

**REPORT ON  
POST ENUMERATION SURVEY  
(5% Sample Check of DISE Data 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

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

## 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 files 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.

<b>Educational Management:</b>	A process of creating conditions or situations necessary for maintaining quality of education.
<b>Gross enrollment Ratio:</b>	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.
<b>Net enrollment Ratio:</b>	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.
<b>Repetition Rate:</b>	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.
<b>Rural Area:</b>	Refers to areas out side of the municipal and city corporation areas.
<b>Transition Rate:</b>	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.
<b>Urban Area:</b>	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 Shiksha 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 5 Districts of 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, this 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. Adilabad, Mahaboobnagar, Vizianagaram, Prakasham and Kurnool, representing Telengana, Coastal Andhra and Rayalaseema regions of the state. Data for the study was collected from 770 schools spread over five districts selected for the study. However, comparison between DISE and PSE data could be established only in 700 districts since the other 70 schools, which represent private, un-aided and certain residential schools under Tribal/Social Welfare departments were not covered by DISE data. 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 700 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 770 schools; out of this data pertaining to 70 schools was not matching with the DISE data. Hence, only 700 schools data were considered for comparison.

The important conclusions drawn from the survey results are as follows:

- Within the available comparable data, few schools did not provide the information on some of the items.
- The overall deviation of DISE data from PES data, in respect of all comparable of items, is 11.4%, which is slightly higher than the permissible percentage of deviation i.e. 10%, and thereby giving a precision level of 88.6% for DISE data in relation to PES data.
- The highest deviation of data is observed in respect of items which are based on respondents interpretation i.e. Disability, Management, Number of Blocks in the schools, Repetition Rate etc.
- The items like number of blocks in schools, teacher posts sanctioned, teachers in position, disability, availability of computers have not been reported properly. Hence, it was felt difficult to establish deviation on such an important variables.
- As much as seven per cent of schools among 770 schools were not open at the time of survey causing lot of inconvenience while collecting data.
- As much as 12% of Head Masters concerned could not able to provide requisite information pertaining to his/her school though records are available.
- Seventeen per cent of schools were not maintaining the records properly resulting in non-availability of data.
- Twenty nine per cent of Head Masters do not have the details of even children enrolled in their respective schools and also habitations concerned.
- As high as 43% schools do not have School Report Card.
- In 17% of the schools, it was observed that Teachers were not on time to school for various reasons.

- Thirty two per cent of the schools even do not have photocopy of DISE format though requisite instructions were in vogue.
- In as much as 37.5% of schools Display Boards were not available.
- Considerable number of schools did not have exclusive toilets for girl children.
- Enrolment of girls, especially from ST community, has recorded lesser frequency than other category.

### **Recommendations**

Based on the results of the survey some **recommendations** has been 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 time available among teachers concerned.
- More emphasis should be laid on issues like **enrolment, retention, dropout and attendance rate** in the data capture format resulting in effective enumeration of vital statistics.
- Certain aspects/variables found in DISE format like school establishment particulars, post sanctioned, budget releases are generally not available at school level. As a result, the DISE format suffers from vacuum in capturing such data. Hence, it would be better to collect such information from authorities of education administration at Mandal (block) or District level to maintain accuracy.
- 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. This has been resulting difficulty in

establishing similarities or confirmation of data through Five Percent Check.

- After collection of DISE data, there should be a proper scrutiny at school complex level as well as Mandal (block) level for ensuring data lapses.
- Effective supervision and monitoring should be ensured at Mandal and District level.
- Support of statistical expertise should be utilized at the Mandal (block) level for scrutiny, processing and development of database.
- MIS Units should be strengthened right from the Mandal level to state level.

Summing up, variance of DISE data in reference to 5% sample check through PSE survey data is slightly deviant (11.4%) 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.

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# **CHAPTER -I**

## **INTRODUCTION**

# CHAPTER I

## 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 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.

### **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 organisations 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, 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<sup>th</sup> 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.

In reference to School Education, the total enrolment among children in the age group of 6-14 years is 1,27,18,240 and out of this 264,013 are out of school children (DISE 2006-7). The Repetitions and dropout particulars are as follows:

**Table 1.1: Statistics of Children's Enrolment in Andhra Pradesh**

Age group	Repetition	Drop-out	GER	NER
6-11 yrs.	3.11	3.34	90.38	86.55
11-14 yrs	1.16	6.91	101.67	72.21

Source: DISE 2006

Further, the completion rate and Transition rate are 72.96 and 90.37 respectively.

The total educational institutions across the state, in terms of management as well as school grades is provided below:

**Table 1.2: Management-wise Educational Institutions In Andhra Pradesh**

School Mgt.	Primary	Upper primary	High school	Total
Government	54255	12094	9719	62137
Aided	2287	5595	5310	17825
Private	5595	5310	5584	16160

Source: DISE 2006

Under the circumstances of actual educational scenario, SSA in Andhra Pradesh is tuned to the specific needs of the state to reduce the gender disparity and also enhance rate of literacy by ensuring 100% per cent enrollment and retention.

### **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 the 75% assistance of Central

Government and 25% share of State Government up to 10<sup>th</sup> plan. There after the cost sharing would be 50:50 from both Central and State Governments.

As per the information available, 2319 primary schools were established so far and upgraded 5023 Primary Schools as Upper Primary Schools. State has taken up large scale of recruitment of teachers i.e. 1.5 lakhs in the last five years. Apart from this 34,376 Vidya Volunteers were posted in schools where teaching posts were vacant for some or other reason. Under the programme, government simplified the admission procedure i.e. admission on demand at any time during academic year. Thus the access to primary education has been improved up to 100% and 98.94% in case of upper primary Education.

### **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.



# **CHAPTER - II**

## **STUDY DESIGN AND AREA**

## **CHAPTER- II**

### **STUDY DESIGN AND AREA**

In a study of evaluating and 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 aspects related to methodology were emphasized in this regard while carrying out the study. A brief description on various dimensions of the methodology followed for the study is provided in this chapter.

#### **2.1 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.

#### **2.2 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, 770 schools were selected as sample of the study and the pertaining details are presented in the following table.

**Table 2.1: Sample of the Study**

<b>S.No</b>	<b>Type of School</b>	<b>Number of Schools</b>	<b>Percentage</b>
1	Primary	438	56.9
2	Primary with Upper Primary	176	22.9
3	Upper Primary with Secondary or Higher Secondary	156	20.3
	Total	770	100

Thus, the study sample consists of 770 schools with 438 Primary Schools (56.9%), 176 Primary with Upper Primary section schools (22.9) and 156 Upper Primary with Secondary or Higher Secondary sections (20.3%).

