REPORT ON POST ENUMERATION SURVEY

(5% sample check of DISE 2008 for the state of Andhra Pradesh)

Submitted to
State Project Director, Sarva Shiksha Abhiyan
Govt. of Andhra Pradesh

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T. Vijaya Kumar

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Acronyms

SSA – Sarva Shiksha Abhiyan
DISE – District Information system for Education
PES - Post Enumeration Survey
DCF - Data Collection Format
GoI – Government of India
NUEPA - National University of Educational Planning and Administration
NIRD - National Institute of Rural Development
SC – Scheduled Castes
ST – Scheduled Tribes
OBCs – Other Backward Classes
MDM - Mid day meal programme

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

Free and compulsory education to all children up to the age of fourteen years is our constitutional commitment. The Government of India has initiated a number of programmes to achieve the goal of Universalisation of Elementary Education (UEE). Among the several programmes launched, Sarva Shiksha Abhiyan (SSA) is the most recent one in this regard. The Sarva Shiksha Abhiyan (SSA) is a historic stride towards achieving the long cherished goal of Universalisation of Elementary Education (UEE) through a time bound integrated approach, in partnership with States. SSA, which promises to change the face of the elementary education sector of the country, aims to provide useful and quality elementary education to all children in the 6-14 age group by 2010. Unlike the previous programmes of this nature, SSA is quite distinct in terms of implementation through mission as well as partnership mode.

In the context of implementation of Sarva Siksha Abhiyan (SSA), a massive programme undertaken in the realm of education sector, what assumes greater significance is proper implementation of the programme itself to derive appropriate results. For effective implementation of such large-scale programme, collecting information, analyzing the results, identifying the corrective course, deriving instructions based on the actual situation, the Sarva Shiksha Abhiyan (SSA) is implemented throughout the country with the help of project authorities of state government concerned. An elaborate MIS mechanism has been laid to monitor the implementation of the programme, gauge the results and identify course of action from time to time. At the project authority level i.e. State level, the District Information System for Education (DISE) collects data pertaining to various aspects of education system through a structured schedule consisting of information on school education. At district level regular monitoring reports are being prepared and submitted to Ministry of HRD, Govt. of India at periodical intervals. In addition, with a view to establishing the veracity of information provided by the project authorities concerned, an external institution

conducts similar survey i.e. DISE, based on a five per cent sample survey. Thus, appropriate MIS in essence properly guards the SSA.

As per the desire of the MHRD, GoI the 5% sample check of the DISE data by an external research agency has been asked by the State Project Director, SSA, The National Institute of Rural Development has taken up the study in 3 Districts of Andhra Pradesh namely Krishna, Nalgonda and Chittoor, The report is aimed at verification of data collected through DISE and verifies data similarities as well as fluctuations, if any. In essence, thus report is solely aimed at verification of actual data collected and submitted and thus leading to refining and also to maintain internal consistency of data to facilitate decision-making process in educational management.

The Five per cent sample check of DISE data was based on data collected in five districts viz. Krishna, Nalgonda and Chittoor representing Telengana, Coastal Andhra and Rayalaseema regions of the state. Data for the study was collected from 535 schools spread over three districts selected for the study. However, comparison between DISE and PSE data could be established only in 535 schools. Further, in reference to certain variables there was no commonality between formats canvassed for DISE and PSE data. Hence, the report has not only the limitation of comparison among 535 schools but also in reference to certain common variables. However, the data on independent variables, for which there was a provision in PSE data format, description on findings was presented separately.

Findings of the Study

- The scrutiny of DISE data reveals that some of the schools have not provided proper information. It reflects that Head Masters and Teachers concerned do not have proper awareness on items of the DISE Format. In PES, the coverage of sample was 535 schools;
- The overall deviation of DISE data from PES data, in respect of all comparable of items, is 8.49%, which is within the range of permissible percentage of deviation i.e. 10%, and there by

giving a precision level of 91.51% for DISE data in relation to PES data

- Within the available comparable data, few schools did not provide the information on some of the items.
- The highest deviation of data is observed in respect of items which are based on respondent's interpretation i.e. Status of school buildings, condition of boundary walls in schools, sources of drinking water in schools and availability of computers etc.
- The items like number of blocks in schools, teacher posts sanctioned, teachers in position, disability, repitation rate, availability of computers have not been reported properly. Hence, it was felt difficult to establish deviation on such an important variables.
- As much as 26% of schools not open at the time of survey causing lot of inconvenience while collecting data for these schools investigators visited second time.
- As much as 55.3% of Head Masters concerned could not able to provide requisite information pertaining to his/her school though records are available.
- 33.2% percent of schools were not maintaining the records properly resulting in non-capture of data.
- In 26.4% of the schools, it was observed that Teachers were not on time to school for various reasons.
- 46% of the schools even do not have photocopy of DISE format though requisite instructions were in vogue.
- In as much as 46% of schools Display Boards were not available.
- Still considerable number of schools was not having exclusive toilets for girl children.

- Enrolment of girls, especially from SC followed by ST community, has recorded high frequency when compared with the boys of the same category.
- In case of OBC Girls the enrolment indicates less when compared to boys.

Based on the results of the survey some of the **recommendations** were arrived at for improving MIS, and these are as follows:

- The DISE format is lengthy and hence it should be re-designed to keep it short and simple keeping in view the abilities and time available among teachers concerned.
- More emphasis should be laid on issues on project performance indicators such as **enrolment, retention, and dropout, attendance rate and achievement** in the data capture format resulting in effective enumeration of vital statistics.
- Collection of data through DISE format may be ensured by October of each academic year so that the Five Percent Sample Check can be attempted by December of the same academic year so that the results can be appropriately utilized for planning the activities for next academic year.
- The formats canvassed for Post Enumeration Survey (DCF) and the District Information System of Education (DISE) were quite different in terms of certain variables/aspects. Which is becoming an obstacle for reporting.
- The School complex (Cluster Resource centres) should be strengthened by providing required number of computers and operators for collection and maintenance of data at the cluster level and also made accountable.
- Teachers and Head Masters, Mandal Educational Officers, Officers of District project SSA and DIET faculty should be given training on collection and utilization of DISE data and its all related soft ware

applications for proper planning and implementation of Educational activities.

- All the teachers must be given proper orientation and awareness that based on this data the budgetary provisions of schools were made hence, it is mandatory to know all these by the concerned personnel of the schools.
- Though this year scrutiny was under taken by the School complex Head masters, in most of the places it was quite informal. Hence this has to be addressed with focus and Effective supervision and monitoring should be ensured at cluster (School Complex), Mandal and District level.
- ***MIS Units should be strengthened right from the Cluster level(School complex) to state level.***

Summing up, variance of DISE data in reference to 5% sample check through PSE survey data is slightly deviant (8.49%) from the permissible data variance of 10%. Based on the visits to schools concerned and physical verification of DISE formats, it appears that the deviation of data is perhaps due to certain level of lack of awareness in terms of providing actual data. Had there been extra bit of supervision and a small dose of capacity-building intervention, the variance in terms of DISE data would have been much lesser.

Chapter 1
Introduction

1.1 Introduction

In the contemporary world economy, no country has achieved constant economic development without considerable investment in human capital. Previous studies have shown handsome returns to various forms of human capital accumulation: basic education, research, training, learning-by-doing and aptitude building. The distribution of education also matters in this regard. Unequal education tends to have a negative impact on per capita income in most countries. Moreover, controlling for human capital distribution and the use of appropriate functional form specifications consistent with the asset allocation model make a difference for the effects of average education on per capita income, while failure to do so leads to insignificant and even negative effects of average education. Investment in human capital can have little impact on growth unless people can use education in competitive and open markets. The larger and more competitive these markets are, the greater are the prospects for using education and skills.

In the earlier neoclassical models, education was not considered a major input for production and hence was not included in growth models (Harberger, 1998: 1-2). In the 1960s mounting empirical evidence stimulated the "human investment revolution in economic thought" (Bowman, 1960). The seminal works of (Schultz, 1961) and (Denison, 1962) led to a series of growth accounting studies pointing to education's contribution to the unexplained residuals in the economic growth of western economies. Other studies looked at the impact of education on earnings or estimated private rate of returns (Becker 1964, Mincer 1974). A 1984 survey of growth accounting studies covering 29 developing countries found estimates of education's contribution to economic growth ranging from less than 1 percent in Mexico to as high as 23 percent in Ghana (Psacharopoulos, 1984).

Prior to the nineteenth century, systematic investment in human capital was not considered especially important in any country. Expenditures on schooling, on-the-job training, and other similar forms of investment were quite small. This began to change radically during this century with the application of science to the development of new goods and more efficient methods of production, first in Great Britain, and then gradually in other countries.

During the twentieth century, education, skills, and the acquisition of knowledge have become crucial determinants of a person's and a nation's productivity. One can even call the twentieth century the "Age of Human Capital" in the sense that the primary determinant of a country's standard of living is how well it succeeds in developing and utilizing the skills and knowledge, and furthering the health and educating the majority of its population.

1.2 Education: the Scenario

Though India has the rich tradition of having one of the oldest education system i.e. Gurukul, yet the present scenario is quite tardy in terms of spread of education among all sections of people as well as level of education. Whatever the historical reasons may be the backwardness in terms of spread of education was taken up as a great challenge by the time of Independence. Constitutional measures taken up to provide compulsory education among all sections of population. However, given the population growth on one side and the physical constraints like difficult terrain, habitations in remote areas, tribal dialect etc on the other hampered the progress in terms of spread of education. Given the tardy progress in education new programmes have been taking shape to further education across the country from time to time.

Free and compulsory education to all children up to the age of fourteen years is our constitutional commitment. The Government of India has initiated a number of programmes to achieve the goal of Universalisation of Elementary Education (UEE). Among the several programmes launched, Sarva Shiksha Abhiyan (SSA) is the most recent one in this regard. The Sarva Shiksha Abhiyan (SSA) is a historic stride towards

achieving the long cherished goal of Universalisation of Elementary Education (UEE) through a time bound integrated approach, in partnership with States. SSA, which promises to change the face of the elementary education sector of the country, aims to provide useful and quality elementary education to all children in the 6-14 age groups by 2010. Unlike the previous programmes of this nature, SSA is quite distinct in terms of implementation through mission as well as partnership mode.

1.3 Effective Implementation of Programmes: Role of MIS

In the context of implementation of Sarva Siksha Abhiyan (SSA), a massive programme undertaken in the realm of education sector, what assumes greater significance is proper implementation of the programme itself to derive appropriate results? For effective implementation of such large-scale programme, collecting information, analyzing the results, identifying the corrective course, deriving instructions based on the actual situation assume much of significance.

Further, recent trends in programme implementation demand make the availability of timely and accurate information of the utmost importance to organizations engaged in education activities. Information is a critical resource in the operation and management of organizations. Timely availability of relevant information is vital for effective performance of managerial functions such as planning, organizing, leading, and control. An information system in an organization is like the nervous system in the human body: it is the link that connects all the organization's components together and provides for better operation and survival in a competitive environment. Indeed, today's organizations run on information.

In a programme of the magnitude of Sarva Shiksha Abhiyan (SSA), MIS thus play vital role in ensuring proper implementation of the programmes, assess corrective course of action, realign strategies and activities, and measure the results and so on.

1.4 Sarva Shiksha Abhiyan (SSA) and the MIS in vogue

Sarva Shiksha Abhiyan (SSA) is implemented throughout the country with the help of project authorities of state government concerned. An elaborate MIS mechanism has been laid to monitor the implementation of the programme, gauge the results and identify course of action from time to time. At the project authority level i.e. state level, through District Information System for Education (DISE) data pertaining to various aspects of education system is collected through a structured schedule consisting of information on school education at district level. Regular monitoring reports are being prepared and submitted to Ministry of HRD, Govt. of India at periodical intervals. In addition, in order to establish the veracity of information provided by the project authorities concerned, an external institution conducts similar survey i.e. DISE, based on a five per cent sample survey. Thus, appropriate MIS in essence properly guards the SSA.

1.5 Education System in Andhra Pradesh: A Glimpse

Andhra Pradesh is the fifth largest state in the country both in terms of population as well as geographical area. Though Andhra Pradesh became prominent in terms of its innovative social and economic development programmes like SHG Movement, Social Security Programmes etc. yet in terms of education it stood at bottom as far as southern region of the country. The state continues to show not only lowest literacy among the southern states but also one of the least literate states in the country. As per 2001 census, literacy rate for Andhra Pradesh is 61.11% for overall population with 70.85% for males and 51.17% for females. Thus, the state of Andhra Pradesh, in essence relatively backward in terms of education at overall population level and also the gender disparity. This assumed significance while situating the Sarva Shiksha Abhiyan (SSA) in Andhra Pradesh.

The pattern of Education in Andhra Pradesh is under 10+2+3 year's system. The first 10 years represents School Education, which includes five years Primary Education (1 to 5 Classes), two years of Upper Primary Education (6&7 Classes) and three years of High School (8 to 10 classes). At the end of 10^{th} class State Govt. conducts a Public Examination for entry into the Intermediate Education (11&12 classes), which is part of

Higher Education and leads to further 3 years of Graduation courses under University system.

1.6 Sarva Shiksha Abhiyan (SSA) in Andhra Pradesh

The scheme was initiated in the year 2000-2001 in all 23 districts. SSA in Andhra Pradesh is functioning under the aegis of Andhra Pradesh School Education Society. The SSA was launched with the75% assistance of Central Government and 25% share of State Government up to 10^{th} plan. There after the cost sharing would be 50:50 from both Central and State Governments.

1.7 District Information System for Education and Sample Check

As cited, effective implementation of programmes heavily depends on information system inbuilt in the programme implementation. This in view, **District Information System for Education** provision was made for strengthening of Educational Management. A number of Government and Quasi Government Institutions were involved in collection information on important educational variables from the schools concerned to provide inputs for formulation of district elementary education plans under Sarva Shiksha Abhiyan and also for five year plans. Further this intervention will also be useful to decentralized framework programme implementation.

Since DISE data provides the basic information provided by the project authority concerned, it is also quite essential to verify the data based on a sample check. The present report is thus is based on data collected through five per cent sample of the actual DISE data in Andhra Pradesh. The report is aimed at verification of data collected through DISE and verifies data similarities as well as fluctuations, if any. In essence, the report is solely aimed at verification of actual data collected and submitted and thus leading to refining and also to maintain internal consistency of data to facilitate decision-making process in educational management.

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Chapter- 2

Study area and Design

In a study of quality check and sample analysis of DISE data and confirming the results there of, the methodology of the study needs to be precision oriented. Hence, carefully drawn sampling method and appropriate care for other related aspects with regard to methodology were emphasized in this study. This chapter provides brief description about methodology.

Objectives

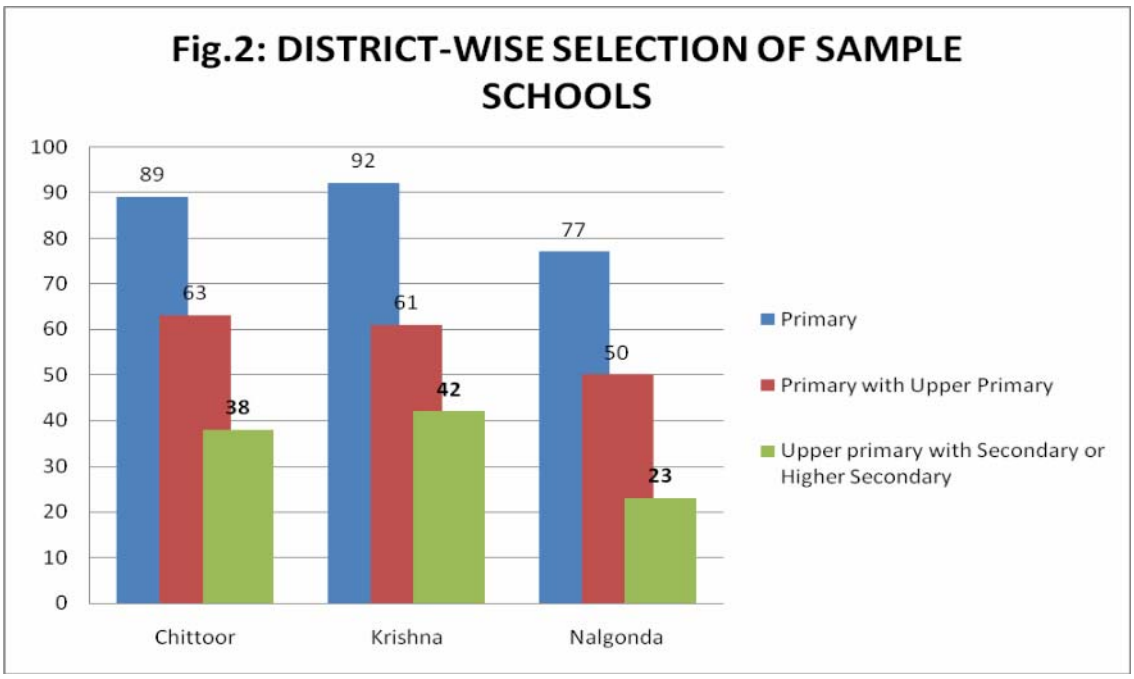
The study is carried out with the following prime objectives:

i. Evaluate the quality check of the DISE data
ii. Measure the precision levels as well as deviation of DISE data
iii. Suggest measures for strengthening data base on information pertaining to SSA in Andhra Pradesh.

