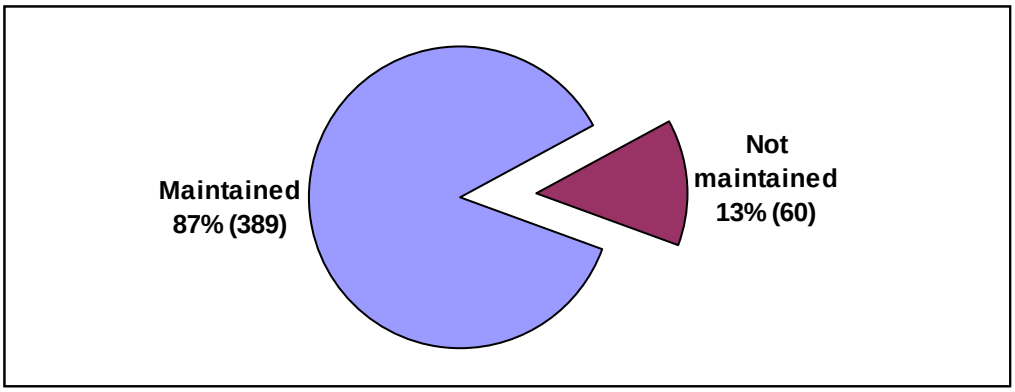


Chart 3 reveals that 8% of VSS had not met even once in a year. Prior to field visit, 19% of VSS had less than 5 meetings in a year, 55% of VSS organized meeting between 6 to 10 times and 18% of VSS met more than 10 times during current year prior to field visit. Chart 4 reveals 87 % of VSS maintained their proceedings. This suggests poor school management as far as the VSS is concerned.

TABLE 61: MEAN DISTRIBUTION OF WORKING DAYS ACROSS SCHOOL CATEGORY

S.N.	School category	Working days	Teaching days
1	Primary	242	233
2	Primary with upper primary	246	236
3	Only Upper Primary	241	235
4	Upper Primary with Secondary	248	230
	Total	**244**	**234**

Table 60 expresses the mean distribution of working days and teaching days of sampled schools. Both working days and teaching days mean the same, but difference is in the source of data collection. Data on working days collected from teachers' attendance register and teaching days collected from students attendance register. There is a difference of approximately 10 days between working days and teaching days.

CHAPTER

5

Enumerators' feedback

Besides checking the DISE data, survey also assesses the implementation of EMIS through enumerators' feedback schedule in 447 schools. It assessed the record keeping practices of schools, training of schools on DISE, problems faced during filling of DISE format, availability of notice boards and use of notice board and available & up-to-date registers.

TABLE 62: Attributes pertaining to the Head Master towards PES enumerators.

Attributes of HM	Very Good	Good	Average	Poor	Very Poor	Total
Initial reaction of the Head Masters	43.1	34.2	17.6	3.6	1.4	100.0
Response of Head Masters to provide information	40.7	33.3	20.2	4.3	1.4	100.0
Availability of records	35.2	31.3	26.5	5.1	1.9	100.0