### **2.3 Study Area**

The state of Andhra Pradesh consists of three regions i.e. Coastal Andhra (9 districts), Telengana (10 districts) and Rayalaseema (4 district). Keeping the number of districts in each region, a representative sample of five districts – two each from Coastal Andhra and Telengana and one from Rayalaseema – were randomly selected for the study. Since the Coastal Andhra and Telengana regions consists of nine and ten districts each, two districts from these regions were emphasized upon. As Rayalaseema region consists of only four districts, only one district was selected as sample district in this regard. Thus, the five districts constitute as sample area for the study and the details there of are presented in the following table. In each district, the study area was confined to two Mandals (Blocks) from each Revenue Division and from each Mandal two

School complexes with 10 each schools were selected by following the random sampling technique. Thus, a total of 770 schools were covered in this study.

**Table2.2: Study Area**

<b>S.No.</b>	<b>Region</b>	<b>Name of the District</b>	<b>No. of Revenue Divisions</b>	<b>No. of Mandals Selected</b>	<b>Number of Schools</b>
1	Coastal	Vizianagaram	3	6	136
	Andhra	Prakasham	4	8	141
	<b>Sub total (a)</b>		<b>7</b>	<b>14</b>	<b>277</b>
2	Telengana	Adilabad	5	10	214
		Mahaboobnagar	4	8	156
	Sub total (b)		<b>9</b>	<b>18</b>	<b>360</b>
3	Rayalaseema	Kurnool	3	6	123
	Sub total (c)		<b>3</b>	<b>6</b>	<b>123</b>
Grand Total (a + b + c)			<b>19</b>	<b>38</b>	<b>770</b>

As cited in the table, a total of 277 schools were drawn as sample from Coastal Andhra, 360 schools from Telengana and 123 from Rayalaseema regions.

#### **2.4 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.

## **2.5 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.

## **2.6 Reference period**

The DISE data pertains to the year 2006 with 30<sup>th</sup> September as reference date. The post enumeration survey was also of the same period. Though the MoU was signed in the month of December 22, 2006 the study was launched in January 2007, because of closure of schools due to Christmas and Pongal vacation.

## **2.7 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.

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

*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 700 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 depicting 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 and 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 respect of SSA in Andhra Pradesh.

## **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 formats in 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 number of blocks, class rooms, computer facility, teacher post sanctioned and positioned 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 and 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
- Academic inspections
- Visits by the coordinators of different levels
- School development and 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

A limitation in reference to data from all types of schools has also been experienced while undertaking the study. The DISE data did not cover the particulars related to private and un-aided schools, residential schools of Social Welfare dept. etc., where as the data pertaining to 70 of these schools were collected and analysed as part of this report. Hence, a comparison in this regard could not be attempted. As a sequel, data from these 70 schools were analysed separately and only data pertaining to 700 common schools were presented in comparative analysis.

To sum up, the study was confined to 770 schools drawn from five districts across different regions of Andhra Pradesh. However, as the DISE data did not have the component of private and un-aided schools information, data pertaining to relevant schools, numbering 70, were presented separately and thus data of 700 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/aspects 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.



**CHAPTER -III**  
**COMPARITIVE DATA ANALYSIS BETWEEN**  
**PES AND DISE**

## **CHAPTER III**

### **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, 770 schools were selected randomly for the study and survey was carried out through trained and qualified research investigators. This resulted in coverage of additional 70 schools in comparison to schools covered under DISE survey in the study area. Hence, while making the comparative analysis between the data collected through PES and DISE data, data pertaining to additionally covered 70 schools were not included, as comparison can not be made, and only the data pertaining to 700 common schools were analysed and presented in this report. 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 2005-06 and 2006-07.

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.

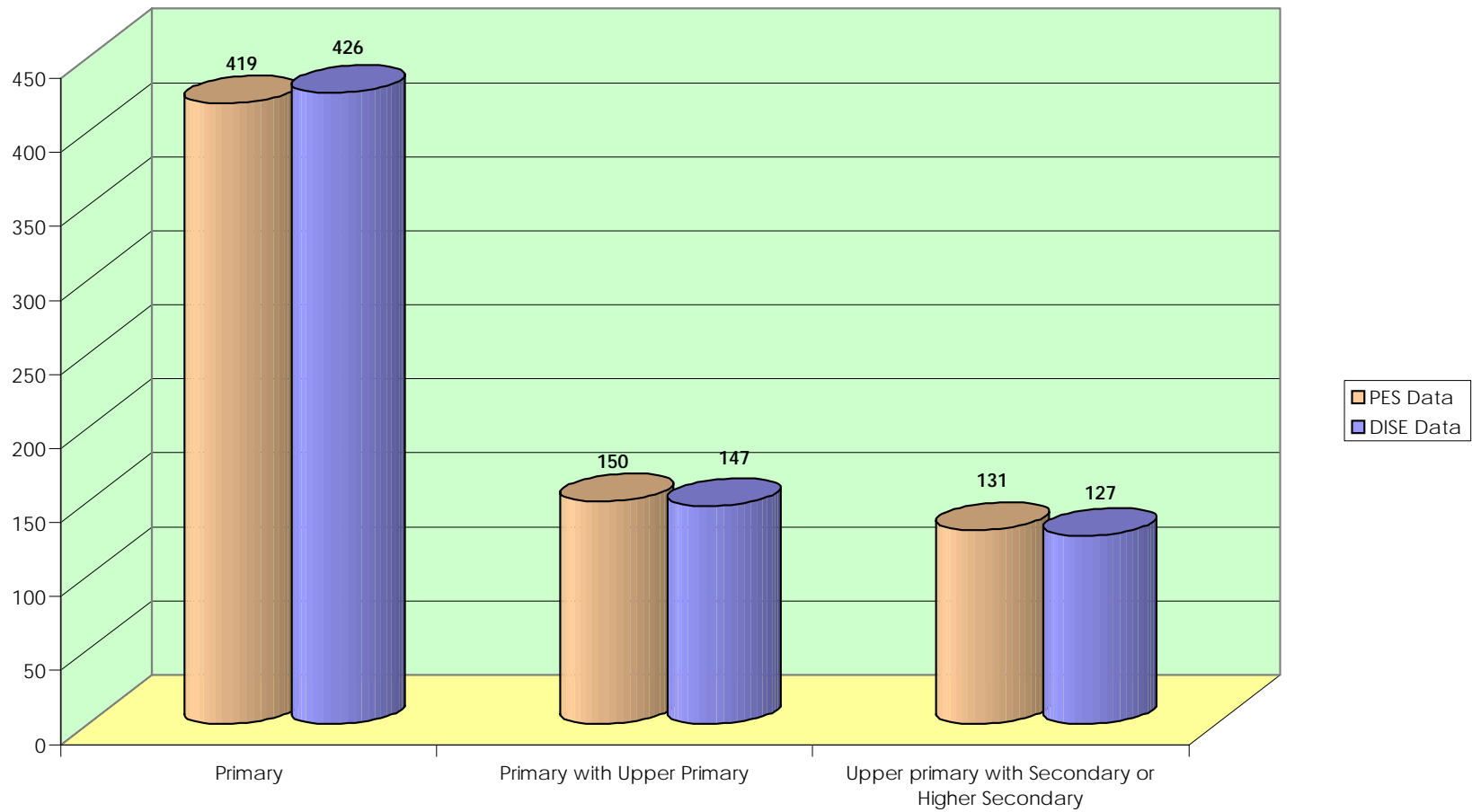
## COMPARATIVE ANALYSIS OF DISE DATA WITH PES DATA