2.1 Sampling

The universe of the study is all the schools covered under SSA programme in Andhra Pradesh. As the DISE data consists of information on all the schools covered under SSA in Andhra Pradesh, five per cent of the schools appropriately representing schools across the state were selected for deriving sample for the study. While confining to the five per cent sampling, care has also been taken to emphasis on type of schools as well as management by ensuring the representation of both rural and urban, different types of management of schools namely Government, Private, Aided and recognized etc. Due consideration was also accorded to the schools located in SC/ST area.

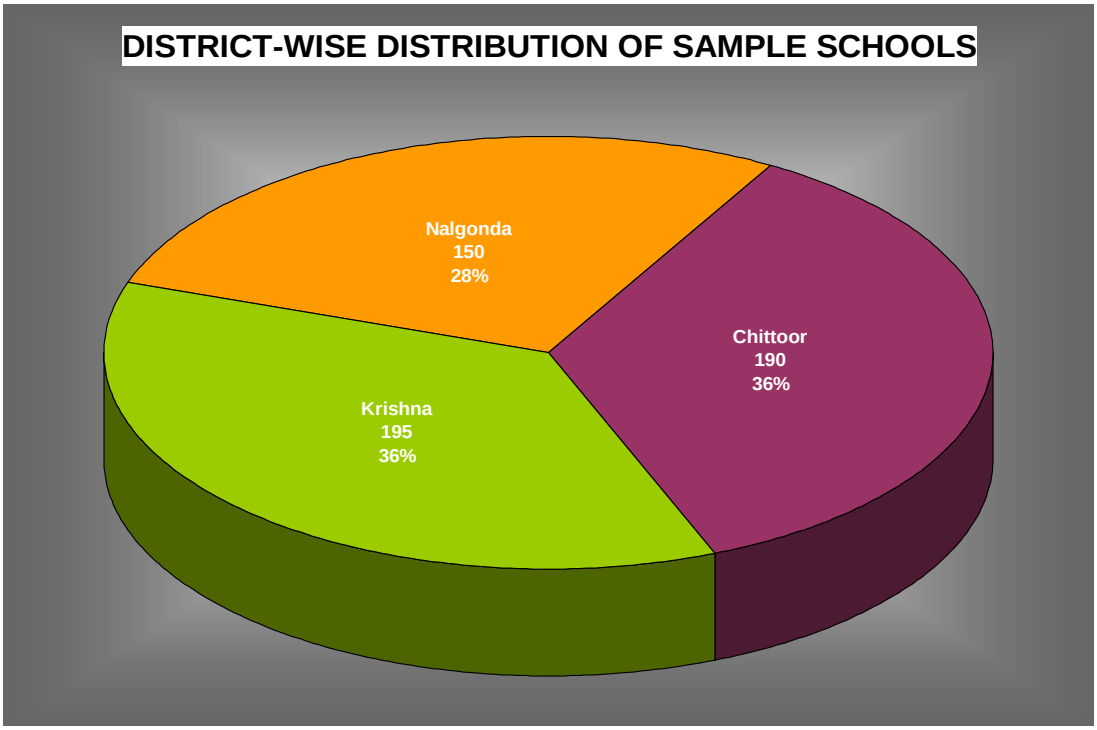
In all, 535 schools were selected as sample of the study and the pertaining details are presented in the following table.



Thus, the study sample consists of 535 schools with 258 Primary Schools (48.22%), 174 Primary with Upper Primary section schools (32.55. %) and 103 Upper Primary with Secondary or Higher Secondary sections (19.25%).

2.2 Study Area

The state of Andhra Pradesh consists of three regions i.e. Coastal Andhra (9 districts), Telengana (10 districts) and Rayalaseema (4 districts).A representative sample of three districts – one each from Coastal Andhra, Telangana and from Rayalaseema – were randomly selected for the study. Thus, the three districts constitute as sample area for the study and the details there of are presented in the following table. In each district, the schools were randomly selected from all the regions representing urban, rural, and tribal and areas like SC population etc were included in the sample. Thus, a total of 535 schools were covered in this study.



As cited in the graph, a total of 195 schools were drawn as sample from Coastal Andhra i.e. Krishna district, 150 schools from Telengana i.e Nalgonda district and 190 from Rayalaseema regions i.e. Chittoor district.

2.3 Instruments for Data Collection

A prescribed 'schedule' consisting of information on various aspects of school education was canvassed for the purpose of the study. National University of Educational Planning and Administration (NUEPA), New Delhi designed the schedule. It covers the aspects like school enrolment, dropouts, stagnation, physical and teaching facilities and so on.

2.4 Collection of Data

For the purpose of data collection, the study team made physical 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 B.Ed. or M.Ed. qualification 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. The school management concerned was informed in advance to keep the records ready for secondary data collection as well. On the day of visit to the schools, the structured schedule was canvassed for primary data collection under the supervision of research team.

2.5 Reference period

The DISE data pertains to the year 2008 with 30th September as reference date. The post enumeration survey was also of the same period. Though the MoU was signed in the month of January 2009, the study was also launched in Jan, 2009, because of certain administrative reasons.

2.6 Data Analysis and Presentation

Collected data, after 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 was 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.

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

*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 485 schools, where commonality of data exists, is presented variable-wise providing actual data obtained through PES and DISE and deviation observed there of.

2.7 Chapterisation

Reported is formatted in four chapters. Chapter I consists of general introduction pertaining to the importance of education, role of MIS for effective discharge of programme activities and the mandate of the report etc. Chapter II consists of methodology followed for the study with the description of study area. This chapter also depicts the limitations the study experienced and the reasons there of. 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 analysed pertaining to additional data collected through PES survey format and information on which data is not available through DISE format. The final chapter, Chapter V, consists of summary of report and suggestive measures/recommendations derived through the survey for effective course of action in future for improvement of DISE under SSA.

2.8 Limitations of the Study:

Though the study is carefully drawn keeping in view all the parameters of the study yet the study confronted the following limitations.

- Difference in Formats for post enumeration survey and DISE Data.
- Coverage of all types of school Managements
- Unfilled columns in prescribed formats of DISE data.

National University of Educational Planning and Administration, Government of India designed the format of DCF and is used for collecting the DISE data. The format is too lengthy and most of the items were self-explanatory. It is noticed that there is no point of collecting data on certain items again and again which were already available with concerned department. Some of the information is not available in the school instantly, for which they have to search the old records. Difference in formats for post enumeration survey with additions and with expanded items was made difficult as a

result comparison could be under taken. Some of the DISE formats were not filled properly, particularly important items like type of management, number of blocks, class rooms, computer facility etc. Consequently, these aspects were kept outside the purview of this survey report presentation.

Since the prime objective of Post Enumeration Survey (PES) is to evaluate the quality check of the DISE data and it is an important database for planning and strategy development, improvement of education on the whole, the construction of items in the format should be appropriate and should seek the information on what actually intended for. However, in several aspects, there is no similarity of the items on which PES and DISE formats were designed and as a result these aspects were not comparable. A few of the examples are detailed below:

- The details of the Head Master i.e. Name and educational Qualifications.
- Experience of Principal
- Number of years of working as HM in the present school
- Children enrollment in the last Academic Year
- Enrollment and Attendance details of children on the date of survey
- Grade wise Examination details for which Annual Examinations conducted in Last Academic Year.
- Investigators feed back on certain items like Attributes pertaining to the principal
- Filling up of attendance registers etc.

Apart from these, quite a good number of items on which information usually collected on regular basis under DISE data were missing in the DCF i.e. PES format. Such items are indicated below:

- Particulars of pre primary classes
- Teacher training activities
- Academic inspections
- Visits by the coordinators of different levels
- School development

- maintenance grants
- Infrastructure availability in the class rooms
- Library facilities
- Arrangements for disable students
- Enrolment details
- School information on the whole. etc.

In some cases, after scrutiny of DISE formats it has been noticed that some of the sample schools have not provided the information on certain items, which other wise could be, compared with the Post Enumerations survey formats. Consequently, some more items could not be compared and the details are as follows:

- Year of establishment of the school
- Number of teacher posts sanctioned and positioned
- Sex wise teacher details
- Number of Blocks and classrooms in the schools

To sum up, the study was confined to 535 schools drawn from three districts across different regions of Andhra Pradesh. However, as the DISE data did not have the component of private and un-aided schools information, thus data of 535 common schools were used for comparative analysis. The schools selected for the study consists of various category of school education and also different managements. The data were collected for the study through a structured schedule prescribed for the purpose. As the study findings were devoted to establish the comparison with DISE data already collected, a specific prescribed formula was adopted for comparable items of data. The study encountered certain limitations due to differential formats prescribed for DISE and PES survey. However, as most of the items were comparable, a genuine attempt has been made to arrive at confirmation and deviation of survey results.

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Chapter 3

Comparative Data Analysis between PES and DISE Data

As cited elsewhere in the report, the principal mandate of the report is to establish the accuracy of DISE survey in respect of various components of SSA in Andhra Pradesh. However, the Data Collection Formats (DCF) used for PES survey consists of additional information than the Data Collection Formats (DCF) through which data were collected for DISE survey. Further, certain institutions like private and un-aided schools, residential schools under Social/Tribal Welfare dept. were not covered under DISE survey. However, given the mandate of the study and the methodology followed, each and every category of schools was covered under PES survey. As a result, 535 schools were selected randomly for the study and survey was carried out through trained and qualified research investigators. The data of 535 schools were compared with PES data and conclusions were arrived. Further, as the PES data format has additional information than DISE survey data, the additional components were also presented separately and for the purpose of comparison only common variables were taken up.

In essence, this chapter contains a comparative analysis of common variables existing between PES and DISE survey data among the common schools covered.

As the report is aimed at confirming the data collected through DISE survey the common variables where deviation were established is furnished below:

- 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;
- Sanctioned Teachers;
- In Position Teachers;
- Status of School Building;
- Number of Blocks in Schools;
- Condition of Class Rooms;
- Electricity in Schools;
- Separate Toilets for Girls in Schools;
- Common Toilets in Schools;
- 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; and
- Children's Enrolment in 2007-08 and 2008-09.

For each component of comparable variables, as cited above, the analysed data is presented against PES and DISE data actual and then deviation, if any, irrespective of positive or negative trends is presented. Wherever, possible and felt necessary, the analysed data is also presented in graphical form for better elucidation.

COMPARATIVE ANALYSIS OF DISE DATA WITH PES DATA

TABLE NO.3.1: COMPARISON OF PES DATA WITH DISE DATA ON SCHOOL CATEGORY

Sl. No.	School Category	PES Data	DISE Data	Deviation
1	**2**	**3**	**4**	**5**
1	Primary	258	258	0
2	Primary with Upper Primary	174	174	0
3	Upper primary with Secondary or Higher Secondary	103	103	0
	Total	535	535	0

a) Quantitative Value of items as per DISE Data - 535

b) Quantitative Value of items as per PES Data - 535

c) Quantitative Value of deviations ignoring $\pm$ signs - 0

d) Percentage deviation of DISE Data with PES Data - 0%

e) Precision level of DISE data with relation to PES Data - 100%

Fig.1: COMPARISON OF PES DATA WITH DISE DATA ON SCHOOL CATEGORY

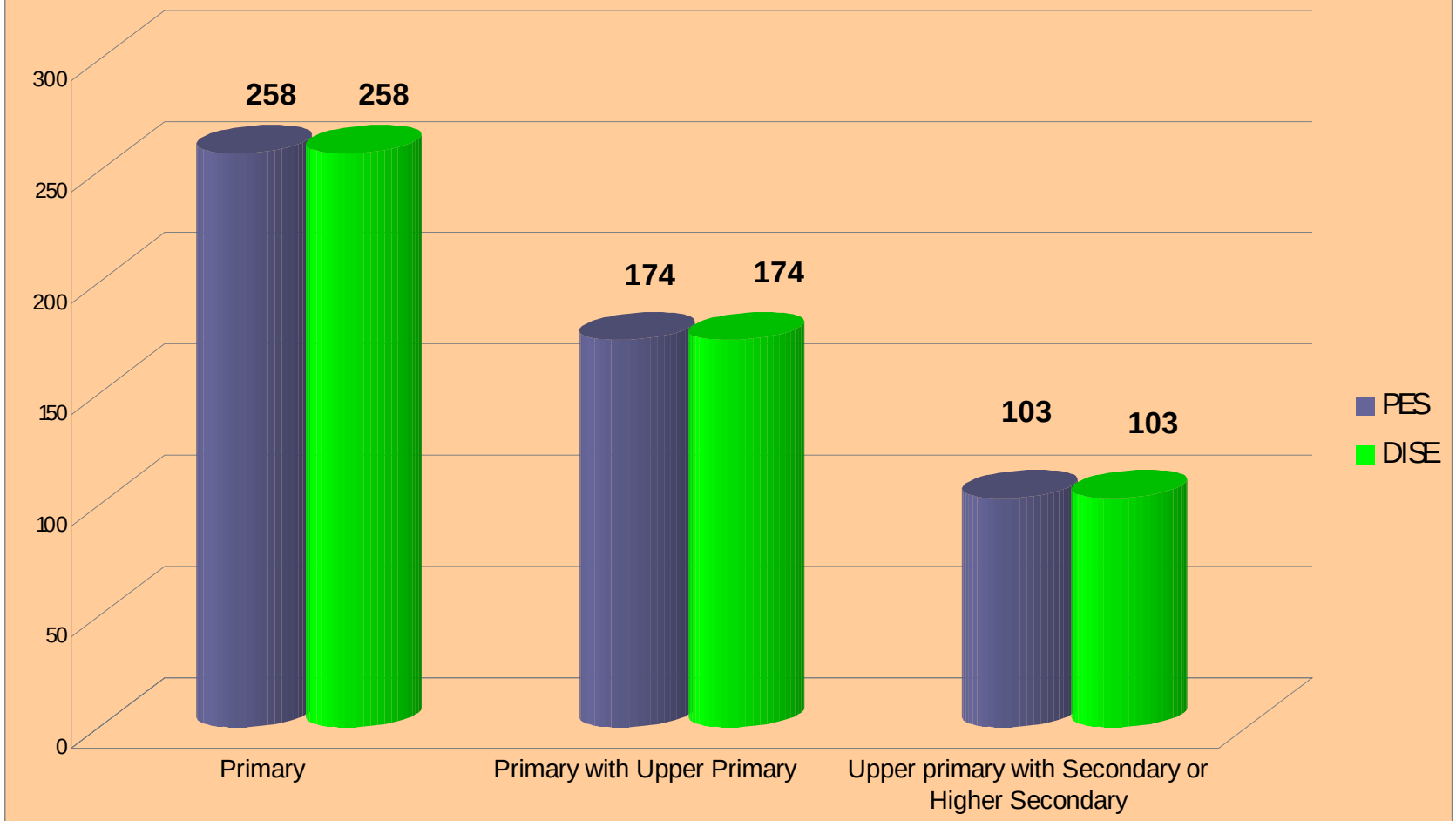


TABLE NO.3.2: COMPARISON OF PES DATA WITH DISE DATA ON SCHOOL LOCATION AND MANAGEMENT WISE

Sl.No	School Category	Sample Size	Rural			Urban		
			PES	DISE	Deviation	PES	DISE	Deviation
1	2	3	4	5	6	7	8	9
1	Primary	258	240	247	7	18	11	7
2	Primary with Upper Primary	174	142	140	2	32	34	2
3	Upper primary with Secondary or Higher Secondary	103	99	96	3	4	7	3
	Total	535	481	483	12	54	52	12