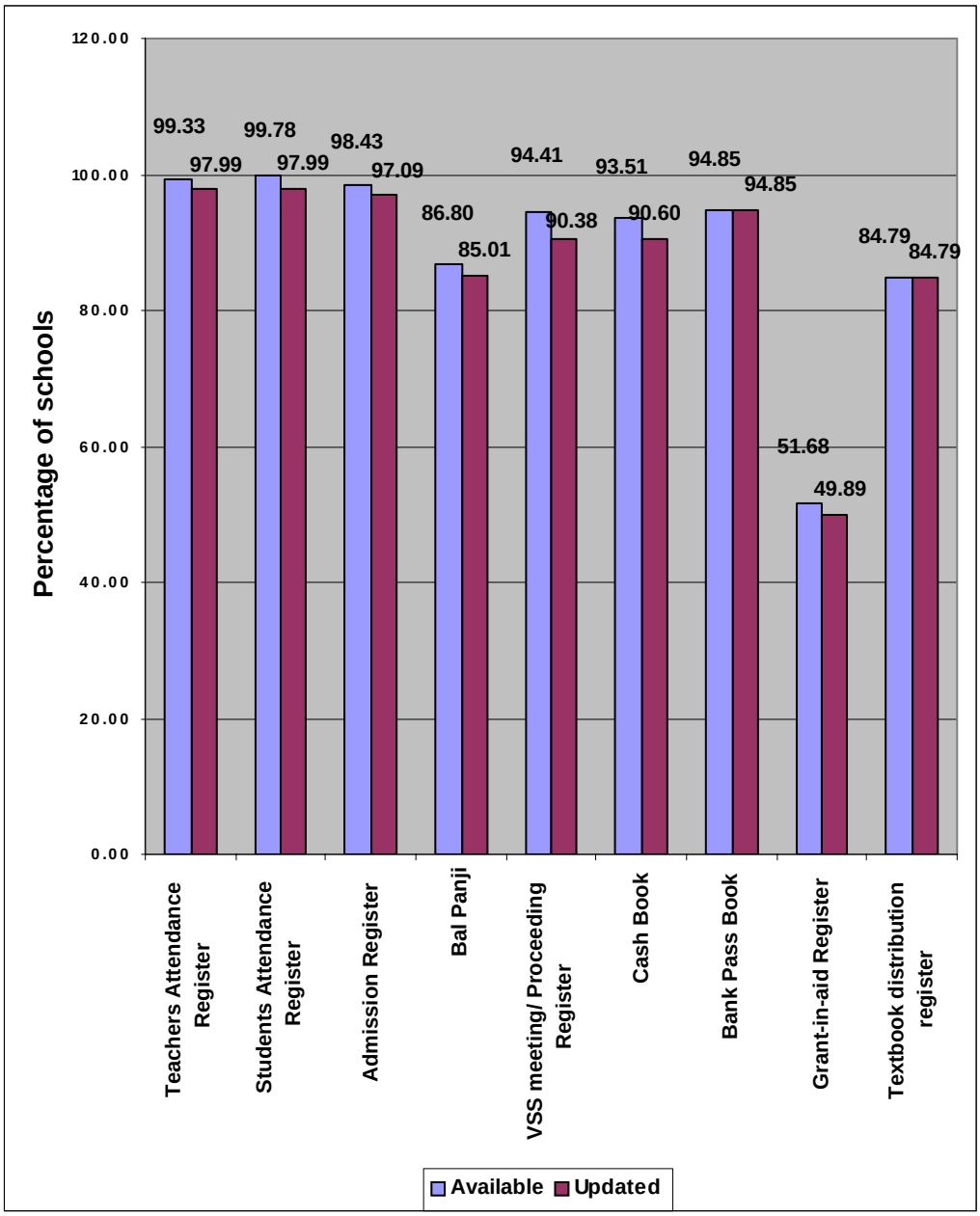
Table 62 shows the attribute of Head Master/Head Teachers towards the enumerators of Post Enumeration Survey. The initial reactions of Head Master was quit positive in 77% schools, whereas in 17.6% of reaction was average and 5% of HMs/HTs shows poor interest towards PES. As regards, response of Head Masters to provide information to enumerators, 74% of HM shows good response, 20.2% shows average response and 5% shows poor response. Regarding availability of records only 66% of schools were good in availability and maintenance of record in good condition, while 33% of schools were poor.

TABLE 63: RECORD KEEPING PRACTICES OF SCHOOLS

S.N.		% age Availability
1	HM/HT able to provide the information pertaining to enrolment and detail of pass percentage easily	91.9
2	HM/HT able to give the enrolment and other details from a single register	51.7
3	Teachers fill up the attendance register properly	89
4	HM/HT have the year end summary details of children for all grades available with them	70.2
5	The attendance register properly maintained and kept in the Almiras	80.1
6	Availability of photocopy of filled in DISE DCF	63.8

It was noticed that 92% of the schools HM/HT were able to provide the information pertaining to enrolment and detail of pass percentage easily, of them 51.7% of schools HM/HT were able to provide the enrolment and other details from a single register. In 70% of schools, HM/HT had the year-end summary details of children for all grades and only 63.8% of schools had availability of photocopy of filled-in DISE DCF.

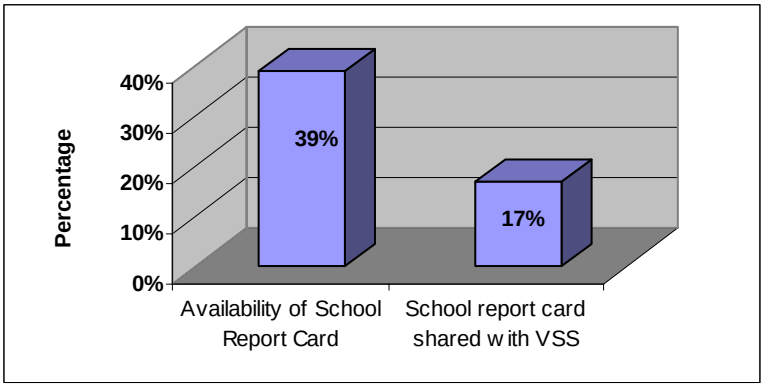
CHART 5: AVAILABILITY AND UP-TO-DATED MAINTENANCE OF RECORDS



Receipt of School Summary Report Card

During survey it was observed that whether the school had received the summary report card (for last year) of DISE or not. Overall only 39% o schools received the school summary report card of previous DISE. Out of 447 schools, only 17% of schools shared school summary report card with VSS members. (See Chart 6)