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

Sl. No.	School Category	PES Data	DISE Data	Deviation
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
1	Primary	419	426	7
2	Primary with Upper Primary	150	147	3
3	Upper primary with Secondary or Higher Secondary	131	127	4
	<b>Total</b>	<b>700</b>	<b>700</b>	<b>14</b>

- |    |  |   |     |
|----|--|---|-----|
| a) | Quantitative Value of items as per DISE Data           | - | 700 |
| b) | Quantitative Value of items as per PES Data            | - | 700 |
| c) | Quantitative Value of deviations ignoring $\pm$ signs  | - | 14  |
| d) | Percentage deviation of DISE Data with PES Data        | - | 2%  |
| e) | Precision level of DISE data with relation to PES Data | - | 98% |

FIGURE-3.1: COMPARISON OF PES DATA WITH DISE DATA ON SCHOOL CATEGORY

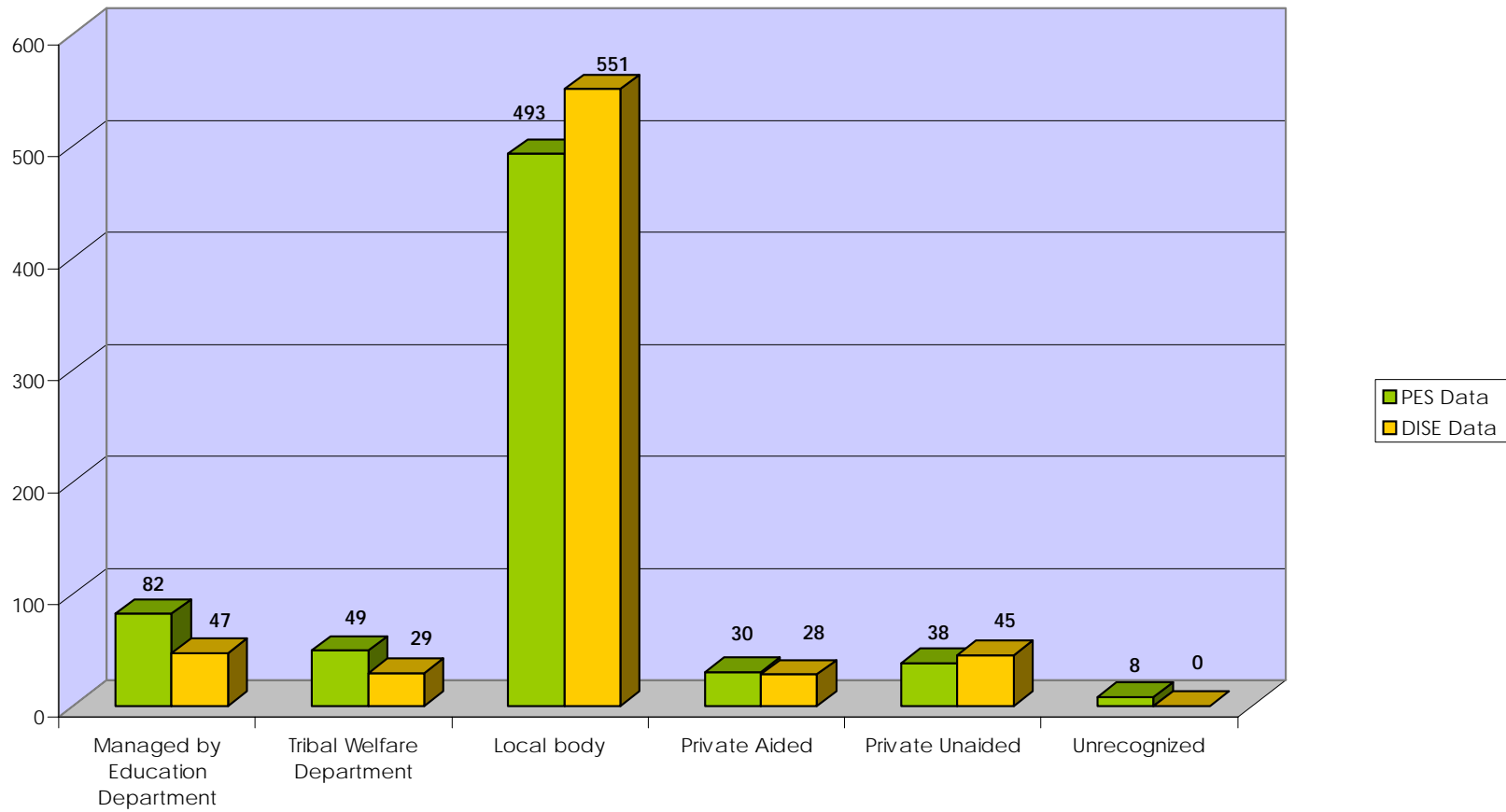


**TABLE NO. 3.2: COMPARISON OF PES DATA WITH DISE DATA ON SCHOOL CATEGORY – MANAGEMENT-WISE**

Sl. No.	School Category	Vizianagaram			Prakasam			Kurnool			Mahabubnagar			Adilabad		
		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
1	Managed by Education Department	5	1	4	8	4	4	19	9	10	15	5	10	35	28	7
2	Tribal Welfare Department	4	1	3	8		8	8		8	6	1	5	23	27	4
3	Local body	107	114	7	95	106	11	76	93	17	106	125	19	109	113	4
4	Private Aided	5	4	1	9	11	2	3	3	0	5	2	3	8	8	0
5	Private Unaided	9	10	1	5	4	1	4	5	1	7	12	5	13	14	1
6	Unrecognized										6		6	2		2
	<b>Total</b>	<b>130</b>	<b>130</b>	<b>16</b>	<b>125</b>	<b>125</b>	<b>26</b>	<b>110</b>	<b>110</b>	<b>36</b>	<b>145</b>	<b>145</b>	<b>48</b>	<b>190</b>	<b>190</b>	<b>18</b>