a) Quantitative Value of items as per DISE Data - 535

b) Quantitative Value of items as per PES Data - 535

c) Quantitative Value of deviations ignoring $\pm$ signs - 24

d) Percentage deviation of DISE Data with PES Data - 4.49%

e) Precision level of DISE data with relation to PES Data - 95.51%

Fig.2: COMPARISON OF PES DATA WITH DISE DATA ON SCHOOL MANAGEMENT

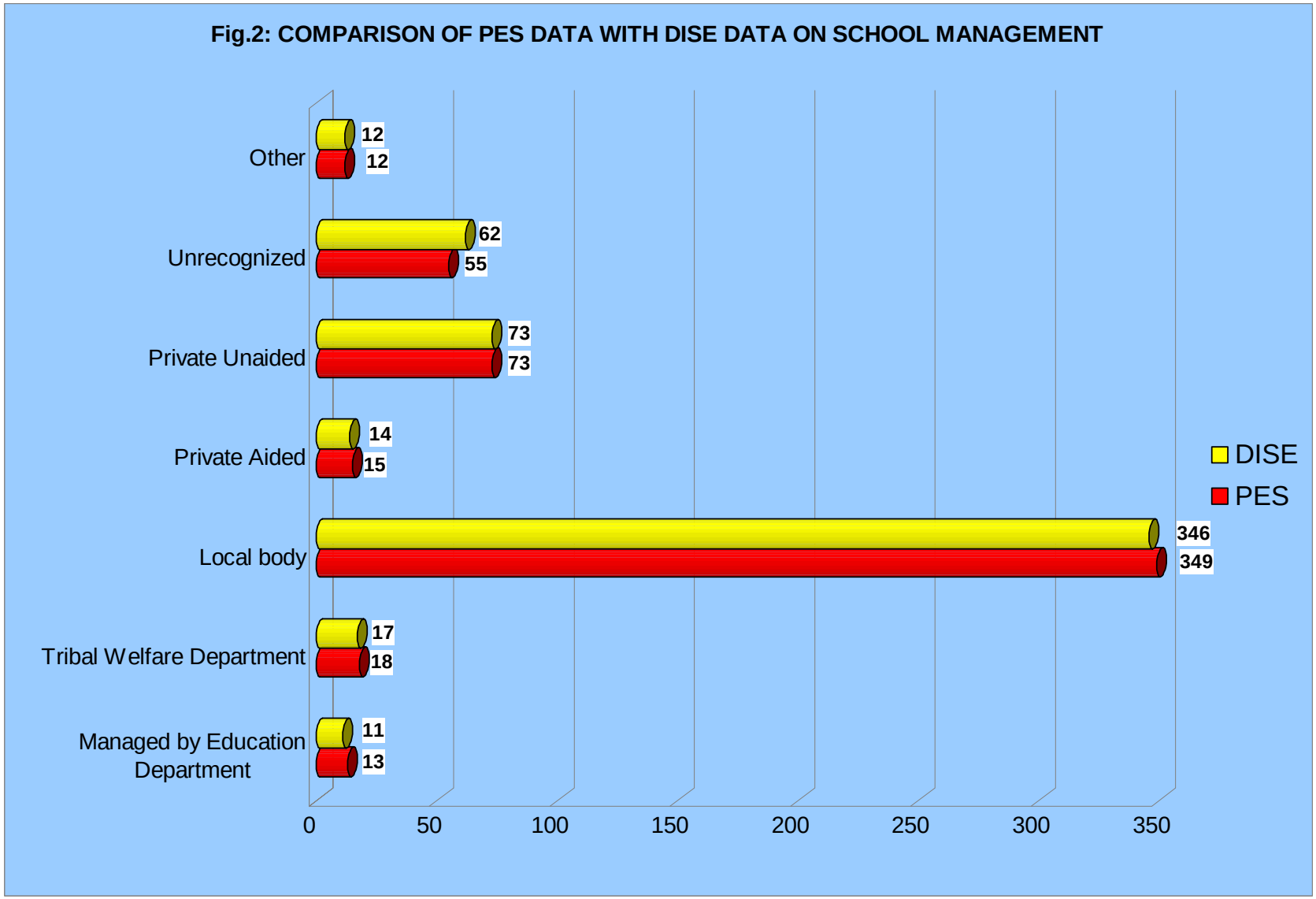


TABLE NO.3.3: COMPARISON OF PES DATA WITH DISE DATA ON TYPE OF SCHOOL AND GENDER WISE

Sl.No	School Category	Sample Size	Boys only			Girls only			Co-educational		
			PES	DISE	Deviation	PES	DISE	Deviation	PES	DISE	Deviation
1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**
1	Primary	258	2	1	1	7	2	5	249	255	6
2	Primary with Upper Primary	174	5	2	3	18	12	6	151	166	15
3	Upper primary with Secondary or Higher Secondary	103	1	3	2	6	2	4	96	98	2
	Total	535	**8**	**6**	**6**	**31**	**16**	**15**	**496**	**519**	**23**

a) Quantitative Value of items as per DISE Data - 535

b) Quantitative Value of items as per PES Data - 535

c) Quantitative Value of deviations ignoring $\pm$ signs - 44

d) Percentage deviation of DISE Data with PES Data - 8.22%

e) Precision level of DISE data with relation to PES Data - 91.78%

TABLE NO.3.4: COMPARISON OF PES DATA WITH DISE DATA ON LOWEST CLASSES IN SCHOOLS

Sl. No.	School Category	Sample Size	1ST CLASS			2nd – 5th CLASS			6TH CLASS		
			PES	DISE	Deviation	PES	DISE	Deviation	PES	DISE	Deviation
1	**2**	**3**	**4**	**5**	**6**	**10**	**11**	**12**	**13**	**14**	**15**
1	Primary	258	245	257	12	12	1	11	1		1
2	Primary with Upper Primary	174	157	155	2	9	12	3	8	7	1
3	Upper primary with Secondary or Higher Secondary	103	2	2	0	3	1	2	98	100	2
	Total	535	**404**	**414**	**14**	**24**	**14**	**16**	**107**	**107**	**4**

a) Quantitative Value of items as per DISE Data - 535

b) Quantitative Value of items as per PES Data - 535

c) Quantitative Value of deviations ignoring $\pm$ signs - 34

d) Percentage deviation of DISE Data with PES Data - 6.36%

e) Precision level of DISE data with relation to PES Data - 93.64%

TABLE NO 3.5: COMPARISON OF PES DATA WITH DISE DATA ON HIGHEST CLASSES IN SCHOOLS

Sl. No.	School Category	Sample Size	1, 2, 3, 4 Classes			5th Class			6 and 7 Classes			8, 9,10 Classes			10 Above		
			PES	DISE	Deviation	PES	DISE	Deviation	PES	DISE	Deviation	PES	DISE	Deviation	PES	DISE	Deviation
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1	Primary	258	14	13	1	244	245	1	-	-	-	-	-	-	-	-	-
2	Primary with Upper Primary	174	-	-	-	2	2	-	123	123	-	46	46	-	3	3	-
3	Upper primary with Secondary or Higher Secondary	103	-	-	-	4	-	4	-	-	-	98	102	4	1	1	-
	Total	535	14	13	1	250	247	5	123	123	-	144	148	4	4	4	-

a) Quantitative Value of items as per DISE Data - 535

b) Quantitative Value of items as per PES Data - 535

c) Quantitative Value of deviations ignoring $\pm$ signs - 10

d) Percentage deviation of DISE Data with PES Data - 1.87%

e) Precision level of DISE data with relation to PES Data - 98.13%

TABLE NO 3.6: COMPARISON OF PES DATA WITH DISE DATA ON SCHOOL MANAGEMENT

Sl. No.	School Category	Sample Size	Managed by Education Department			Tribal Welfare Department			Local body			Private Aided			Private Unaided			Unrecognized			Other		
			PES	DISE	Deviation	PES	DISE	Deviation	PES	DISE	Deviation	PES	DISE	Deviation	PES	DISE	Deviation	PES	DISE	Deviation	PES	DISE	Deviation
1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**
1	Primary	258	4	5	1	5	4	1	210	215	5	15	12	3	8	6	2	10	10	-	6	6	-
2	Primary with Upper Primary	174	3	3	-	8	11	3	72	62	10	-	-	-	40	45	5	45	47	2	6	6	-
3	Upper primary with Secondary or Higher Secondary	103	6	3	3	5	2	3	67	69	2	-	2	2	25	22	3		5	5	-	-	-
	Total	535	13	11	4	18	17	7	349	346	17	15	14	5	73	73	10	55	62	7	12	12	0

a) Quantitative Value of items as per DISE Data - 535

b) Quantitative Value of items as per PES Data - 535

c) Quantitative Value of deviations ignoring $\pm$ signs - 50

d) Percentage deviation of DISE Data with PES Data - 9.35%

e) Precision level of DISE data with relation to PES Data - 90.65%

TABLE NO 3.7: COMPARISON OF PES DATA WITH DISE DATA ON RESIDENTIAL STATUS OF SCHOOL

Sl. No.	School Category	Sample Size	Residential Schools			Non-Residential Schools		
			PES	DISE	Deviation	PES	DISE	Deviation
1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**
1	Primary	258	3	1	2	255	257	2
2	Primary with Upper Primary	174	18	21	3	156	153	3
3	Upper primary with Secondary or Higher Secondary	103	4	4	-	99	99	-
	Total	535	**25**	**26**	**5**	**510**	**509**	**5**

a) Quantitative Value of items as per DISE Data - 535

b) Quantitative Value of items as per PES Data - 535

c) Quantitative Value of deviations ignoring $\pm$ signs - 10

d) Percentage deviation of DISE Data with PES Data - 1.87%

e) Precision level of DISE data with relation to PES Data - 98.13%

TABLE NO 3.8: COMPARISON OF PES DATA WITH DISE DATA ON PART OF SHIFT SCHOOL

Sl. No.	School Category	Sample Size	Part of Shift School			Not Part of Shift School		
			PES	DISE	Deviation	PES	DISE	Deviation
1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**
1	Primary	258	5	-	5	253	258	5
2	Primary with Upper Primary	174	7	3	4	167	171	4
3	Upper primary with Secondary or Higher Secondary	103	3	-	3	100	103	3
	Total	535	**15**	**3**	**12**	**520**	**532**	**12**

a) Quantitative Value of items as per DISE Data - 535

b) Quantitative Value of items as per PES Data - 535

c) Quantitative Value of deviations ignoring $\pm$ signs - 24

d) Percentage deviation of DISE Data with PES Data - 4.49%

e) Precision level of DISE data with relation to PES Data - 95.51%

TABLE NO3.9: COMPARISON OF PES DATA WITH DISE DATA ON TEACHER POSTS SANCTIONED AND IN POSITION

Sl. No.	School Category	Sample Size	Total teacher posts sanctioned			Total teachers in position		
			PES	DISE	Deviation	PES	DISE	Deviation
1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**
1	Primary	258	502	556	54	456	487	31
2	Primary with Upper Primary	174	866	918	52	741	772	31
3	Upper primary with Secondary or Higher Secondary	103	898	851	47	753	696	57
	Total	535	**2266**	2325	**153**	**1950**	1955	**119**

a) Quantitative Value of items as per DISE Data - 535

b) Quantitative Value of items as per PES Data - 535

		Sanctioned	**In Position**
c)	Quantitative Value of deviations ignoring $\pm$ signs -	153	119
d)	Percentage deviation of DISE Data with PES Data -	6.58%	4.08%
e)	Precision level of DISE data with relation to PES Data -	93.42%	95.82%

Fig.3: COMPARISON OF PES DATA WITH DISE DATA ON TEACHER POSTS SANCTIONED AND IN POSITION

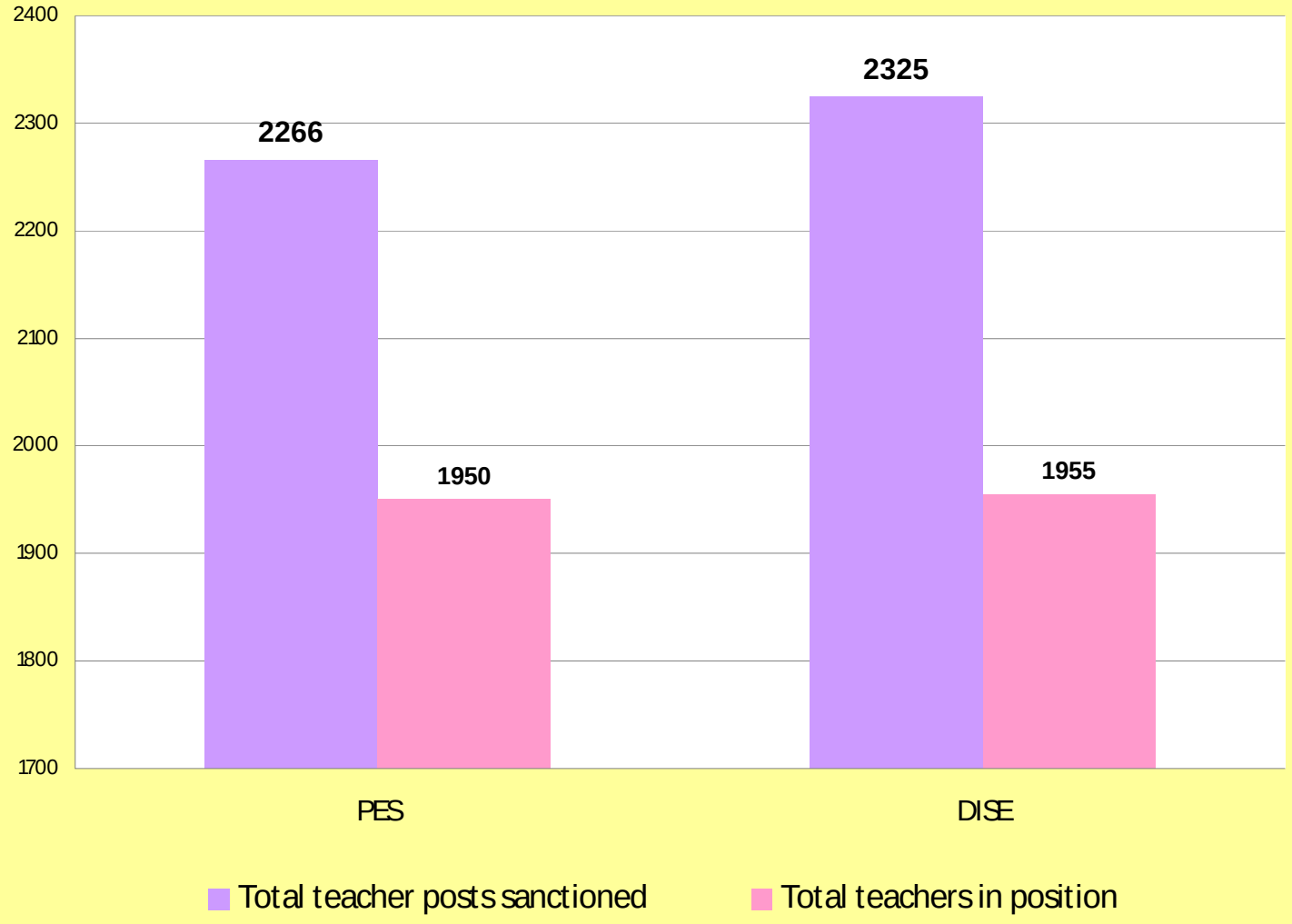


TABLE NO. 3.10: COMPARISON OF PES DATA WITH DISE DATA ON STATUS OF SCHOOL BUILDING

Sl. No.	School Category	Sample Size	Private			Rented			Government			Government School in rent free building			No Building		
			PES	DISE	Deviation	PES	DISE	Deviation	PES	DISE	Deviation	PES	DISE	Deviation	PES	DISE	Deviation
1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**
1	Primary	258	19	17	2	10	8	2	194	211	17	10	4	6	25	18	7
2	Primary with Upper Primary	174	42	45	3	58	49	9	66	79	13	6		6	2	1	1
3	Upper primary with Secondary or Higher Secondary	103	20	18	2	4	9	5	60	70	10	5		5	14	6	8
	Total	535	81	80	7	72	66	16	320	360	40	21	4	17	41	25	16

a) Quantitative Value of items as per DISE Data - 535

b) Quantitative Value of items as per PES Data - 535

c) Quantitative Value of deviations ignoring $\pm$ signs - 96

d) Percentage deviation of DISE Data with PES Data - 17.94%

e) Precision level of DISE data with relation to PES Data - 82.06%

Fig.4: COMPARISON OF PES DATA WITH DISE DATA ON STATUS OF SCHOOL BUILDING

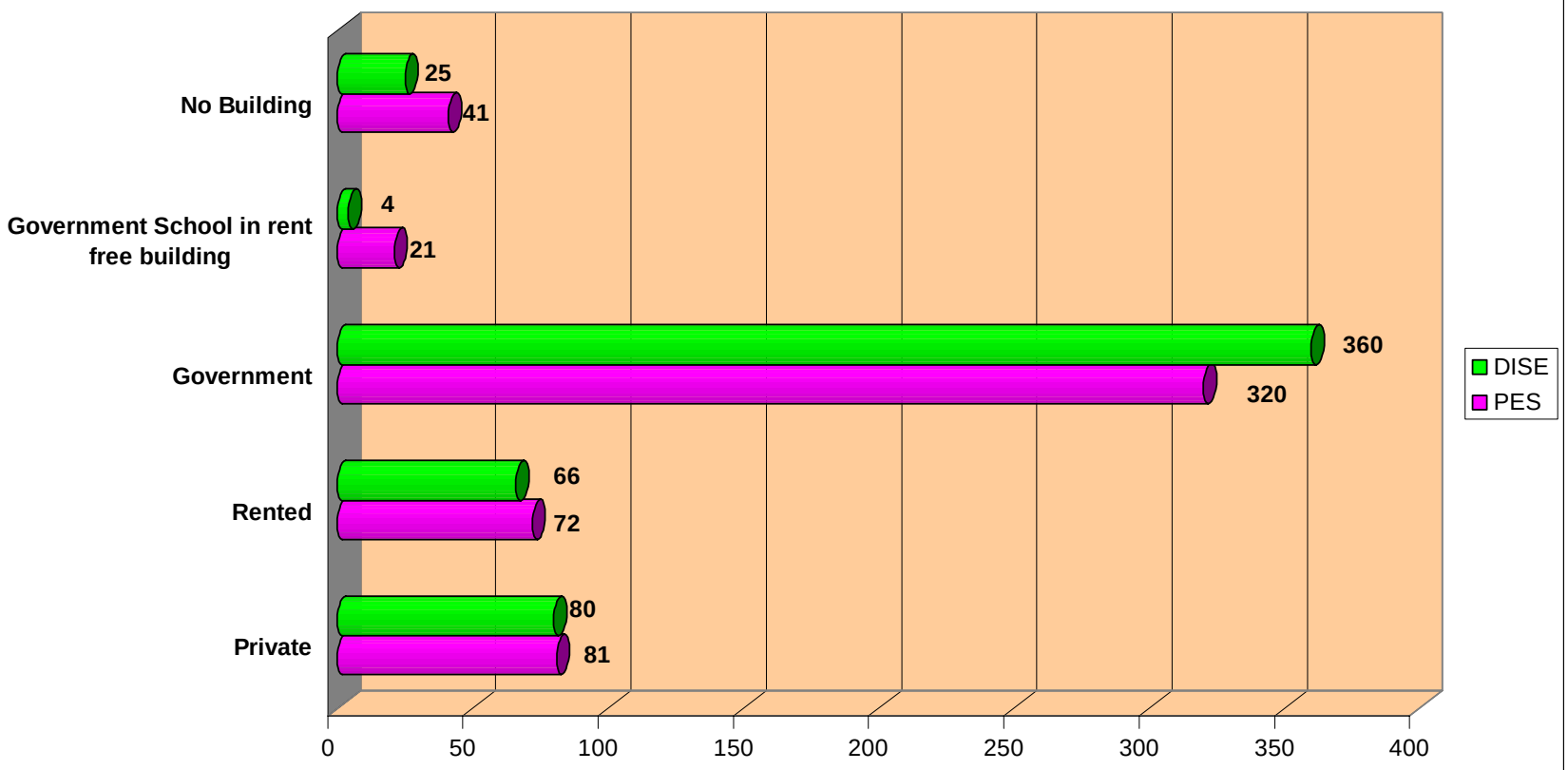


TABLE NO. 3.11: COMPARISON OF PES DATA WITH DISE DATA ON NO. OF BLOCKS IN THE SCHOOL

Sl. No.	School Category	Sample Size	No. of Blocks in school		
			PES	DISE	Deviation
1	**2**	**3**	**4**	**5**	**6**
1	Primary	258	656	555	101
2	Primary with Upper Primary	174	1280	1414	134
3	Upper primary with Secondary or Higher Secondary	103	640	760	120
	Total	535	**2576**	**2729**	**355**

a) Quantitative Value of items as per DISE Data - 535

b) Quantitative Value of items as per PES Data - 535

c) Quantitative Value of deviations ignoring $\pm$ signs - 675

d) Percentage deviation of DISE Data with PES Data - 13.01%

e) Precision level of DISE data with relation to PES Data - 86.99%

TABLE NO 3.12: COMPARISON OF PES DATA WITH DISE DATA ON CONDITION OF CLASS ROOMS

Sl. No.	School Category	Sample Size	Good Condition			Need Minor Repairs			Need Major Repairs		
			PES	DISE	Deviation	PES	DISE	Deviation	PES	DISE	Deviation
1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**
1	Primary	258	311	394	83	85	97	12	96	64	60
2	Primary with Upper Primary	174	1278	1302	24	109	89	20	55	23	32
3	Upper primary with Secondary or Higher Secondary	103	516	614	98	62	96	34	64	50	34
	Total	535	**2105**	**2310**	**205**	**256**	**282**	**66**	**215**	**137**	**126**

a) Quantitative Value of items as per DISE Data - 535

b) Quantitative Value of items as per PES Data - 535

		Good Condition	Minor Repairs	Major Repairs
c)	Quantitative Value of deviations ignoring ± signs -	205	66	126
d)	Percentage deviation of DISE Data with PES Data -	8.87%	23.40%	58.60%
e)	Precision level of DISE data with relation to PES Data-	91.13%	76.60%	41.40%