CHART 6: AVAILABILITY OF SCHOOL REPORT CARD



Training for proper implementation of DISE

It is observed from the above analysis that majority of deviations found are due to subjective interpenetration, and lack of clear & precise knowledge of various indicators. So, training on DISE plays crucial role for accuracy and quality of data. Following paragraphs deals with the itinerary of training.

Generally it is assumed that HM/HT of the schools will f the DISE format, but chart 6 resembles that approximately in 10% of the schools teachers filled the DISE format.

Chart 7 reveals that over half (59%) of the schools hac received training on DISE format and less than half (41%) did not receive training this year.

Chart 8 shows that, where the training was held (place of the training), 41% of schools received training at CRCs and 41% received training at BRCs. It is assumed that HM/HT of the schools will receive the training on DISE format. Data reveals that nearly in 55% of cases Head Masters received the training while in 4% of cases, teachers also received training on DISE format and 41% of schools did not receive any training on DISE

Who was responsible for filling DISE?

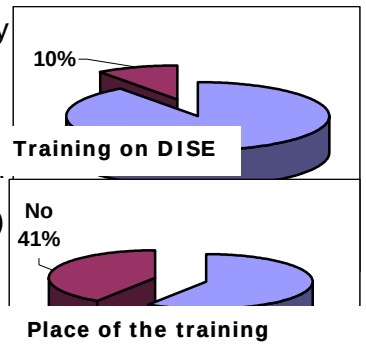


CHART 7

Place of the training

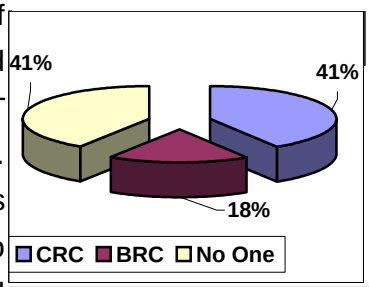


CHART 9

Who received the training?

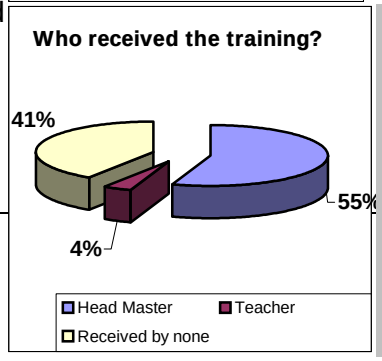


CHART 10

As regards, the duration of training, chart 11 shows that out of 447 school, in 38% of schools, HM/HT/Teachers received one day training and 20% received half day training. It is precise to mention here that, all the training were organised on the Guru Gosthi meeting at BRC or CRC level itself. Respondents interview reveald that DISE traning was one of the agenda of Guru Gosthi or CRC meeting, which held once in a month, and no separate training on DISE format. This dilute the seriousness of the DISE system.

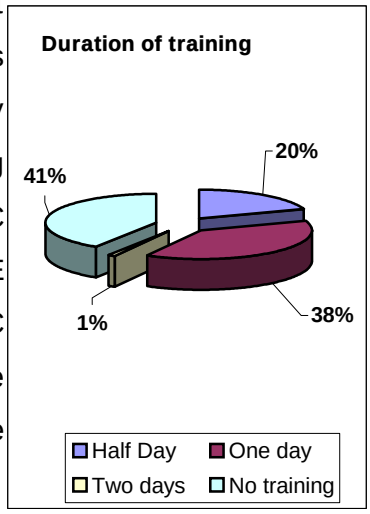


CHART 11

Chart 12, resembles that in 34% of cases, the training was conducted by the CRC Coordinators (CRCC), 22% by BRC Coordinators (BRCC), while in 4% cases it was given by District Resource Group members (DRGs) or other members.