- a) Quantitative Value of items as per DISE Data - 700
- b) Quantitative Value of items as per PES Data - 700
- c) Quantitative Value of deviations ignoring  $\pm$  signs - 144
- d) Percentage deviation of DISE Data with PES Data - 20%
- e) Precision level of DISE data with relation to PES Data - 80%

FIGURE-3.2: COMPARISON OF PES DATA WITH DISE DATA ON SCHOOL MANAGEMENT



**TABLE NO. 3.3: COMPARISON OF PES DATA WITH DISE DATA ON SCHOOL LOCATION**

SI.No	School Category	Sample Size	Rural			Urban		
			PES	DISE	Deviation	PES	DISE	Deviation
1	2	3	4	5	6	7	8	9
1	Primary	419	343	347	4	76	79	3
2	Primary with Upper Primary	150	112	113	1	38	34	4
3	Upper primary with Secondary or Higher Secondary	131	94	86	8	37	41	4
	Total	700	549	546	13	151	154	11

- a) Quantitative Value of items as per DISE Data - 700
- b) Quantitative Value of items as per PES Data - 700
- c) Quantitative Value of deviations ignoring  $\pm$  signs - 24
- d) Percentage deviation of DISE Data with PES Data - 3%
- e) Precision level of DISE data with relation to PES Data - 97%

**TABLE NO.3.4: COMPARISON OF PES DATA WITH DISE DATA ON TYPE OF SCHOOL**

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	419	2	-	2	8	7	1	409	419	10
2	Primary with Upper Primary	150	2	-	2	4	1	3	144	146	2
3	Upper primary with Secondary or Higher Secondary	131	9	-	9	15	17	2	107	110	3
	Total	<b>700</b>	<b>13</b>	-	13	27	25	6	660	675	15

- a) Quantitative Value of items as per DISE Data - 700
- b) Quantitative Value of items as per PES Data - 700
- c) Quantitative Value of deviations ignoring  $\pm$  signs - 34
- d) Percentage deviation of DISE Data with PES Data - 5%
- e) Precision level of DISE data with relation to PES Data - 95%

**TABLE NO.3.5: COMPARISON OF PES DATA WITH DISE DATA ON LOWEST CLASSES IN SCHOOLS**

Sl. No.	School Category	Sample Size	1 <sup>ST</sup> CLASS			3 <sup>RD</sup> CLASS			5 <sup>TH</sup> CLASS			6 <sup>TH</sup> CLASS		
			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	419	417	426	9	2	-	2	-	-	-	-	-	-
2	Primary with Upper Primary	150	144	133	11	3	-	3	-	-	-	3	14	11
3	Upper primary with Secondary or Higher Secondary	131	19	-	19	-	-	-	4	-	4	108	127	19
	<b>Total</b>	<b>700</b>	580	559	39	5	-	5	<b>4</b>	-	<b>4</b>	111	141	30

- a) Quantitative Value of items as per DISE Data - 700
- b) Quantitative Value of items as per PES Data - 700
- c) Quantitative Value of deviations ignoring  $\pm$  signs - 80
- d) Percentage deviation of DISE Data with PES Data - 11%
- e) Precision level of DISE data with relation to PES Data - 89%

**TABLE NO.3.6: COMPARISON OF PES DATA WITH DISE DATA ON HIGHEST CLASSES IN SCHOOLS**

Sl. No.	School Category	Sample Size	1, 2, 3, 4 Classes			5 <sup>th</sup> 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	419	20	4	16	396	422	26	3	-	3	-	-	-	-	-	-
2	Primary with Upper Primary	150	--	-	-	-	-	-	145	147	2	5	-	5	-	-	-
3	Upper primary with Secondary or Higher Secondary	131	-	-	-	-	-	-	-	-	-	129	127	2	2	-	2
	<b>Total</b>	<b>700</b>	<b>20</b>	<b>4</b>	<b>16</b>	<b>396</b>	<b>422</b>	<b>26</b>	<b>148</b>	<b>147</b>	<b>5</b>	<b>134</b>	<b>127</b>	<b>7</b>	<b>2</b>	<b>-</b>	<b>2</b>

- a) **Quantitative Value of items as per DISE Data** - **700**
- b) **Quantitative Value of items as per PES Data** - **700**
- c) **Quantitative Value of deviations ignoring ± signs** - **56**
- d) **Percentage deviation of DISE Data with PES Data** - **8%**
- e) **Precision level of DISE data with relation to PES Data** - **92%**

**TABLE NO.3.7: 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		
			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	419	37	19	18	31	13	18	329	370	41	10	14	4	6	10	4	6	-	6
2	Primary with Upper Primary	150	17	9	8	6	4	2	101	109	8	10	6	4	16	19	3	-	-	0
3	Upper primary with Secondary or Higher Secondary	131	28	19	9	12	12	0	63	72	9	10	8	2	16	16	0	2	-	2
	<b>Total</b>	<b>700</b>	<b>82</b>	<b>47</b>	<b>35</b>	<b>49</b>	<b>29</b>	<b>20</b>	<b>493</b>	<b>551</b>	<b>58</b>	<b>30</b>	<b>28</b>	<b>10</b>	<b>38</b>	<b>45</b>	<b>7</b>	<b>8</b>	<b>0</b>	<b>8</b>

- a) Quantitative Value of items as per DISE Data - 700
- b) Quantitative Value of items as per PES Data - 700
- c) Quantitative Value of deviations ignoring  $\pm$  signs - 138
- d) Percentage deviation of DISE Data with PES Data - 20%
- e) Precision level of DISE data with relation to PES Data - 80%

**TABLE NO.3.8: 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	419	5	2	3	414	424	10
2	Primary with Upper Primary	150	3	3	-	147	144	3
3	Upper primary with Secondary or Higher Secondary	131	13	14	1	118	113	5
	Total	<b>700</b>	21	19	4	679	681	18

- a) Quantitative Value of items as per DISE Data - 700
- b) Quantitative Value of items as per PES Data - 700
- c) Quantitative Value of deviations ignoring  $\pm$  signs - 22
- d) Percentage deviation of DISE Data with PES Data - 3%
- e) Precision level of DISE data with relation to PES Data - 97%

**TABLE NO.3.9: 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	419	15	-	15	404	426	22
2	Primary with Upper Primary	150	7	1	6	143	146	3
3	Upper primary with Secondary or Higher Secondary	131	3	4	1	128	123	5
	Total	700	25	5	22	675	695	30