Fig.5: COMPARISON OF PES DATA WITH DISE DATA ON CONDITION OF CLASS ROOMS

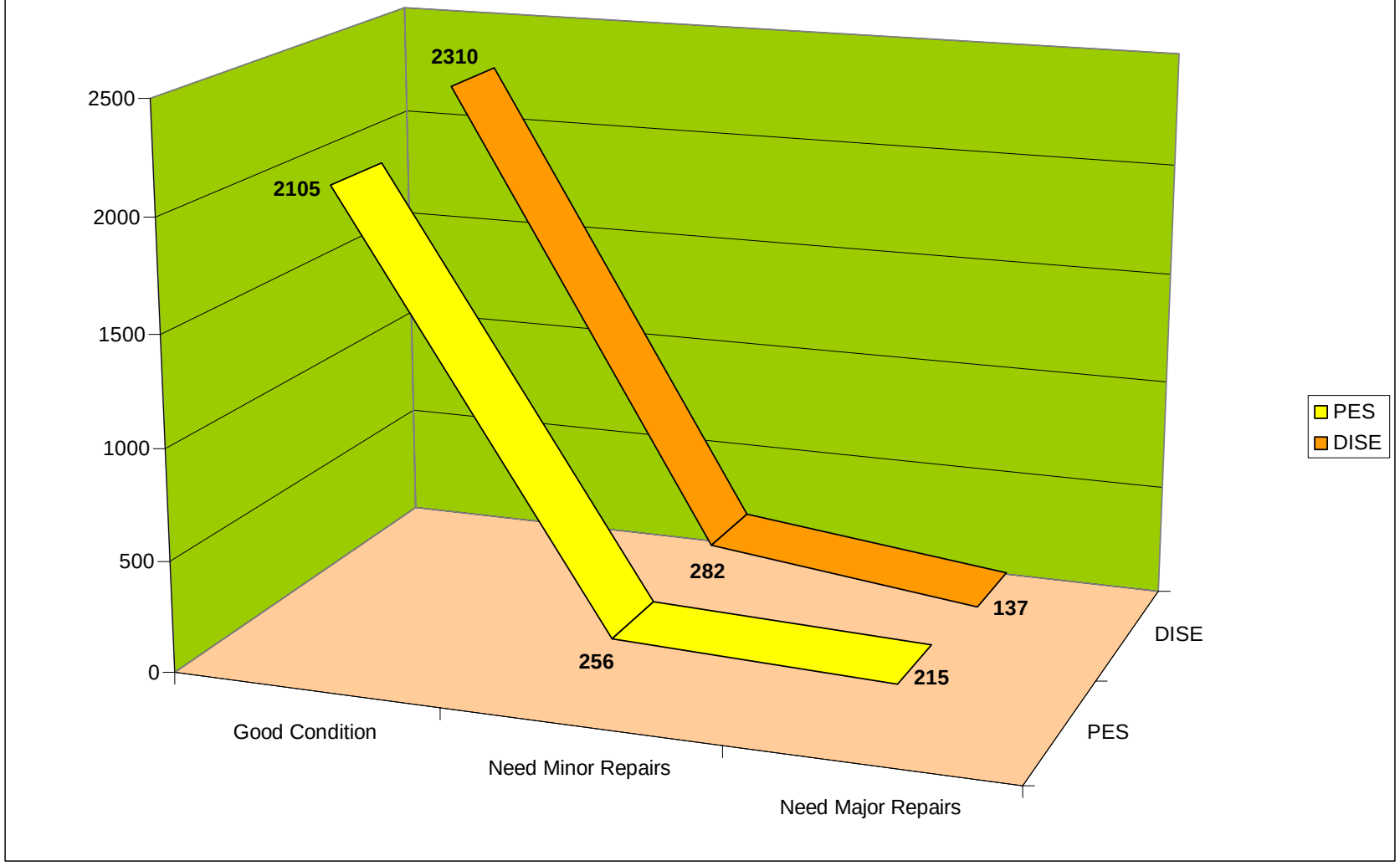


TABLE NO 3.13: COMPARISON OF PES DATA WITH DISE DATA ON AVAILABLITY OF ELECTRICITY IN SCHOOLS

Sl. No.	School Category	Sample Size	Electricity Available			Electricity Not Available		
			PES	DISE	Deviation	PES	DISE	Deviation
1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**
1	Primary	258	38	35	3	220	223	3
2	Primary with Upper Primary	174	108	112	4	66	62	4
3	Upper primary with Secondary or Higher Secondary	103	93	88	5	10	15	5
	Total	**535**	**239**	**235**	**12**	**296**	**300**	**12**

a) Quantitative Value of items as per DISE Data - 535

b) Quantitative Value of items as per PES Data - 535

c) Quantitative Value of deviations ignoring $\pm$ signs - 24

d) Percentage deviation of DISE Data with PES Data - 4.49%

e) Precision level of DISE data with relation to PES Data - 95.51%

TABLE NO 3.14: COMPARISON OF PES DATA WITH DISE DATA ON AVAILABILITY OF COMMON TOILETS

Sl. No.	School Category	Sample Size	Common Toilets Available			Common Toilets Not Available		
			PES	DISE	Deviation	PES	DISE	Deviation
1	2	3	4	5	6	7	8	9
1	Primary	258	128	135	7	130	123	7
2	Primary with Upper Primary	174	110	118	8	64	56	8
3	Upper primary with Secondary or Higher Secondary	103	61	59	2	42	44	2
	Total	**535**	**299**	**312**	**17**	**236**	**223**	**17**

a) Quantitative Value of items as per DISE Data - 535

b) Quantitative Value of items as per PES Data - 535

c) Quantitative Value of deviations ignoring $\pm$ signs - 34

d) Percentage deviation of DISE Data with PES Data - 6.36%

e) Precision level of DISE data with relation to PES Data - 93.64%

TABLE NO 3.15: COMPARISON OF PES DATA WITH DISE DATA ON AVAILABILITY OF SEPARATE TOILETS FOR GIRLS

Sl. No.	School Category	Sample Size	Separate Toilets Available			Separate Toilets Not Available		
			PES	DISE	Deviation	PES	DISE	Deviation
1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**
1	Primary	258	85	86	1	173	172	1
2	Primary with Upper Primary	174	140	118	22	34	56	22
3	Upper primary with Secondary or Higher Secondary	103	74	72	2	29	31	2
	Total	535	**299**	**276**	**25**	**236**	**259**	**25**

a) Quantitative Value of items as per DISE Data - 535

b) Quantitative Value of items as per PES Data - 535

c) Quantitative Value of deviations ignoring $\pm$ signs - 50

d) Percentage deviation of DISE Data with PES Data - 9.35%

e) Precision level of DISE data with relation to PES Data - 90.65%

TABLE NO 3.16: COMPARISON OF PES DATA WITH DISE DATA ON CONDITION OF BOUNDARY WALL OF SCHOOLS

Sl. No.	School Category	Sample Size	Pucca			Pucca but broken			Barbed wire fencing			Heges			No boundary wall			Other		
			PES	DISE	Deviation	PES	DISE	Deviation	PES	DISE	Deviation	PES	DISE	Deviation	PES	DISE	Deviation	PES	DISE	Deviation
1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**
1	Primary	258	53	58	5	15	16	1	4	1	3	19	1	18	152	169	17	15	13	2
2	Primary with Upper Primary	174	96	97	1	8	6	2	6	7	1	3	2	1	53	55	2	8	7	1
3	Upper primary with Secondary or Higher Secondary	103	48	47	1	20	13	7	0	2	2	2	2	0	23	33	10	10	6	4
	Total	535	**197**	**202**	**7**	**43**	**35**	**10**	**10**	**10**	**6**	**24**	**5**	**19**	**228**	**257**	**29**	**33**	**26**	**7**

a) Quantitative Value of items as per DISE Data - 535

b) Quantitative Value of items as per PES Data - 535

c) Quantitative Value of deviations ignoring $\pm$ signs - 78

d) Percentage deviation of DISE Data with PES Data - 14.58%

e) Precision level of DISE data with relation to PES Data - 85.42%

Fig.6: COMPARISON OF PES DATA WITH DISE DATA ON CONDITION OF BOUNDARY WALL IN SCHOOLS

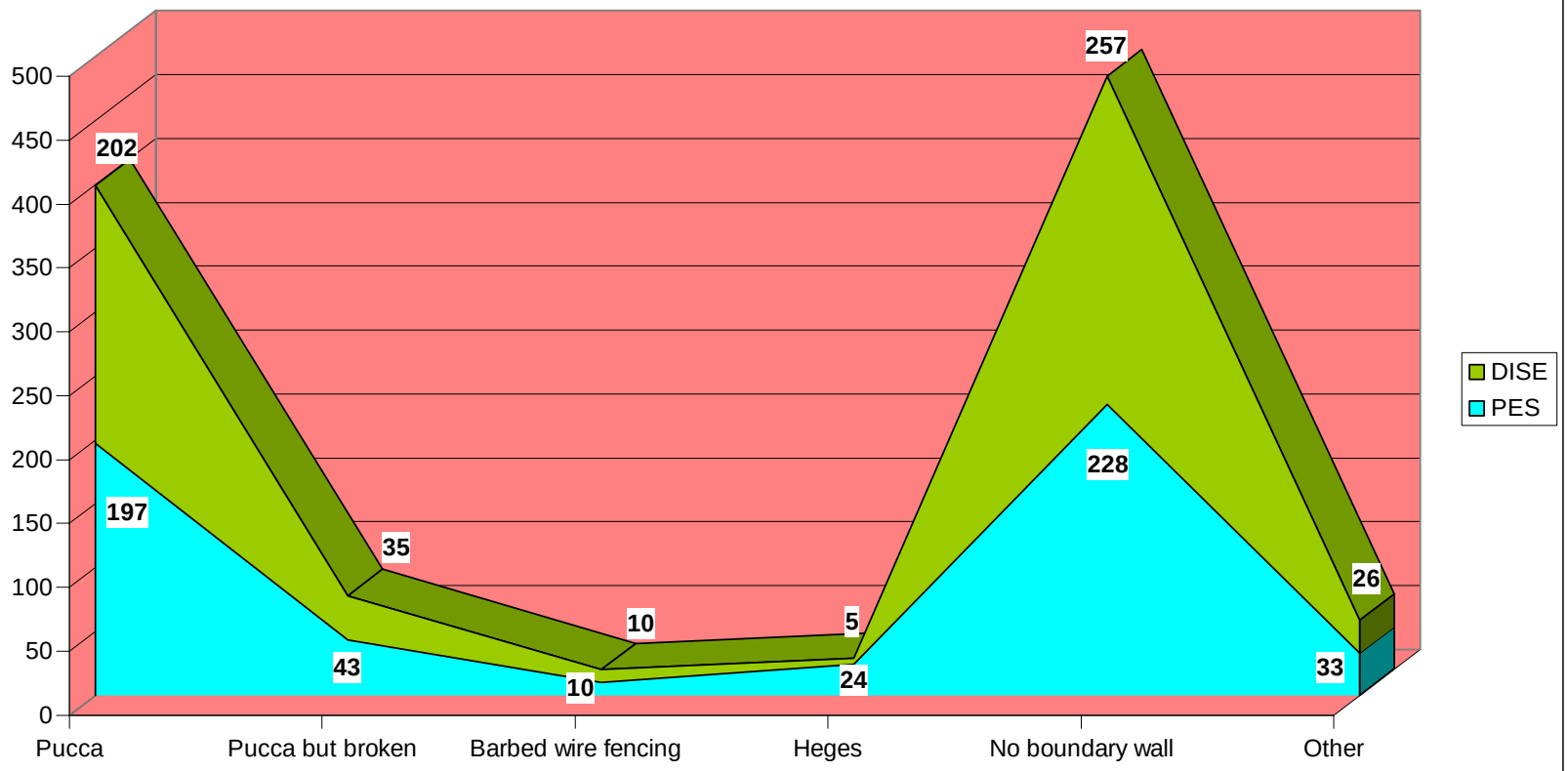


TABLE NO 3.17: COMPARISON OF PES DATA WITH DISE DATA ON SOURCE OF DRINKING WATER

Sl. No.	School Category	Sample Size	Hand pump			Well			Tap Water			Others			No drinking water facility available		
			PES	DISE	Deviation	PES	DISE	Deviation	PES	DISE	Deviation	PES	DISE	Deviation	PES	DISE	Deviation
1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**
1	Primary	258	88	76	12	1	1	0	81	87	6	6	26	20	82	68	14
2	Primary with Upper Primary	174	44	42	2	1	3	2	88	92	4	27	22	5	14	15	1
3	Upper primary with Secondary or Higher Secondary	103	16	13	3	6	7	1	64	61	3	10	11	1	7	11	4
	Total	535	**148**	**131**	**17**	**8**	**11**	**3**	**233**	**240**	**13**	**43**	**59**	**26**	**103**	**94**	**19**

a) Quantitative Value of items as per DISE Data - 535

b) Quantitative Value of items as per PES Data - 535

c) Quantitative Value of deviations ignoring $\pm$ signs - 78

d) Percentage deviation of DISE Data with PES Data - 14.58%

e) Precision level of DISE data with relation to PES Data - 85.42%

Fig.7: COMPARISON OF PES DATA WITH DISE DATA ON SOURCE OF DRINKING WATER

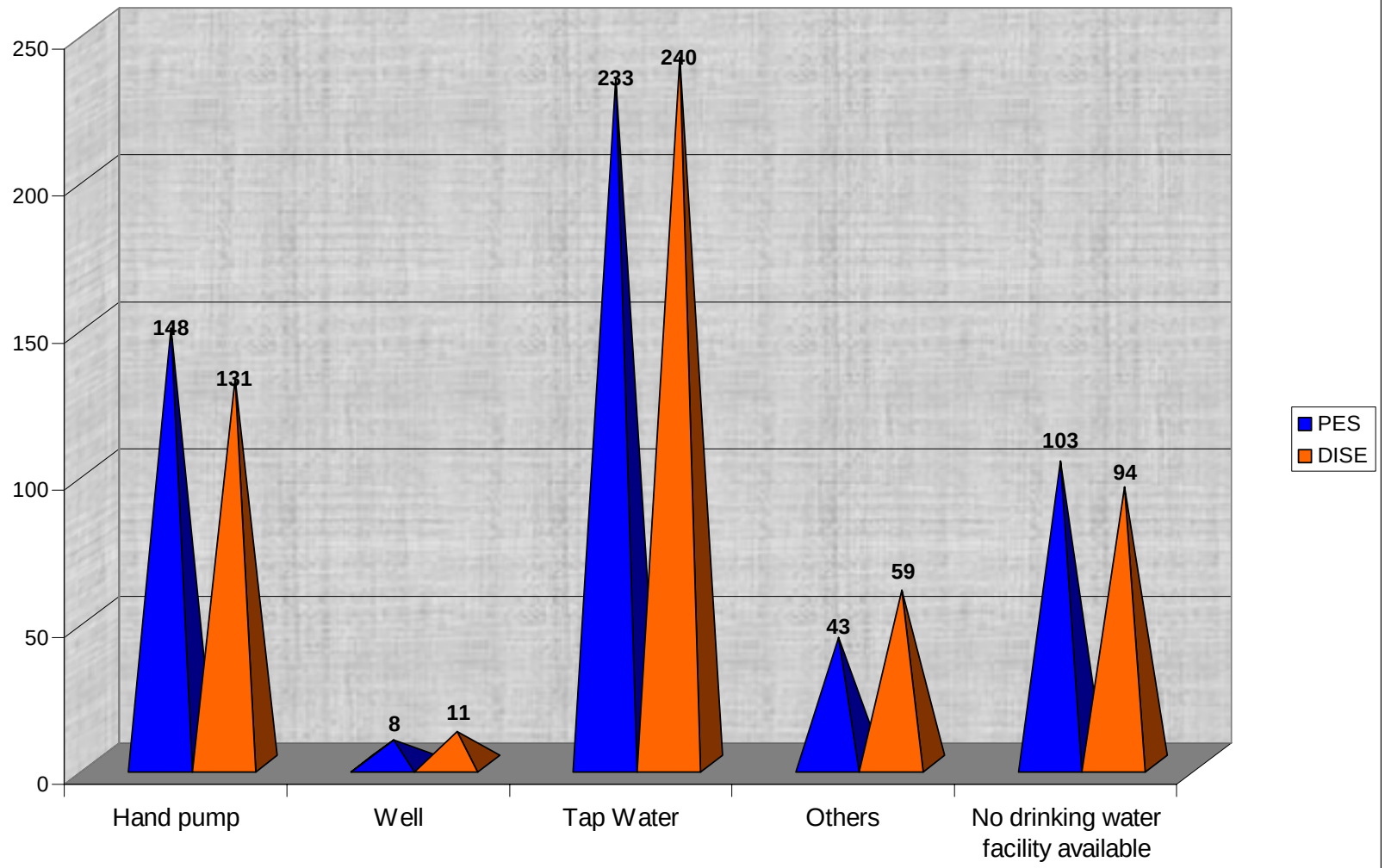


TABLE NO 3.18: COMPARISON OF PES DATA WITH DISE DATA ON AVAILABILITY OF PLAYGROUND AT SCHOOLS

Sl. No.	School Category	Sample Size	Playground Available			Playground Not Available		
			PES	DISE	Deviation	PES	DISE	Deviation
1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**
1	Primary	258	130	126	4	128	132	4
2	Primary with Upper Primary	174	100	111	11	74	63	11
3	Upper primary with Secondary or Higher Secondary	103	88	85	3	15	18	3
	Total	535	**318**	322	**18**	**217**	213	**18**