Regarding quality of training question were asked from the respondents on whether the concept and DISE format was explained quite clearly during the training and all the doubts were removed completely. Chart 13 shows that 47% of HM/HT reported to have a good quality of training, while 12% reported that the concept and DISE format was explained partially and ritualistically.

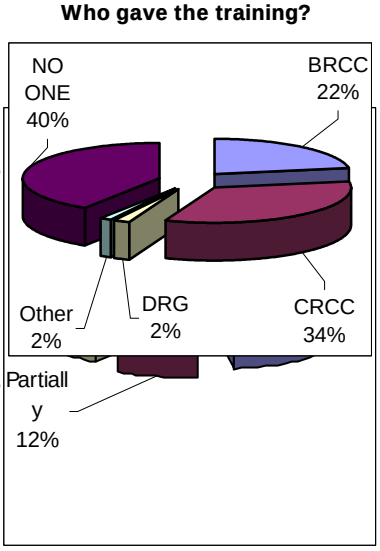


CHART 13

Major problems and suggestions received from respondents for improving quality of DISE

Study also solicited the problems faced in filling DISE format, suggestions for improving the quality of DISE. Head Masters / Head Teachers served as respondents. Major problems have been summarized below:

- A large number of schools had not received training for filling DISE format. Many of the schools require in-depth training and that should not be restricted to HM/HT only. Training of all teachers should be given in general for making understanding over the relevant indicators.
- Specific problems faced are calculation of class wise age of children, identification of repeaters, building blocks, teachers positioning against sanctioned post, compilation of children data, calculation of total enrolment & new enrolment and calculation of school living certificate etc.

Major suggestions for improvement have been summarized as follows:

- Micro level training at Block Resource Center by competent trainer in a participatory training mode with improved training methodology is needed.
- Besides Head Masters, training should be given to some teachers also.
- Schools should consolidate the basic indicators of schools at CRC before filling of DISE format. So that quality may be ensured.
- Supply of School summary report and feedback on filled DISE format should be ensured.
- District Level Office should supply the DISE format to school on time and sufficient time should be given for completing the format.

CHAPTER

5

Conclusion and Recommendations

The principal objective of the survey was to measure deviations of DISE data from Post Enumeration Survey (PES) data and to suggest appropriate remedial measures for strengthening the DISE system in Bihar. So the Sample Checking of DISE data deals with a few relevant issues concerning DISE format and mechanism made for implementation of DISE in Bihar. Overall 449 schools were covered from 6 sampled districts for comparison of DISE data with PES data. State Level Office of Bihar Shiksha Pariyojna Parishad, Patna, provided tools (NUEPA) for survey. Major finding with recommendations for strengthening the DISE system in Bihar are as follows:

Findings

- The overall deviation of DISE data from PES data, in respect of all comparable items, is 12% which is slightly higher than the permissible percentage of deviation i.e 10% and there by giving precision level of 88%.

- Out of 28 comparable variables 11 variables shows deviation of 10% or more from PES data. These variables are type of school (11.1%), repeaters (19.1%), disability (33.5%), examination result (11.1%), teachers sanctioned post (24.1%), teachers in-position (21.5%), toilet for girls (9.8%), availability of furniture for children (11.8%) and distribution of textbooks.

- Indicators with less than 10% of deviation from PES data are location of school (2.7%), category of school (0.5%), lowest grade in schools (0.4%), highest grade in schools (2.7%), school management (5%), residential status (2%), part of shift school (2%), pre-schools (4.5%), children enrolment (7.2%), status of

school building (4.2%), electricity (1.8%), common toilet (7%), source of drinking water (8%) and availability of play ground (6.2%).

- Major reasons for these deviations may be summarized as:

- ***Types of school:*** Majority of schools was made co-educational especially primary school, but still schools are bearing its old name and same is used for DISE code.

- ***Repeaters:*** Problem of definition and interpretation of repeaters.

- ***Disability:*** Over reporting.

- ***Teachers sanctioned post and In-position:*** Non-availability of record and knowledge about sanctioned post was found in majority of schools. Several new teachers were appointed but schools do not have the record of sanctioned post. In majority of cases, school received the appointed teachers. Schools do not have the information about the number of sanctioned post. High deviations in "in-position" may also be due to large teachers' choice of transfer, deputation of teacher on another schools, deputation on other activities and appointment of new teachers during June-July 2006 to December 2006.

- ***Availability of Blackboards:*** Under reporting.

- ***Condition of boundary wall:*** Interpretation of Pucca, Pucca but broken, wire fencing, hedge and others. There seems to be no clear-cut understanding.