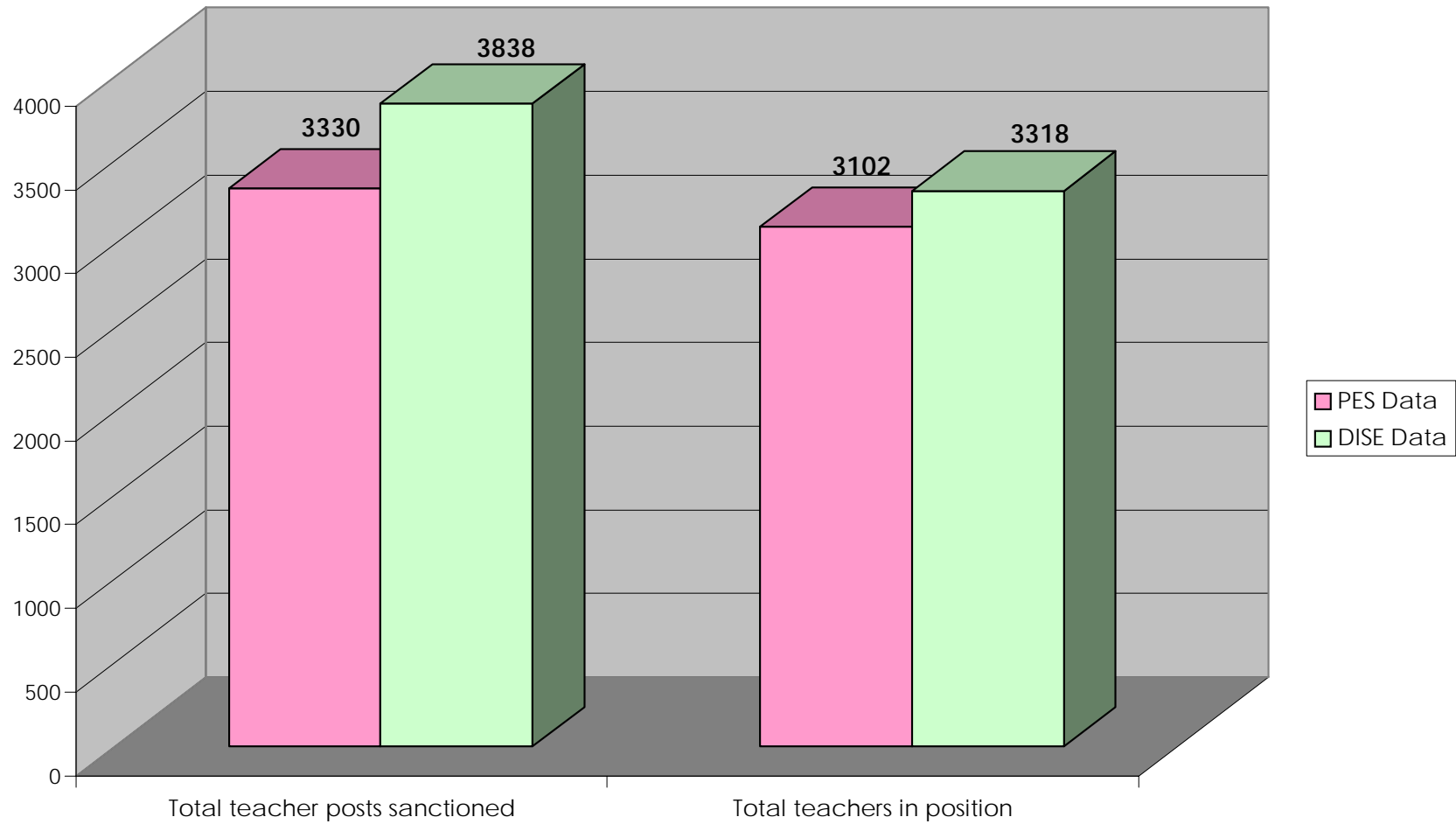
- a) Quantitative Value of items as per DISE Data - 700
- b) Quantitative Value of items as per PES Data - 700
- c) Quantitative Value of deviations ignoring  $\pm$  signs - 52
- d) Percentage deviation of DISE Data with PES Data - 7%
- e) Precision level of DISE data with relation to PES Data - 93%

**TABLE NO.3.10: 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	419	1081	1244	163	963	1112	149
2	Primary with Upper Primary	150	908	1099	191	870	973	103
3	Upper primary with Secondary or Higher Secondary	131	1341	1495	154	1269	1233	36
	Total	700	3330	3838	508	3102	3318	288

- |    |  |   |     |                    |
|----|--|---|-----|--------------------|
| a) | Quantitative Value of items as per DISE Data           | - | 700 |                    |
| b) | Quantitative Value of items as per PES Data            | - | 700 |                    |
|    |  |   |     | <b>SANCTIONED</b>  |
|    |  |   |     | <b>IN POSITION</b> |
| c) | Quantitative Value of deviations ignoring $\pm$ signs  | - | 508 | 288                |
| d) | Percentage deviation of DISE Data with PES Data        | - | 15% | 9%                 |
| e) | Precision level of DISE data with relation to PES Data | - | 85% | 91%                |