a) Quantitative Value of items as per DISE Data - 535

b) Quantitative Value of items as per PES Data - 535

c) Quantitative Value of deviations ignoring $\pm$ signs - 36

d) Percentage deviation of DISE Data with PES Data - 6.73%

e) Precision level of DISE data with relation to PES Data - 93.27%

TABLE NO 3.19: COMPARISON OF PES DATA WITH DISE DATA ON AVAILABILITY OF COMPUTERS IN SCHOOLS

Sl. No.	School Category	Sample Size	No. of computers available in good working condition		
			PES	DISE	Deviation
1	**2**	**3**	**4**	**5**	**6**
1	Primary	258	33	45	12
2	Primary with Upper Primary	174	456	478	22
3	Upper primary with Secondary or Higher Secondary	103	401	427	26
	Total	535	**890**	950	**60**

a) Quantitative Value of items as per DISE Data - 535

b) Quantitative Value of items as per PES Data - 535

c) Quantitative Value of deviations ignoring $\pm$ signs - 60

d) Percentage deviation of DISE Data with PES Data - 6.32%

e) Precision level of DISE data with relation to PES Data - 93.68%

TABLE NO 3.20: COMPARISON OF PES DATA WITH DISE DATA ON AVAILABILITY OF FURNITURE IN SCHOOLS

Sl. No.	School Category	Sample Size	Furniture for all students			Furniture for some students			No furniture - children sit on floor		
			PES	DISE	Deviation	PES	DISE	Deviation	PES	DISE	Deviation
1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**
1	Primary	258	39	45	6	90	92	2	129	121	8
2	Primary with Upper Primary	174	60	64	4	49	54	5	65	56	9
3	Upper primary with Secondary or Higher Secondary	103	26	32	6	40	43	3	37	28	9
	Total	535	**125**	**141**	**16**	**179**	**189**	**10**	**231**	**205**	**26**

a) Quantitative Value of items as per DISE Data - 535

b) Quantitative Value of items as per PES Data - 535

c) Quantitative Value of deviations ignoring $\pm$ signs - 52

d) Percentage deviation of DISE Data with PES Data - 9.72%

e) Precision level of DISE data with relation to PES Data - 90.28%

Fig.8: COMPARISON OF PES DATA WITH DISE DATA ON AVAILABILITY OF FURNITURE IN SCHOOLS

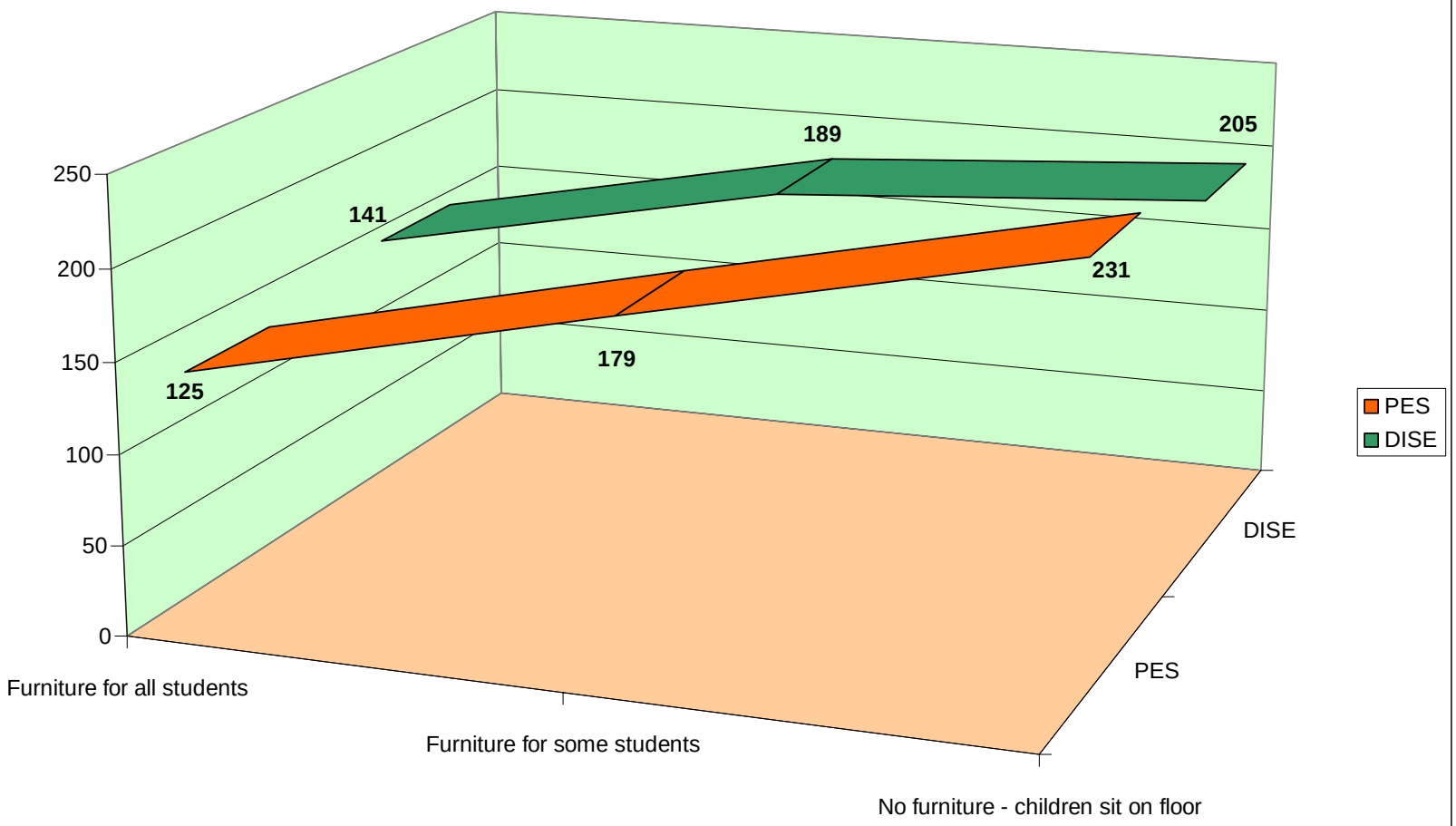


TABLE NO 3.21: COMPARISON OF PES DATA WITH DISE DATA ON ENROLMENT OF CHILDREN IN 2007-08 – BOYS & GIRLS

Sl. No.	School Category	Sample Size	Total Enrolment			SC Children Enrolled			ST Children Enrolled			OBC Children Enrolled		
			PES	DISE	Deviation	PES	DISE	Deviation	PES	DISE	Deviation	PES	DISE	Deviation
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	Primary	258	14011	13710	301	3556	3577	21	2047	1972	75	6427	5885	542
2	Primary with Upper Primary	174	12762	14569	1807	3648	3499	149	1308	1395	87	4070	5218	1148
3	Upper primary with Secondary or Higher Secondary	103	12849	11986	863	2077	2539	462	908	790	118	4528	5146	618
	Total	535	**39622**	**40265**	**2971**	**9281**	**9615**	**632**	**4263**	**4157**	**280**	**15025**	**16249**	**2308**

a) Quantitative Value of items as per DISE Data - 70286

b) Quantitative Value of items as per PES Data - 68191

c) Quantitative Value of deviations ignoring $\pm$ signs - 6191

d) Percentage deviation of DISE Data with PES Data - 8.81%

e) Precision level of DISE data with relation to PES Data - 91.19%

Fig.9: COMPARISON OF PES DATA WITH DISE DATA ON ENROLMENT OF CHILDREN 2007-08

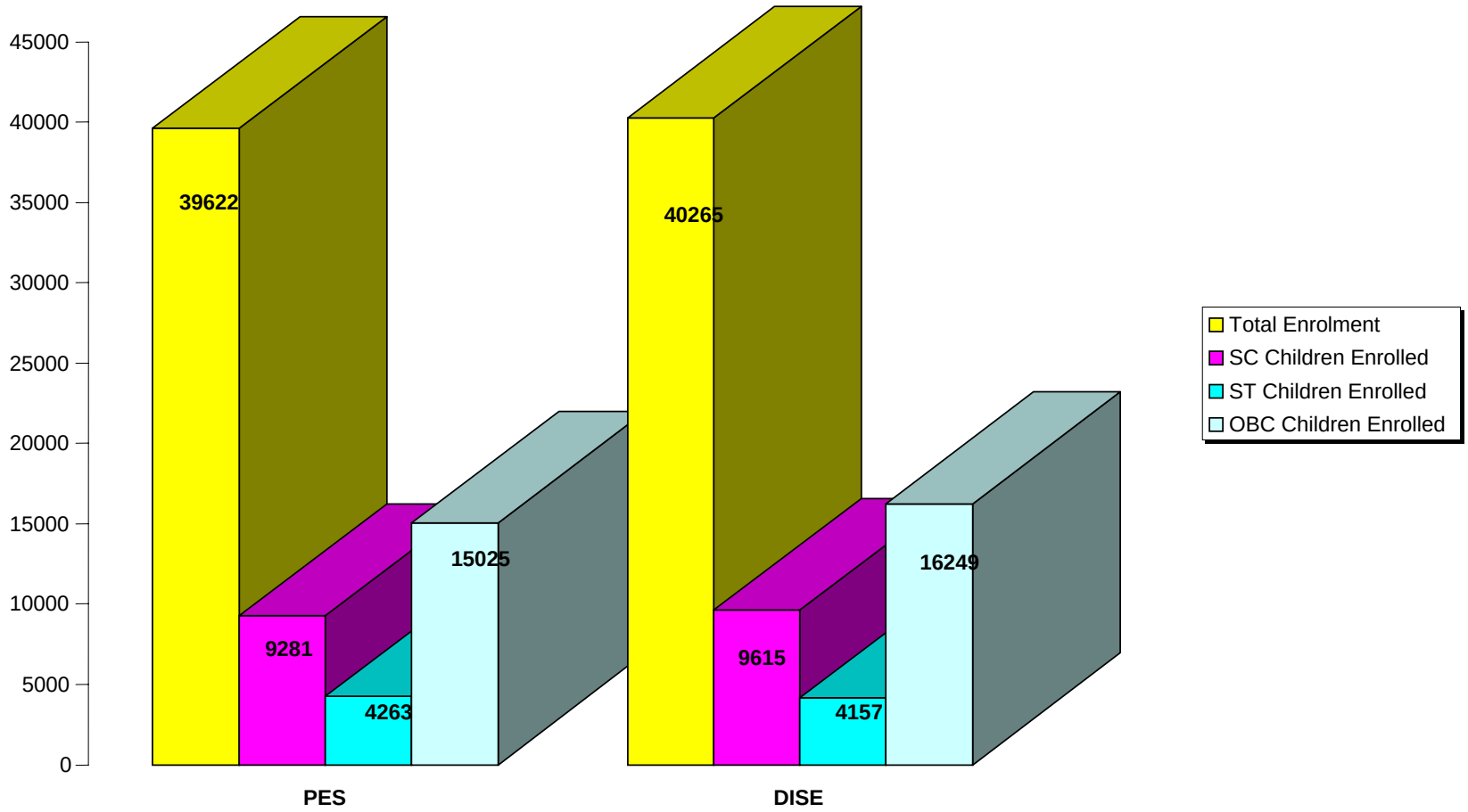


TABLE NO 3.22: COMPARISON OF PES DATA WITH DISE DATA ON ENROLMENT OF CHILDREN IN 2007-08 – BOYS ONLY

Sl. No.	School Category	Sample Size	Total Enrolment			SC Children Enrolled			ST Children Enrolled			OBC Children Enrolled		
			PES	DISE	Deviation	PES	DISE	Deviation	PES	DISE	Deviation	PES	DISE	Deviation
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	Primary	258	6801	6655	146	1725	1735	10	975	939	36	3129	2865	264
2	Primary with Upper Primary	174	6736	7690	954	1867	1791	76	601	641	40	2111	2706	595
3	Upper primary with Secondary or Higher Secondary	103	6420	5989	431	1004	1227	223	501	436	65	2278	2589	311
	Total	535	**19957**	20334	1531	**4596**	4753	310	**2077**	2016	141	**7518**	8160	1170

a) Quantitative Value of items as per DISE Data - 35263

b) Quantitative Value of items as per PES Data - 34148

c) Quantitative Value of deviations ignoring $\pm$ signs - 3152

d) Percentage deviation of DISE Data with PES Data - 8.94%

e) Precision level of DISE data with relation to PES Data - 91.06%

TABLE NO3.23: COMPARISON OF PES DATA WITH DISE DATA ON ENROLMENT OF CHILDREN IN 2007-08 – GIRLS ONLY

Sl. No.	School Category	Sample Size	Total Enrolment			SC Children Enrolled			ST Children Enrolled			OBC Children Enrolled		
			PES	DISE	Deviation	PES	DISE	Deviation	PES	DISE	Deviation	PES	DISE	Deviation
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	Primary	258	7210	7055	155	1831	1842	11	1072	1033	39	3298	3020	278
2	Primary with Upper Primary	174	6026	6879	853	1781	1708	73	707	754	47	1959	2512	553
3	Upper primary with Secondary or Higher Secondary	103	6429	5997	432	1073	1312	239	407	354	53	2250	2557	307
	Total	535	**19665**	19931	1440	**4685**	4862	322	**2186**	2141	139	**7507**	8089	1137

a) Quantitative Value of items as per DISE Data - 35023

b) Quantitative Value of items as per PES Data - 34043

c) Quantitative Value of deviations ignoring $\pm$ signs - 3039

d) Percentage deviation of DISE Data with PES Data - 8.68%

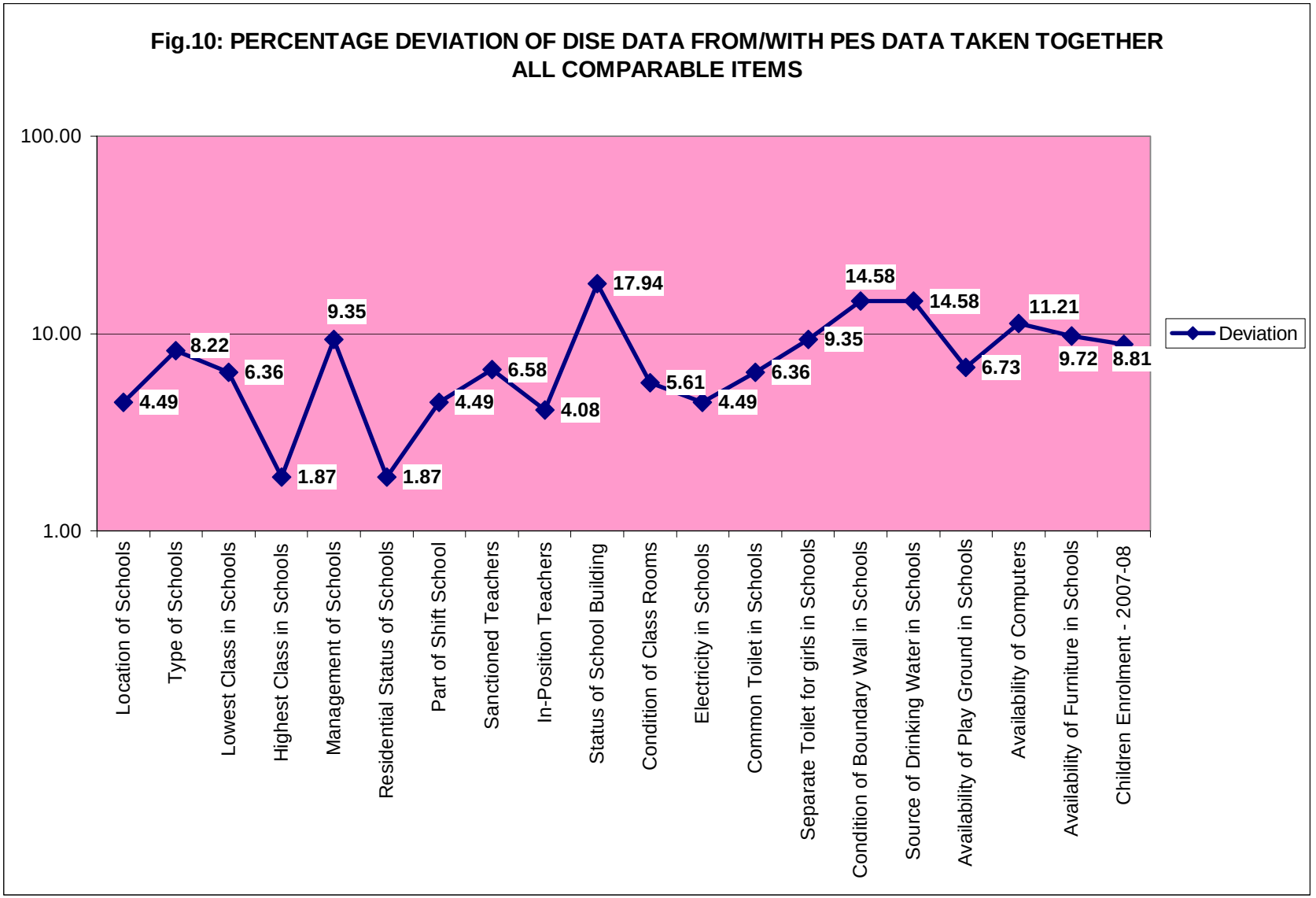
e) Precision level of DISE data with relation to PES Data - 91.32%