- ***Availability of furniture for children:*** Interpretation of furniture for some and none.

- ***Distribution of textbooks:*** Distribution of books to poor children of other social category, who are not entitled for that.

- The students' attendance on the day of visit was 55.8% at elementary level and 55.9% at primary level.

- Teachers' absenteeism on the day of visit was found high. Overall teacher absence rate was 15.2% i.e. 15.2% of teachers were absent from school on the day of visit. The same was 14.3% for primary schools, 16.5% for primary with upper primary, 3%. For only upper primary and 15.9% for primary with upper primary and secondary.

- 9.3% of VSS are constituted in first three years of SSA (i.e 2001 to 2003); only 51.6% of VSS are constituted after 2004. The VSS act suggests reconstitution of VSS in every three years. But the record revealed that the reconstitution of VSS in every three-year was not taken care of. 59% of VSSs were found to be formed before three years and the same VSSs were continuing.

- 36.2% of schools do not have photocopy of filled DISE format.

- 60% of schools do not have School Report Card.

- 41% of schools do not received training on DISE format. Whereas only 38% schools received one day training and 20% received half day training. All the training were organised on the Guru Gosthi meeting at BRC or CRC level itself. Respondents interview reveald that DISE traning was one of the agenda of Guru Gosthi or CRC meeting, which held once in a month, and no separate training on DISE format was organised. This dilutes the seriousness of the DISE system.

- Only 47% of schools Headmaster/Head teacher are satisfied with DISE training.

- Specific problems faced by HM/HT in filling DISE format are calculation of class wise age of children, identification of repeaters, building blocks, teachers positioning against sanctioned post, compilation of children data, calculation of total enrolment & new enrolment and calculation of school living certificate etc.

- Major suggestions provided by respondents (HM/HT) are:

- Micro level training at Block Resource Center by competent trainer in a participatory training mode with improved training methodology is needed.
- Supply of School summary report and feedback on filled DISE format should be ensured.
- Schools should be very clear on the basic indicators of schools at CRC before filling of DISE format. So that quality may be ensured.

Recommendations

Based on the findings of the survey, some of the recommendations were arrived at for improving DISE system. They are as follows:

- During the survey it was observed that major deviations are due to conceptual error (Definition not properly understood) made during filling up few needed information in the DCF by the concerned school Head Masters. As such it is suggested that rigorous training at BRC level is inevitable for conceptual clarity.
- Training at Block Resource Center by competent trainer in a participatory training mode with improved training methodology is needed. Period of training on DISE DCF should be third or fourth week of September.
- For better management of the training at each level it is further suggested that a hierarchical model right from the State to BRC level be devised and an observer/resource person (one level above) should be present during the training that the information loss basically made during the training is minimized.
- More emphasis should be given on issues like enrolment, class wise age of children, repeaters, dropout, building blocks, teachers sanctioned post, calculation of total enrolment & new enrolment and calculation of school living certificate, where the deviations are on high side.

- Certain variables like school establishment, post sanctioned, budget released, location of school changed are generally not available at school level. So authority should make these information available before DISE data collection.
- In order to ensure complete coverage of all recognized schools, it is suggested that a check-list of all such schools existing in the Block should be prepared and cross-checked with the list provided by the Block Education Extension Officer.
- In order to minimize the deviation in the key variables such as type of schools, category of schools, Rural/Urban classification, year of establishment and all such variables which seldom changes, it is recommended that School Report Card be shared with respective schools along with the DCF. Feedback on DISE DCF should also be shared and corrective measures should be initiated sincerely.
- Outsourcing of DISE Data Entry from the open market should normally be avoided, as the agency involved in data entry may not have experience in handling the DISE software, which leads to inconsistency in data. It is suggested that the entire work should be carried out in close supervision of the MIS personnel at district level. For that the MIS infrastructure needs to be adequately strengthened.
- As far as validation of DISE data is concerned, CRCCs' should be entrusted the responsibility to thoroughly scrutiny each DCF and give feedback to respective schools immediately. As there are hardly 10-15 schools under the jurisdiction of the CRC, it is possible to share the feedback. CRC is the only smallest administrative unit where quality of data can be maximized.
- In order to improve the quality of data across the district it is further suggested that optimal utilization of DISE data should be made at all levels. As such it is essential that data at each level right from the School to district level be shared and discussed in details.
- MIS units should be strengthened right from the block level to state level.

- Districts should maintain the time line for DISE data collection. The DISE data should be collected in the month of October and completed before December and PES survey should be done in the month of December.