**FIGURE-3.3: COMPARISON OF PES DATA WITH DISE DATA ON TEACHER POSTS SANCTIONED AND IN POSITION**

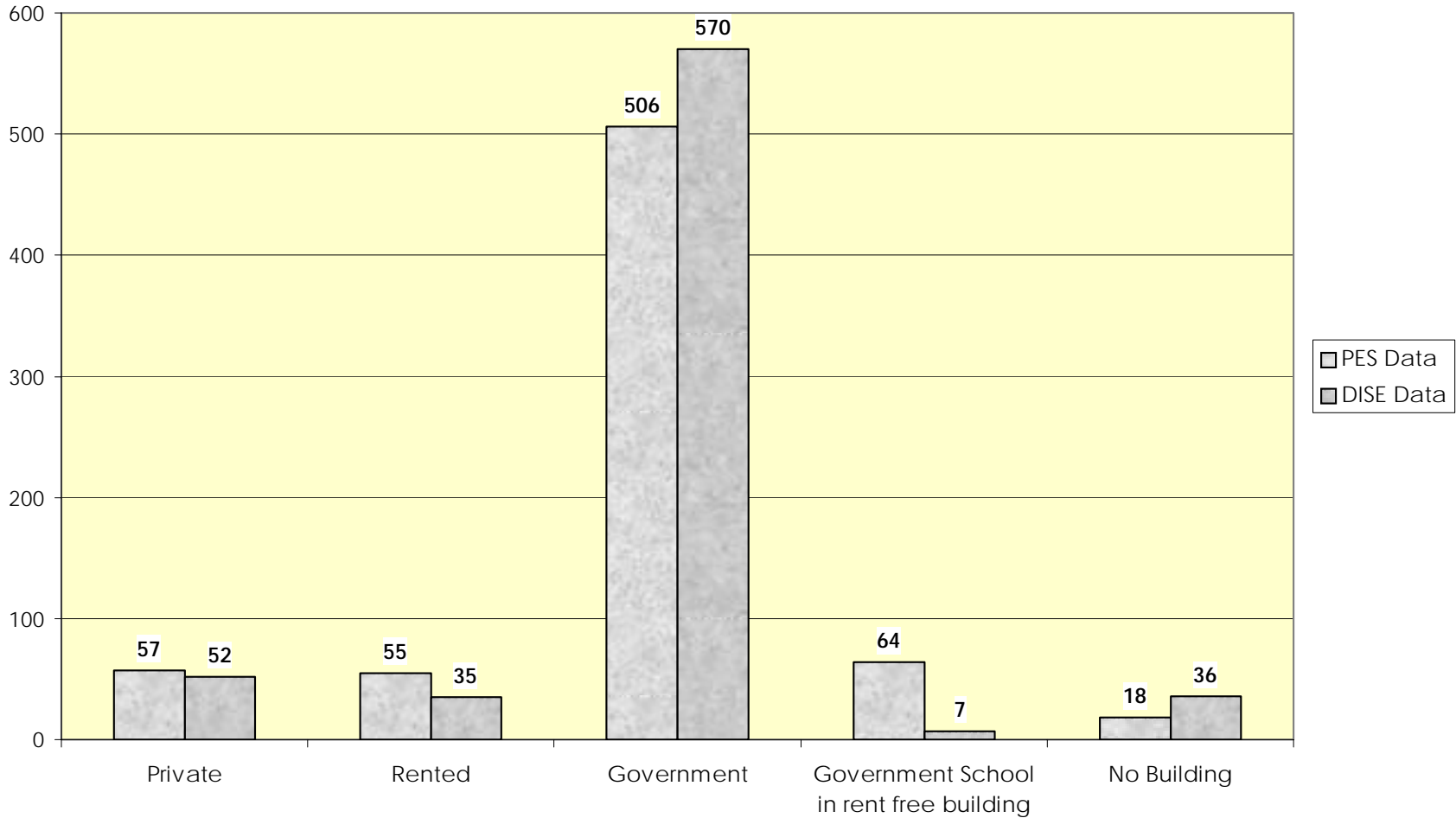


**TABLE NO.3.11: COMPARISON OF PES DATA WITH DISE DATA ON STATUS OF SCHOOL BUILDING**

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	419	14	21	7	30	12	18	326	353	27	36	7	29	13	33	20
2	Primary with Upper Primary	150	20	15	5	14	11	3	99	121	22	14		14	3		3
3	Upper primary with Secondary or Higher Secondary	131	23	16	7	11	12	1	81	96	15	14		14	2	3	1
	<b>Total</b>	<b>700</b>	<b>57</b>	<b>52</b>	<b>19</b>	<b>55</b>	<b>35</b>	<b>22</b>	<b>506</b>	<b>570</b>	<b>64</b>	<b>64</b>	<b>7</b>	<b>57</b>	<b>18</b>	<b>36</b>	<b>24</b>

- a) Quantitative Value of items as per DISE Data - 700
- b) Quantitative Value of items as per PES Data - 700
- c) Quantitative Value of deviations ignoring  $\pm$  signs - 186
- d) Percentage deviation of DISE Data with PES Data - 27%
- e) Precision level of DISE data with relation to PES Data - 73%

FIGURE-3.4: COMPARISON OF PES DATA WITH DISE DATA ON STATUS OF SCHOOL BUILDING



**TABLE NO.3.12: 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	419	786	1001	215
2	Primary with Upper Primary	150	566	764	198
3	Upper primary with Secondary or Higher Secondary	131	632	909	277
	Total	700	1984	2674	690

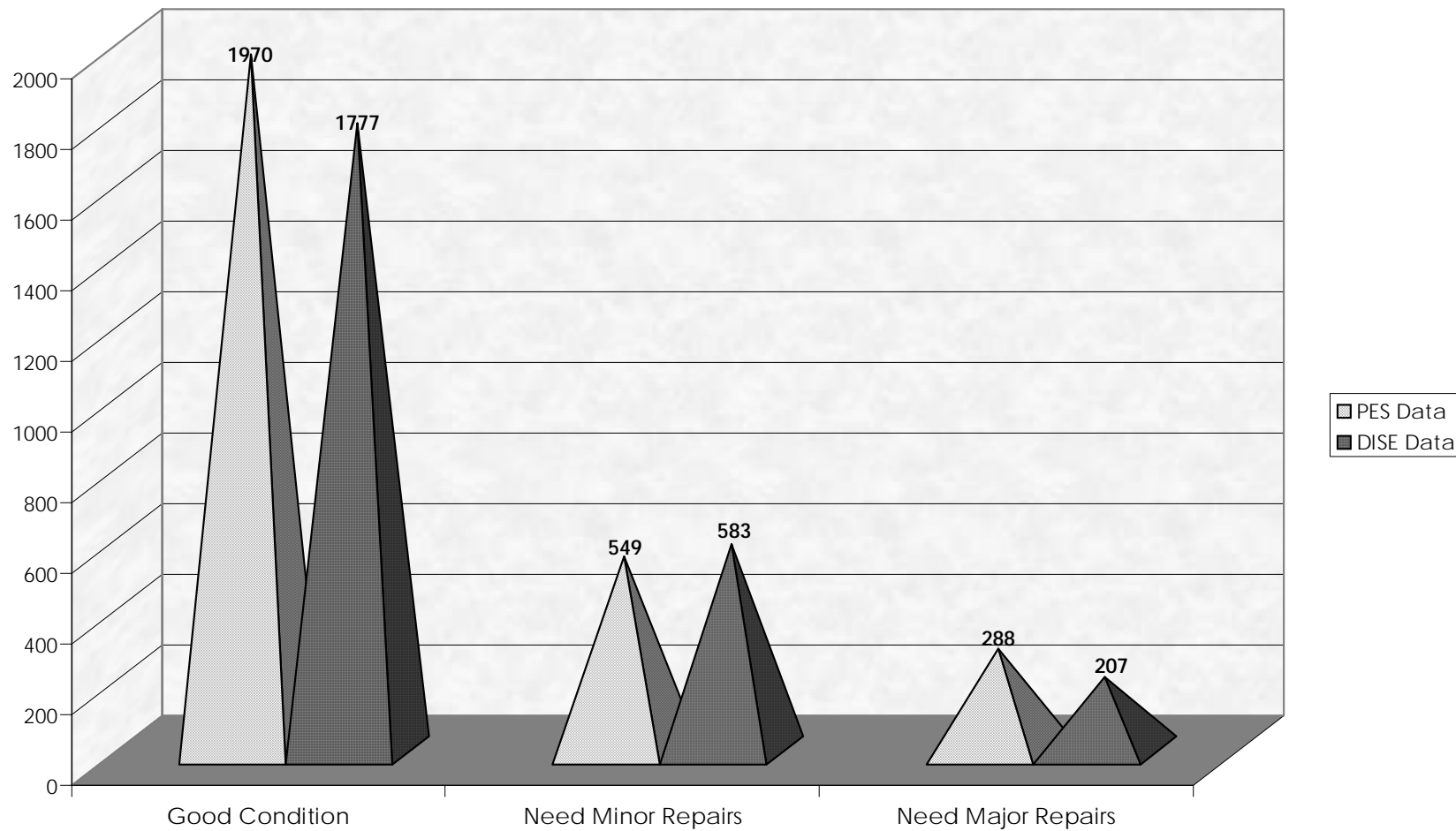
- a) Quantitative Value of items as per DISE Data - 700
- b) Quantitative Value of items as per PES Data - 700
- c) Quantitative Value of deviations ignoring  $\pm$  signs - 690
- d) Percentage deviation of DISE Data with PES Data - 35%
- e) Precision level of DISE data with relation to PES Data - 65%