TABLE NO: 3.24

PERCENTAGE DEVIATION AND PRECISION LEVEL OF DISE DATA WITH THE PES DATA FOR ALL COMPARABLE ITMES

Sl. No.	Description of Comparable items	Quantitative Value under			Percentage	
		DISE	PES	Deviation ignoring ± within Sub-items	Deviation	Precision
1	2	3	4	5	6	7
1	Location of Schools	535	535	24	4.49	95.51
2	Type of Schools	535	535	44	8.22	91.78
3	Category of Schools	535	535	0	0.00	100.00
4	Lowest Class in Schools	535	535	34	6.36	93.64
5	Highest Class in Schools	535	535	10	1.87	98.13
6	Management of Schools	535	535	50	9.35	90.65
7	Residential Status of Schools	535	535	10	1.87	98.13
8	Part of Shift School	535	535	24	4.49	95.51
9	Sanctioned Teachers	2266	2325	153	6.58	93.42
10	In-Position Teachers	1950	1955	119	6.08	93.92
11	Status of School Building	535	535	96	17.94	82.06
12	Condition of Class Rooms	2576	2729	153	5.61	94.39
13	Electricity in Schools	535	535	24	4.49	95.51
14	Common Toilet in Schools	535	535	34	6.36	93.64
15	Separate Toilet for girls in Schools	535	535	50	9.35	90.65
16	Condition of Boundary Wall in Schools	535	535	78	14.58	85.42
17	Source of Drinking Water in Schools	535	535	78	14.58	85.42
18	Availability of Play Ground in Schools	535	535	36	6.73	93.27
19	Availability of Computers	535	535	60	11.21	88.79
20	Availability of Furniture in Schools	535	535	52	9.72	90.28
21	Children Enrolment - 2007-08	70286	68191	6191	8.81	91.19
	Total	**86173**	**84295**	**7320**	**8.49**	**91.51**

Fig.10: PERCENTAGE DEVIATION OF DISE DATA FROM/WITH PES DATA TAKEN TOGETHER ALL COMPARABLE ITEMS



The above table 3.25 and fig.10 infers that the overall deviations of data from PES data within the comparable items are 8.49% and thereby giving a precision level of 91.51%. The highest deviation of data is noticed in Management of schools(9.35%)status of school buildings(17.94%), condition of boundary walls (14.58%),source of drinking water(14.58%0 and Availability of computers(11.21%). This is because of the respondents in ability to interpret the item and under reporting of the items with in accurate figures in DISE data. This demands the effective supervision and monitoring at different levels and proper awareness generation among the teachers and Head Masters to fill the schedules or Formats with accurate information for this it is necessary for them to maintain the school records proper. Apart from this it also requires attention of scruitinsation at the school complex level and Mandal level with full involvement of Mandal Educational Officers, Head Masters and Educational Department experts after giving proper orientating training.

The over all deviation is 9.31%, which is within the range of permissible limit i.e. 10%. As far as non-comparable items are concerned due to non-availability of information of DISE, the following items left out with out comparison.

- Data on disability
- Working condition of the computers
- Repetition data
- Attendance of children and teachers
- Grade wise Examination results

However, the independent analysis is made with PES data to show the existing situation or trend. On the whole, it may conclude that more precaution should be taken right from the school level while canvassing and administrating the DISE format and data should be collected from all the schools functioning under different managements then only the accuracy of data will be ensured.

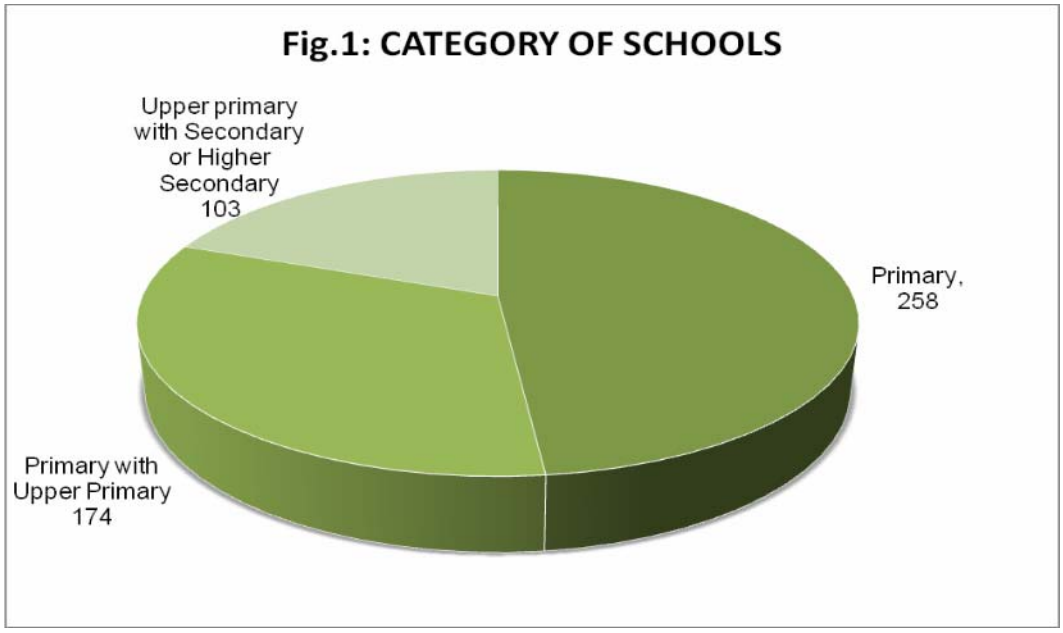
Chapter 4

Post Enumeration Survey Results

The inadequacy, up-to-date, reliable and comprehensive data about the state of school education, especially the primary education, render it difficult for the Planners, Policy and Decision Makers to identify appropriate measures and action on how to improve the quality of education and make it more accessible and available to the people. The Post Enumeration Survey envisioned assessing the quality check, verifying the accuracy, consistency of data and actual coverage of schools. Accordingly, the analysed data was presented in the following manner:

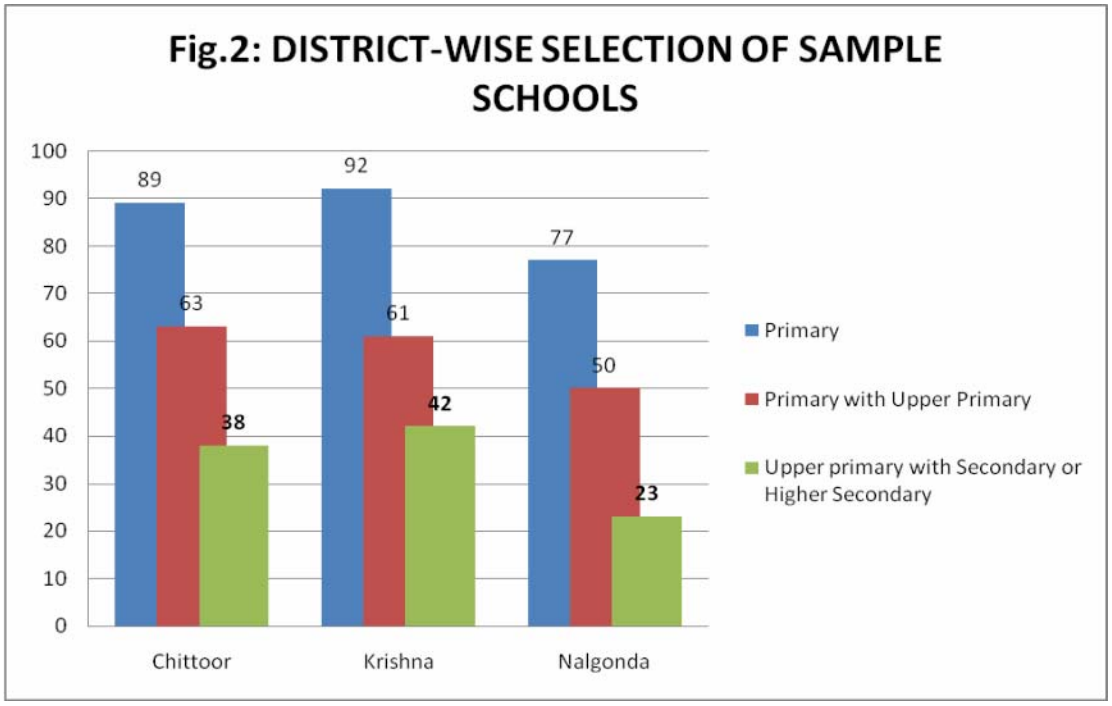
A. Distribution of Sample

As per the details presented in figure.1 the total number of schools covered under the study was 535 under Post Enumeration Survey. Out of this, majority of them i.e. 258(48.2%) were of Primary schools and 174 (32.5%) Primary with Upper Primary schools and the remaining 103 (19.3%) were Upper Primary with Secondary or Higher Secondary institutions. Graphical presentation of analysed data is presented in Fig. 1.



B. Sample Distribution across Districts

In reference to distribution of sample schools by district the details are presented in Fig. 2.

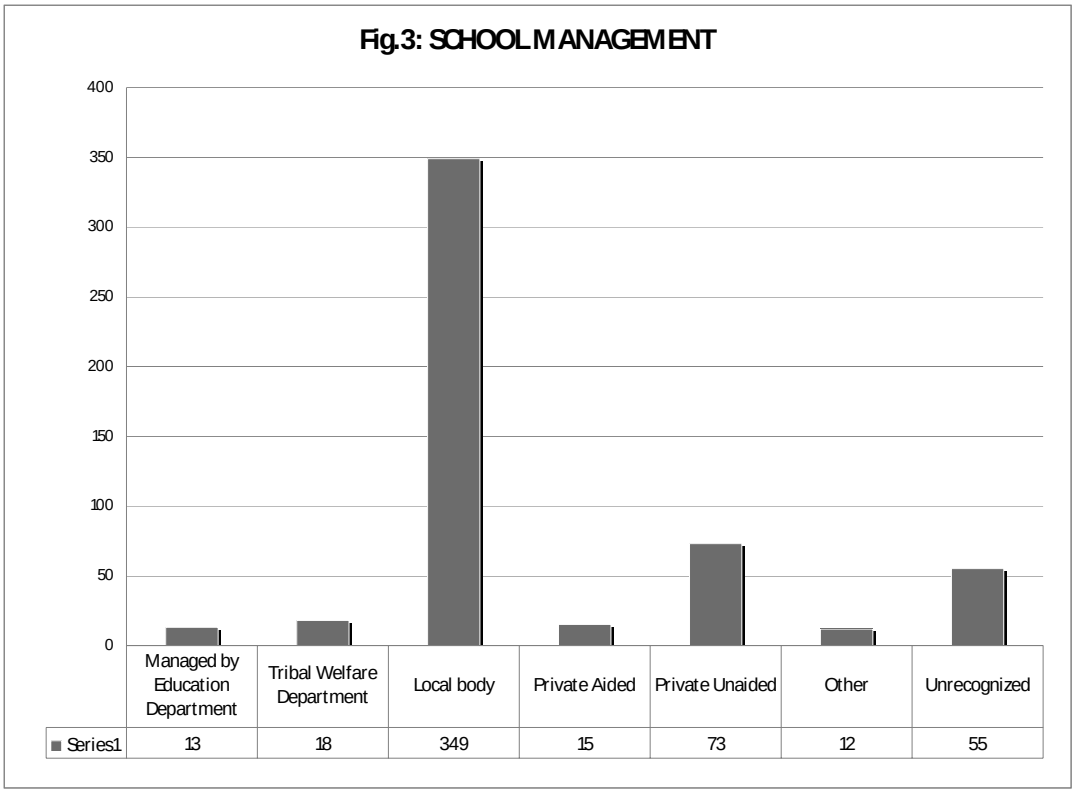


Among the three districts selected for the survey, Krishna district 195 (36.4%) has more coverage of schools than other districts and then followed by Chittoor 190(35.5%) and the remaining (28%) 150 were from Nalgonda district. The variation in terms of number of schools was occurred due to sampling procedure based on revenue divisions and number of schools there of from the particular district.

C.Sample Distribution by School Management

The distribution of sample by School Management is presented in Figure 3.

Figure 3: Sample Distribution by School Management



As per the details presented in Figure 3, it reveals that out of total 535 schools, 349 are run under local body (Panchayati Raj Management), followed by 73 managed under private and unaided managements, Education Department 13, under Tribal and Social Welfare department 18, and unrecognized schools are 55.

D. Distribution of Sample by Location

Details on sample distribution by location of schools are presented in Table 4.1.

TABLE-4.1: DISTRIBUTION OF SCHOOLS BY SCHOOL LOCATION

Sl. No.	School Category	Rural / Urban		Total
		Rural	Urban	
1	Primary	240	18	258
2	Primary with Upper Primary	142	32	174
3	Upper primary with Secondary or Higher Secondary	99	4	103
	Total	481	54	535
	%	89.91	10.09	100.00

It is observed from the above Table that 481 schools (89.91%) were located in rural areas while 54 schools (10.09%) are located in urban areas. Within rural area schools, greater majority of schools (240) were Primary schools followed by 142 Primary with Upper Primary schools. In reference to urban area, majority of them (18) were Primary schools and then followed by 32 Primary with Upper and the remaining 04 are Upper Primary with Secondary.

E. Distribution of Sample by Type of Schools

A detail of sample in this regard is presented in Table 4.2.

TABLE-4.2: DISTRIBUTION OF SCHOOLS BY TYPE OF SCHOOL

Sl. No.	School Category	Type of School			Total
		Boys only	Girls only	Co-educational	
1	Primary	2	7	249	258
2	Primary with Upper Primary	5	18	151	174
3	Upper primary with Secondary or Higher Secondary	1	6	96	103
	Total	8	31	496	535
	%	1.50	5.79	92.71	100.00

Out of 535schools, 496 of them (92.71%) were co-educational schools and then followed by 31(5.79%) exclusively girls schools and 08(1.50%) Boy's schools.

F. Detail of Sample by Type of School Building

Detail on sample in this regard is presented in Table 4.3.

TABLE-4.3: DISTRIBUTION OF SCHOOLS BY STATUS OF SCHOOL BUILDING

Sl. No.	School Category	Status of School Building					Total
		Private	Rented	Government	Government School in rent free building	No Building	
1	Primary	19	10	194	10	25	258
2	Primary with Upper Primary	42	58	66	6	2	174
3	Upper primary with Secondary or Higher Secondary	20	4	60	5	14	103
	Total	81	72	320	21	41	535
	%	15.14	13.46	59.81	3.93	7.66	100

It is seen from the above table that the greater majority of the schools – 320 (59.81%) - were being run in Government school buildings and then followed by 81(15.14%) in private own buildings. Whereas 72 schools (13.46%) were in rented buildings followed by 41 (7.66%) are not having any buildings.

G. Condition of Boundary Wall Among Sample School

Particulars of sample schools in reference to condition of boundary wall are presented in Table 4.4.

TABLE4.4: CONDITION OF BOUNDARY WALL IN THE SAMPLE SCHOOL

Sl. No.	School Category	Condition of boundary wall in the school						Total
		Pucca	Pucca but broken	Barbed wire fencing	Heges	No boundary wall	Other	
1	Primary	53	15	4	19	152	15	258
2	Primary with Upper Primary	96	8	6	3	53	8	174
3	Upper primary with Secondary or Higher Secondary	48	20		2	23	10	103
	Total	197	43	10	24	228	33	535
	%	36.82	8.04	1.87	4.49	42.62	6.17	100

The above table indicates the conditions of boundary wall in the sample schools. Out of 535 schools, 228 schools (42.62%) were not having the boundary wall, followed by 197 schools (36.82%) having Pucca boundary wall, where as 43 schools (8.04%) having pucca boundary wall but broken. Besides this, in 10 schools (1.87%) compounds were barbed with fencing and 24 schools (4.49%) with Heges.