**TABLE NO.3.13: 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	419	665	630	35	198	244	46	105	69	36
2	Primary with Upper Primary	150	524	542	18	169	137	32	70	59	11
3	Upper primary with Secondary or Higher Secondary	131	781	605	176	182	202	20	113	79	34
	Total	<b>700</b>	<b>1970</b>	<b>1777</b>	<b>229</b>	<b>549</b>	<b>583</b>	<b>98</b>	<b>288</b>	<b>207</b>	<b>81</b>

- a) Quantitative Value of items as per DISE Data - 700
- b) Quantitative Value of items as per PES Data - 700
- c) Quantitative Value of deviations ignoring  $\pm$  signs - 240
- d) Percentage deviation of DISE Data with PES Data - 9%
- e) Precision level of DISE data with relation to PES Data - 91%

FIGURE-3.5: COMPARISON OF PES DATA WITH DISE DATA ON CONDITION OF CLASS ROOMS



**TABLE NO.3.14: COMPARISON OF PES DATA WITH DISE DATA ON AVAILABILITY 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	419	34	38	4	385	388	3
2	Primary with Upper Primary	150	67	59	8	83	88	5
3	Upper primary with Secondary or Higher Secondary	131	92	89	3	39	38	1
	Total	700	193	186	15	507	514	9

- a) Quantitative Value of items as per DISE Data - 700
- b) Quantitative Value of items as per PES Data - 700
- c) Quantitative Value of deviations ignoring  $\pm$  signs - 24
- d) Percentage deviation of DISE Data with PES Data - 3%
- e) Precision level of DISE data with relation to PES Data - 97%

**TABLE NO.3.15: 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	419	183	208	25	236	218	18
2	Primary with Upper Primary	150	81	92	11	69	55	14
3	Upper primary with Secondary or Higher Secondary	131	54	81	27	77	46	31
	Total	700	318	381	63	382	319	63

- a) Quantitative Value of items as per DISE Data - 700
- b) Quantitative Value of items as per PES Data - 700
- c) Quantitative Value of deviations ignoring  $\pm$  signs - 126
- d) Percentage deviation of DISE Data with PES Data - 18%
- e) Precision level of DISE data with relation to PES Data - 82%

**TABLE NO.3.16: 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	419	66	91	25	353	335	18
2	Primary with Upper Primary	150	52	78	26	98	69	29
3	Upper primary with Secondary or Higher Secondary	131	61	74	13	70	53	17
	Total	700	179	243	64	521	457	64

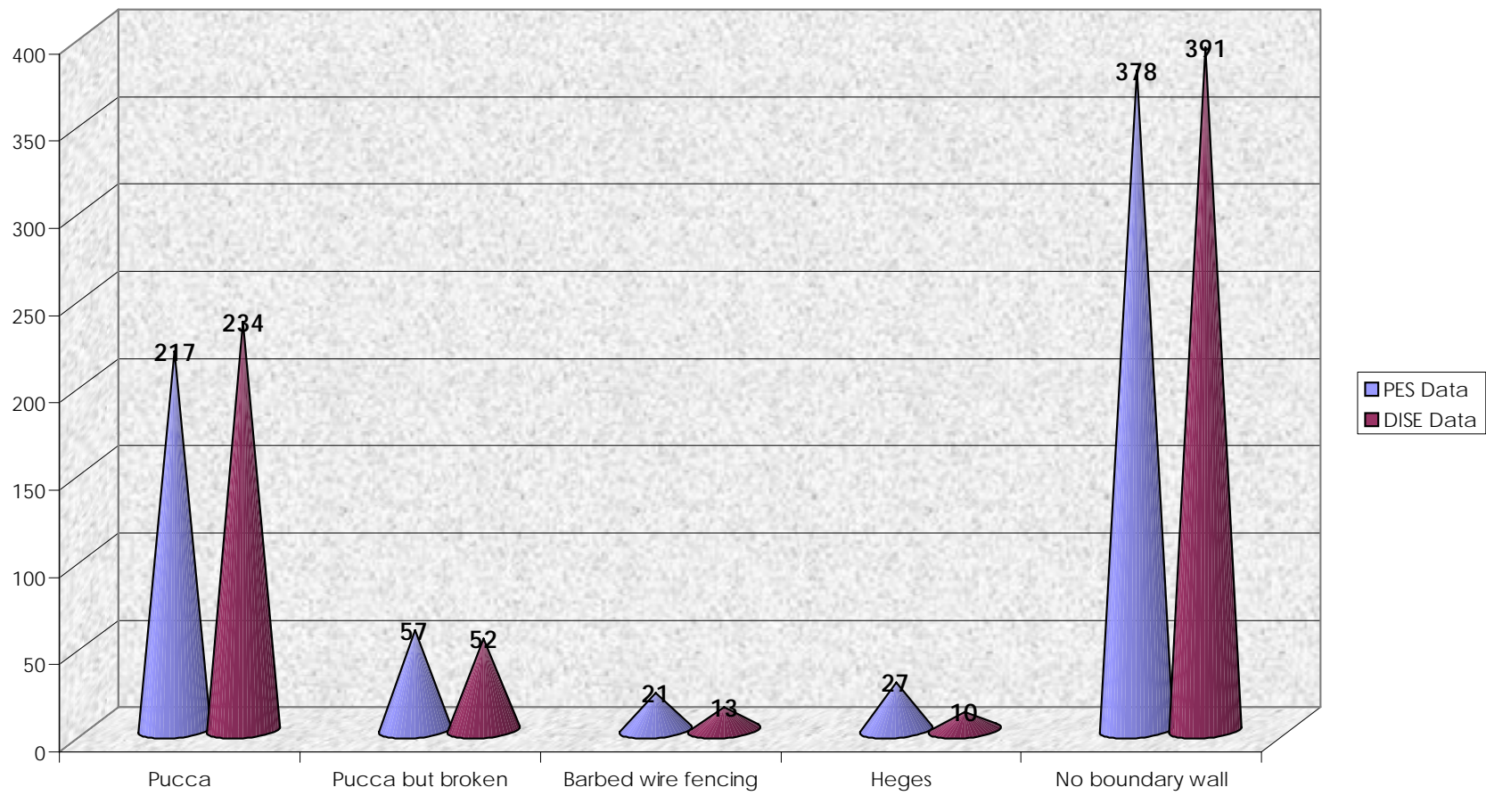
- a) Quantitative Value of items as per DISE Data - 700
- b) Quantitative Value of items as per PES Data - 700
- c) Quantitative Value of deviations ignoring  $\pm$  signs - 128
- d) Percentage deviation of DISE Data with PES Data - 18%
- e) Precision level of DISE data with relation to PES Data - 82%