H. Source of Drinking Water in Sample Schools

A detail of Drinking Water source in sample schools is presented in Table 4.5.

TABLE 4.5: SOURCE OF DRINKING WATER FACILITY IN SCHOOLS

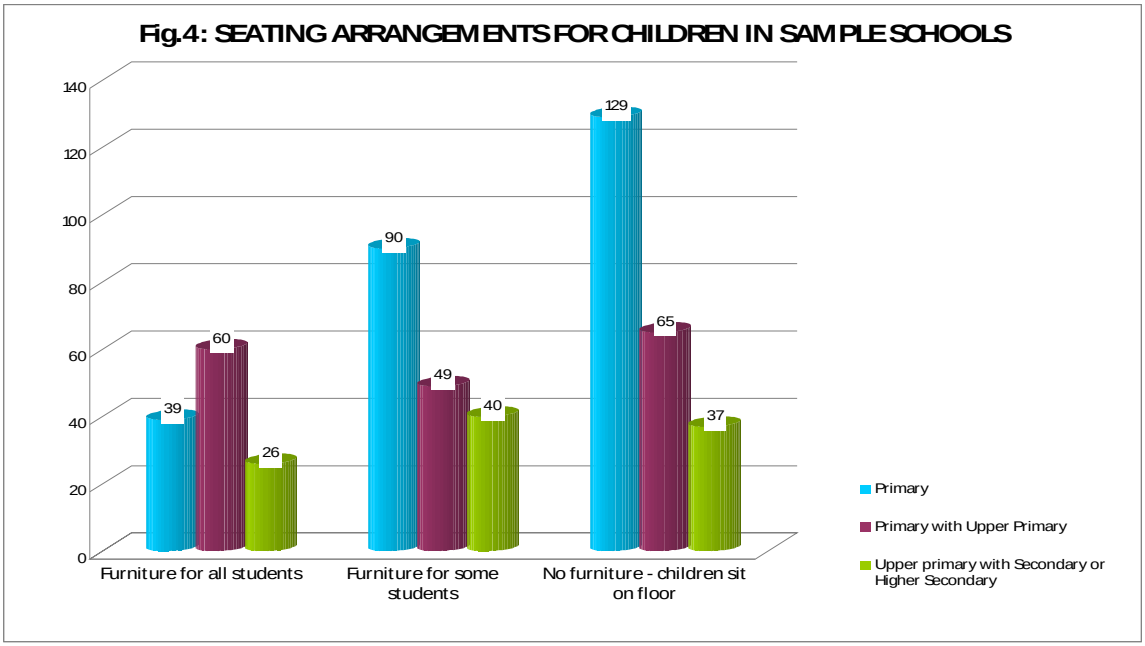
Sl. No.	School Category	Source of drinking water facility in school					Total
		Hand pump	Well	Tap Water	Others	No drinking water facility available	
1	Primary	88	1	81	6	82	258
2	Primary with Upper Primary	44	1	88	27	14	174
3	Upper primary with Secondary or Higher Secondary	16	6	64	10	7	103
	Total	148	8	233	43	103	535
	%	27.66	1.50	43.55	8.04	19.25	100

As detailed in the above-cited Table 4.5, majority of the schools 148 (27.66%) were having Hand Pump as source of drinking water. However, considerable number of schools103 (19.25%) was not at all having drinking water facility.

Tap Water as drinking water facility is found only in 233 schools (43.55%) and Well Water in 08 schools (1.5%) and the remaining 43 schools (8.04%) depend on other sources for drinking water.

I. Seating Arrangement for Children in Schools

A detail in this regard is presented in Figure 4.



The graph on seating arrangements for children in the schools reveals that out of 535 schools, 271are not having furniture for children to sit, they are sitting on the floor and this includes majority of primary and upper primary schools. Only 125 schools were having furniture to all the students. Besides this, in 179 schools furniture is available for some students.

J. Number of Teacher Posts Sanctioned and in Position

A detail on number of teacher posts sanctioned in sample schools and the actual position of teachers there of is presented in Table 4.6.

TABLE-4.6: NUMBER OF TEACHER POSTS SANCTIONED AND IN POSITION

Sl. No.	School Category	No. of Teacher Posts Sanctioned	No. of Teachers in Position
1	Primary	502	456
2	Primary with Upper Primary	866	741
3	Upper primary with Secondary or Higher Secondary	898	753
	Total	**2266**	**1950**

The above cited Table on Number of teacher posts sanctioned and in position shows that a total of 2266 teachers posts were sanctioned in 535 sample schools and out of this 1950(86.05%) were in position.

K.Number of Blocks in Sample Schools

A detail on number of blocks in sample schools is presented in Table 4.7.

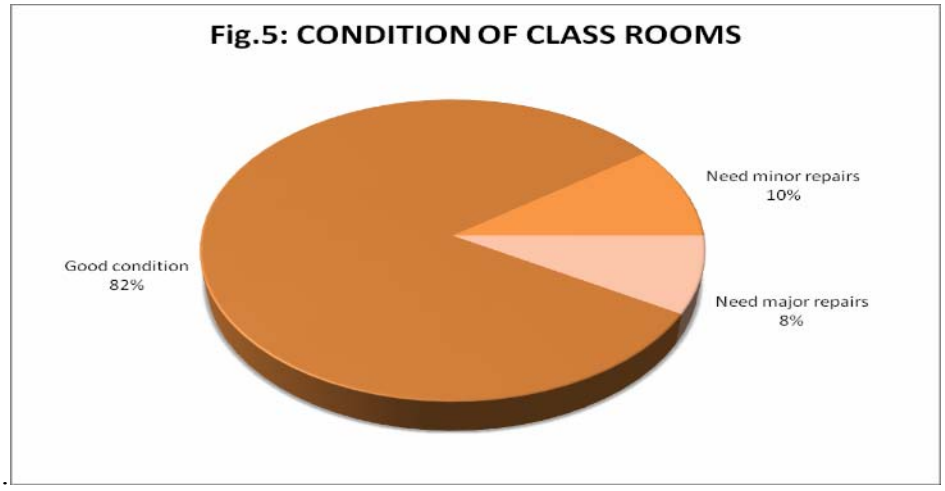
TABLE-4.7: NO. OF BLOCKS IN SAMPLE SCHOOLS

Sl. No.	School Category	No. of Blocks in school
1	Primary	656
2	Primary with Upper Primary	1280
3	Upper primary with Secondary or Higher Secondary	640
	Total	2576

The above table reveals the number of Blocks in sample schools. There were 2576 blocks in 535schools. Out of this 656 were in Primary Schools, 640 in Upper Primary with Secondary and the remaining 1280 Primary with Upper Primary sections.

L. Condition of Rooms in Schools

A detail on physical condition of classrooms in sample schools is presented in Figure .5



The above Figure reveals the condition of classrooms and other rooms of the sample schools. Out of total 535 schools, majority was in Good condition (82%). In reference to remaining schools, 10% of them need minor repairs, 08% need major repairs.

M. Availability of Computers in Schools

A detail in this regard is presented in Table 4.8.

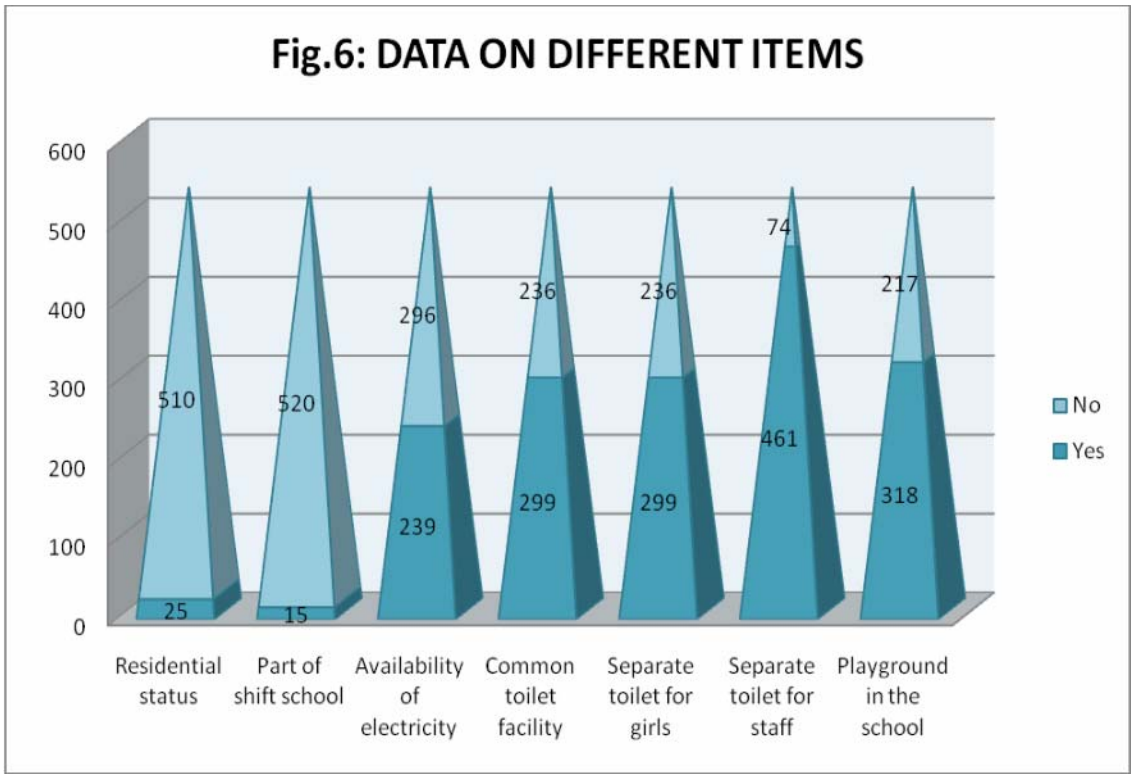
TABLE-4.8: AVAILABILITY OF COMPUTERS IN GOOD WORKING CONDITION

Sl. No,	School Category	No. of computers available in good working condition
1	Primary	33
2	Primary with Upper Primary	456
3	Upper primary with Secondary or Higher Secondary	401
	Total	890

The above table shows that out of 535 schools, 890 computers were available in total sample schools. Out of this 33 computers are working in good condition which are in primary schools followed by 456 computers are available in primary with upper primary schools and 401 computers are available in Upper Primary with Secondary schools which are also in good working condition.

N. Facilities in Schools

A detail on various facilities in schools is presented in Figure 6. Out of total 535 sample schools as many as 520 of them were Day schools. Similarly, only in 15 schools there was a shift system while running the schools. However, in only 239 schools Electricity facility was available. As far as toilet facilities were concerned 299 schools have common toilets. However, only in 299 schools separate toilet facility for girls was available. In reference to play ground facility; only 318 schools have a playground facility for children.



O. Enrolment of Children in Schools – 2007 - 08

The details of enrolment for the academic year 2007 – 08 were presented in Figure 7. It indicates that enrolment ratio between boys and girls were quite encouraging with the girl's enrolment is moderately high in the sample schools of 535. In reference to number of repeaters, Boys number is higher than that of girls, Among SC, ST and OBC children enrollment, there was a substantial gap observed Girls are lesser than boys in OBC where as in SC and ST the Girls enrolment is higher than the boys. In differently able children Boys enrolment is higher than the girls. As far as the children who left the school it is noticed that boys are more in number than the girls.

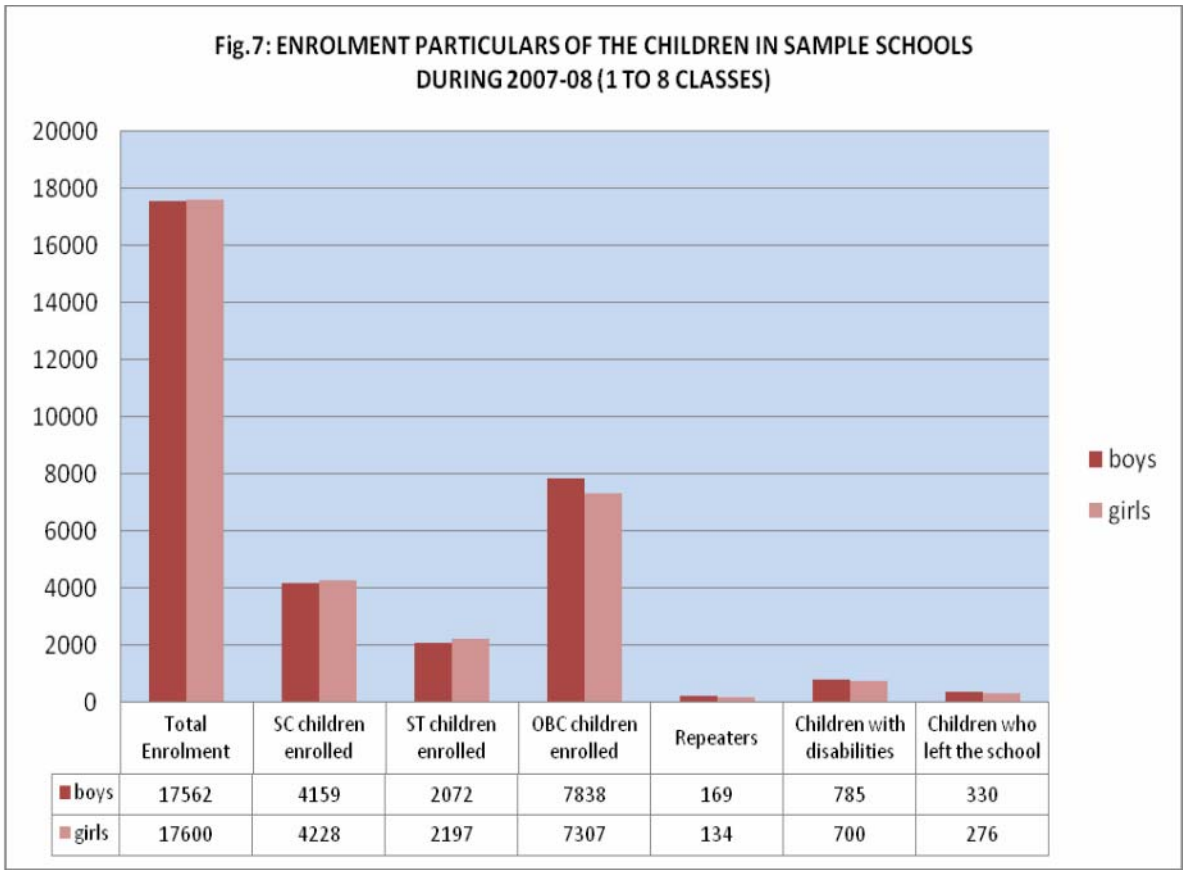
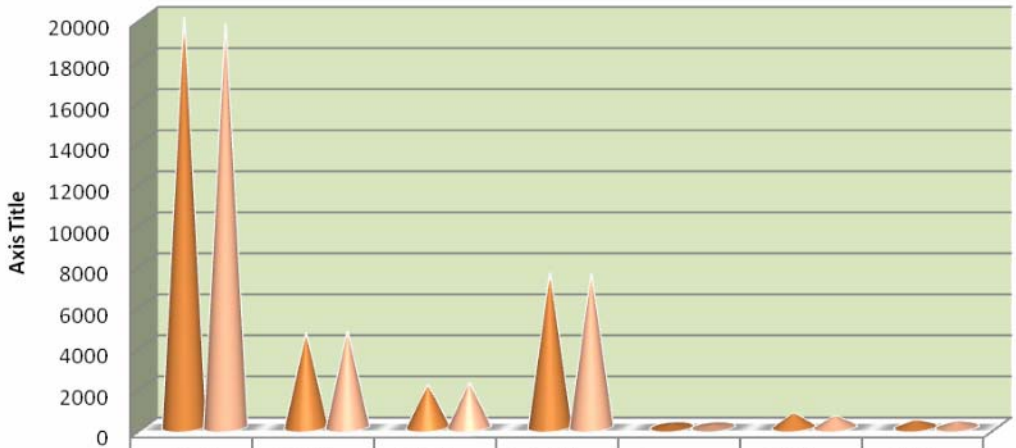


Fig.7: ENROLMENT PARTICULARS OF THE CHILDREN IN SAMPLE SCHOOLS DURING 2007-08 (1 TO 8 CLASSES)
20000
18000
16000
14000
12000
10000
8000
6000
4000
2000
0
boys
girls
Total Enrolment
SC children enrolled
ST children enrolled
OBC children enrolled
Repeaters
Children with disabilities
Children who left the school
boys 17562 4159 2072 7838 169 785 330
girls 17600 4228 2197 7307 134 700 276

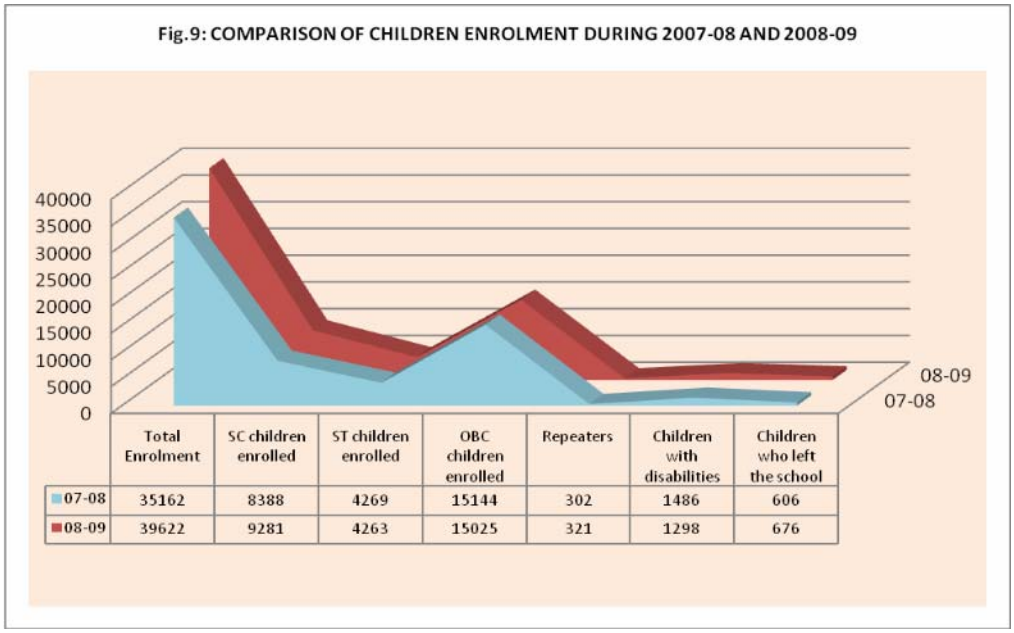
P. Comparison of enrollment of children (2007-08 and 2008-9):

A detail on comparison of the enrollment of children is presented in Figure 8 and figure 9 it indicates that in over all the enrollment has been increased substantially in the year 2008-09 when compared with 2007-08.especially. Where are the number of repeates are increased in the current year. In case of disabled children the enrollment has come down when compared with the year 2007-08. The increase in trend is observed in case of the children who left the school. In disadvantaged groups the enrolment especially among SC category was increased than ST category.

Fig.8: CHILDREN ENROLMENT IN PRESENT ACADEMIC YEAR IN SAMPLE SCHOOLS 2008-09 (1 TO 8 CLASSES)

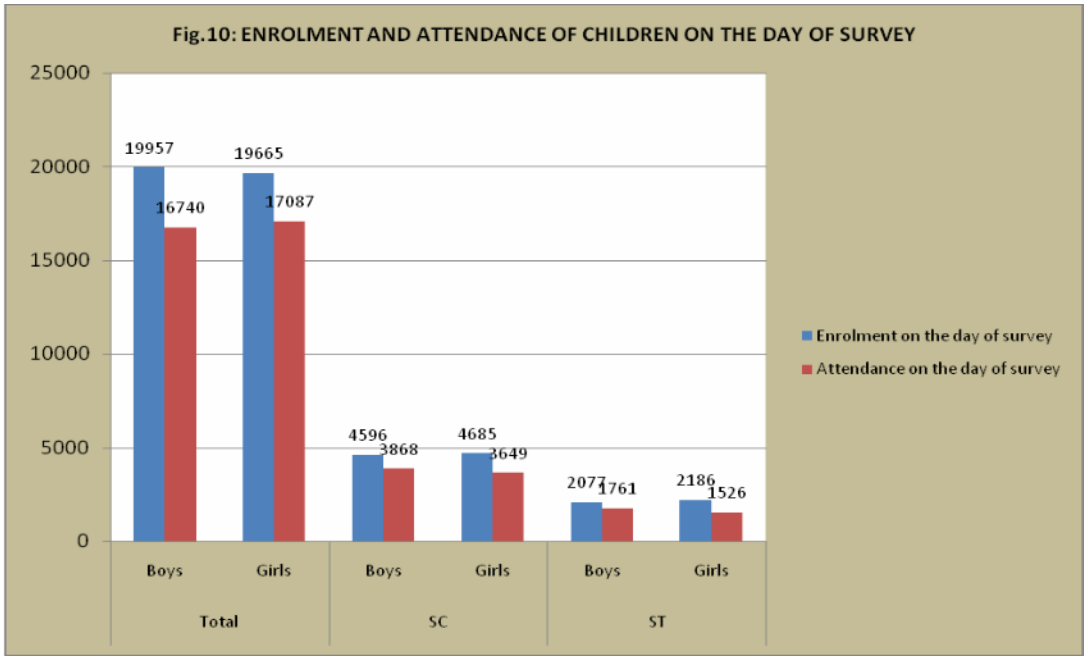


	Total Enrolment	SC children enrolled	ST children enrolled	OBC children enrolled	Repeaters	Children with disabilities	Children who left the school
boys	19957	4596	2077	7518	176	712	365
girls	19665	4685	2186	7507	146	586	311



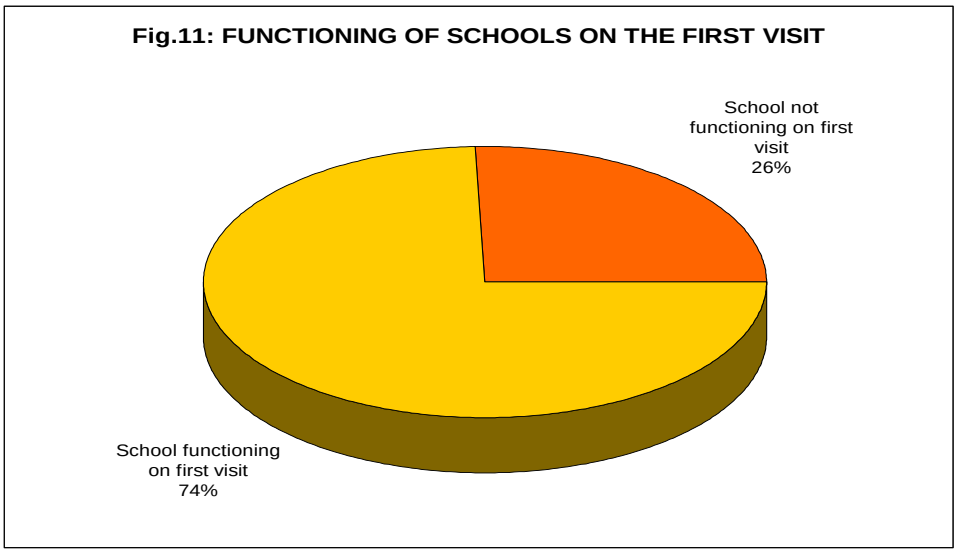
Q. Attendance profile of students on the day of PES:

A detail on attendance profile of students on the day of PES is presented in Figure 10. The attendance percentage was 83.88% in boys and 86.8% in girls as far as SC Boys, 84.1% in SC Girls is77.8% quite encouraging. Where as among ST girls the attendance percentage is (69.8 %%) which is quite lesser and Boys is (84.7%).



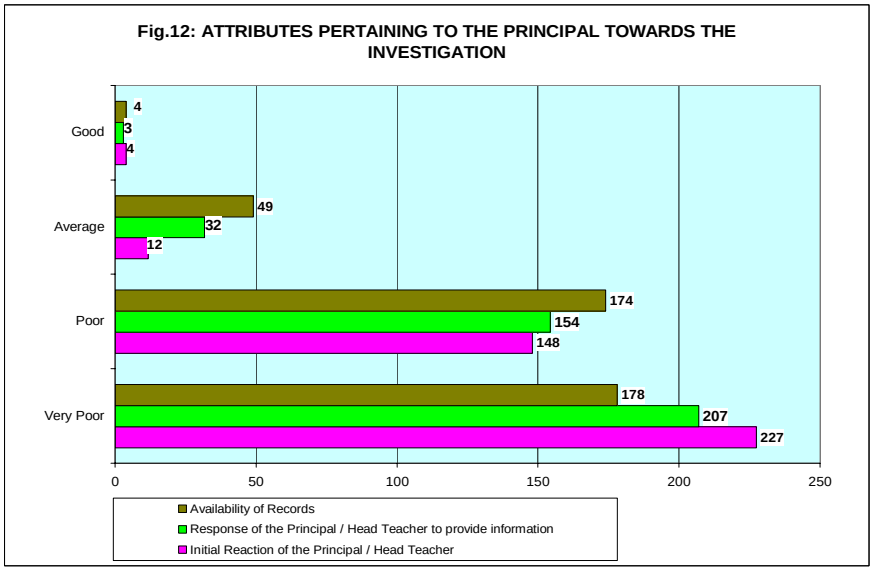
INVESTIGATOR FEEDBACK ON SCHOOLS UNDER PES

R. Functioning of Schools on the Day of Visit for PES



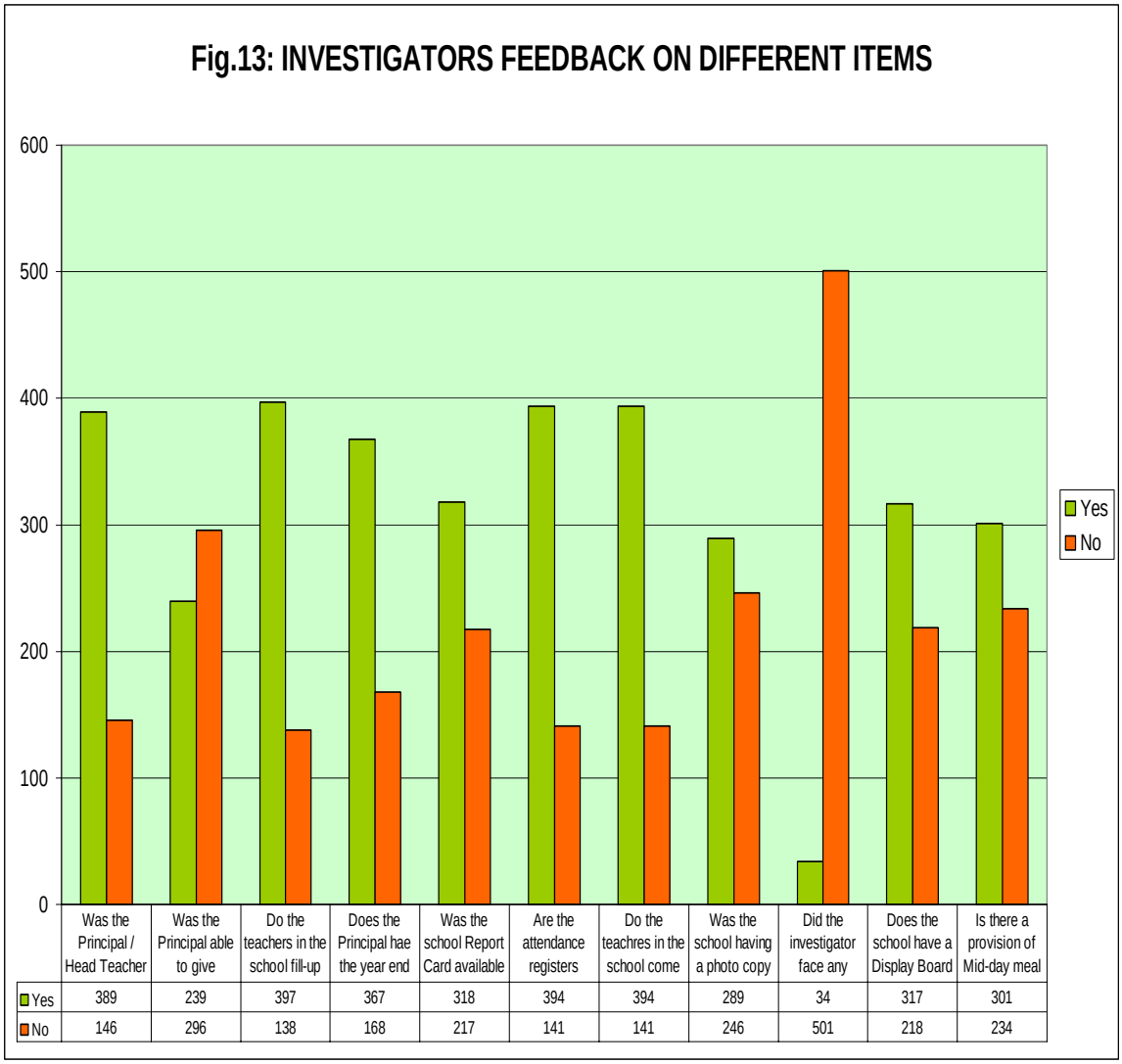
A detail on functioning of schools selected for the sample is provided in Figure 11. The graph reveals that 74% of schools were found opened on the first visit in connection with PES and the remaining 26% schools found closed. To collect the Quality check data the investigators made a second visit and third visits to the 26% of schools among the 535 Schools selected for the survey.

S. Attributes Pertaining to the Principal towards PES Investigators



A detail in this regard is presented in Figure 12. The Graph shows the reaction of principal/HM towards the investigators of PES. The initial reactions of HM were very poor in 227 schools where as in 148 schools the reaction was so casual and have shown least interest towards PES. In reference to response towards the survey, only 12 school Head Masters showed Average response and where as the remaining schools Head Masters response could be accessed with much difficulty. Regarding the availability of records in the sample schools, it was revealed that in 4 of the schools record maintenance was good, followed by 12 are average and 174 poor where as in 178 it is found to be very poor.

T. Investigators Feedback on Different Variables of PES



	Was the Principal / Head Teacher	Was the Principal able to give	Do the teachers in the school fill-up	Does the Principal hae the year end	Was the school Report Card available	Are the attendance registers	Do the teachres in the school come	Was the school having a photo copy	Did the investigator face any	Does the school have a Display Board	Is there a provision of Mid-day meal
Yes	389	239	397	367	318	394	394	289	34	317	301
No	146	296	138	168	217	141	141	246	501	218	234

A detail in this regard is presented in Figure 13. In reference to providing information, it was noticed that 239 school HM's could able to provide the needful information and where as 296 HM's unable to provide the required information. In reference to maintaining attendance register in schools, it was found that in 394 of the schools that teachers were properly filling up the attendance registers and in the remaining 141 of the schools there was a lapse in properly filling the registers concerned. Approximately three fourth of the sample school HM's (324) were having summary details of children in respective schools as well as habitations. In reference to remaining HM's, none of them were having access to needful data. In terms of School Report Cards, 318 schools are maintaining.

In reference to timely attendance of teachers in respective schools, it was found that only in 394(73.6%) of the schools it was noticed that teachers come on time where as in the remaining 141(26.4%) schools teachers do not come on time.

Out of 535 sample schools, only 289 of schools posses' photocopy of DISE filled in format where as the remaining 246 schools do not have the photocopy of DISE format. Similarly, only in 317schools display boards were available and where as 218 schools display boards were not available. Where as, the implementation of MDM is concerned out of 535 schools in 301 schools the programme is being implemented.

Chapter 5

Conclusions and Recommendations

The scrutiny of DISE data reveals that some of the Schools have not provided the proper information. It reflects that Head Masters and Teachers concerned do not have proper awareness on items of the DISE Format. In PES, the coverage of sample was 535 schools.

A few of the important conclusions drawn from the survey results are as follows:

- The overall deviation of DISE data from PES data, in respect of all comparable of items, is 8.49%, which is within the range of permissible percentage of deviation i.e. 10%, and there by giving a precision level of 91.51% for DISE data in relation to PES data
- Within the available comparable data, few schools did not provide the information on some of the items.
- The highest deviation of data is observed in respect of items which are based on respondents interpretation i.e. Status of school buildings, condition of boundary walls in schools, sources of drinking water in schools and availability of computers etc.
- The items like number of blocks in schools, teacher posts sanctioned, teachers in position, disability, repitation rate, availability of computers have not been reported properly. Hence, it was felt difficult to establish deviation on such an important variables.
- As much as 26% of schools not open at the time of survey causing lot of inconvenience while collecting data for these schools investigators visited second time.

- As much as 55.3% of Head Masters concerned could not able to provide requisite information pertaining to his/her school though records are available.
- 33.2% percent of schools were not maintaining the records properly resulting in non-capture of data.
- In 26.4% of the schools, it was observed that Teachers were not on time to school for various reasons.
- 46% of the schools even do not have photocopy of DISE format though requisite instructions were in vogue.
- In as much as 46% of schools Display Boards were not available.
- Still considerable number of schools was not having exclusive toilets for girl children.
- Enrolment of girls, especially from SC followed by ST community, has recorded high frequency when compared with the boys of the same category.
- In case of OBC Girls the enrolment indicates less when compared to boys.

Based on the results of the survey some of the **recommendations** were arrived at for improving MIS, and these are as follows:

- The DISE format is lengthy and hence it should be re-designed to keep it short and simple keeping in view the abilities and time available among teachers concerned.
- More emphasis should be laid on issues on project performance indicators such as **enrolment, retention, and dropout, attendance rate and achievement** in the data capture format resulting in effective enumeration of vital statistics.
- Collection of data through DISE format may be ensured by October of each academic year so that the Five Percent Sample Check can be

attempted by December of the same academic year so that the results can be appropriately utilized for planning the activities for next academic year.

- The formats canvassed for Post Enumeration Survey (DCF) and the District Information System of Education (DISE) were quite different in terms of certain variables/aspects. Which is becoming an obstacle for reporting.
- The School complex (Cluster Resource centres) should be strengthened by providing required number of computers and operators for collection and maintenance of data at the cluster level and also made accountable.
- Teachers and Head Masters, Mandal Educational Officers, Officers of District project SSA and DIET faculty should be given training on collection and utilization of DISE data and its all related soft ware applications for proper planning and implementation of Educational activities.
- All the teachers must be given proper orientation and awareness that based on this data the budgetary provisions of schools were made hence, it is mandatory to know all these by the concerned personnel of the schools.
- Though this year scrutiny was under taken by the School complex Head masters, in most of the places it was quite informal. Hence this has to be addressed with focus and Effective supervision and monitoring should be ensured at cluster (School Complex), Mandal and District level.
- ***MIS Units should be strengthened right from the Cluster level (School complex) to state level.***

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