**TABLE NO.3.17: 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		
			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	419	107	106	1	26	28	2	9	5	4	22	5	17	255	282	27
2	Primary with Upper Primary	150	50	65	15	16	13	3	8	3	5	1	1	0	75	65	10
3	Upper primary with Secondary or Higher Secondary	131	60	63	3	15	11	4	4	5	1	4	4	0	48	44	4
	<b>Total</b>	<b>700</b>	<b>217</b>	<b>234</b>	<b>19</b>	<b>57</b>	<b>52</b>	<b>9</b>	<b>21</b>	<b>13</b>	<b>10</b>	<b>27</b>	<b>10</b>	<b>17</b>	<b>378</b>	<b>391</b>	<b>41</b>

- a) Quantitative Value of items as per DISE Data - 700
- b) Quantitative Value of items as per PES Data - 700
- c) Quantitative Value of deviations ignoring  $\pm$  signs - 96
- d) Percentage deviation of DISE Data with PES Data - 14%
- e) Precision level of DISE data with relation to PES Data - 86%

FIGURE-3.6: COMPARISON OF PES DATA WITH DISE DATA ON CONDITION OF BOUNDARY WALL OF SCHOOLS

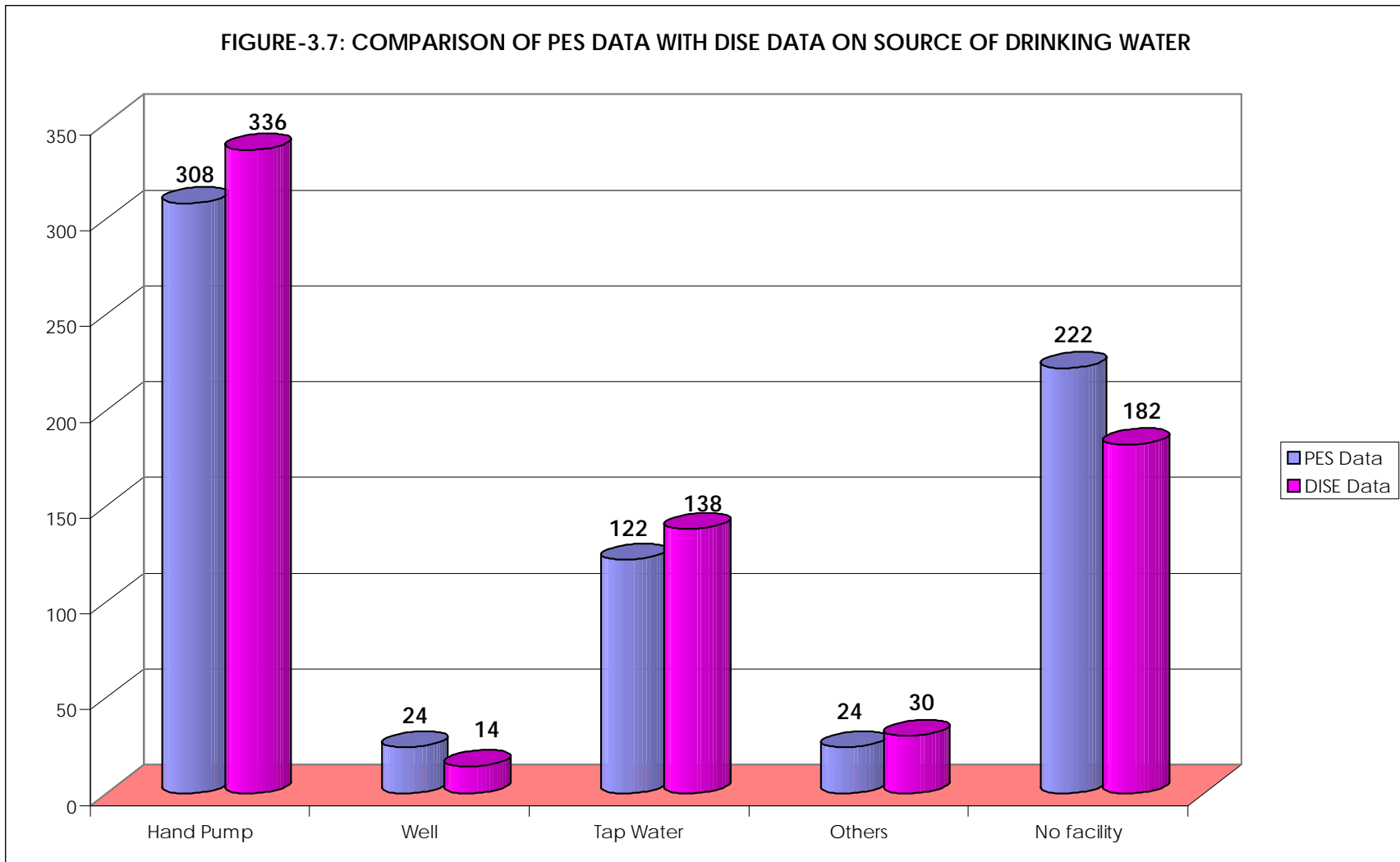


**TABLE NO.3.18: COMPARISON OF PES DATA WITH DISE DATA ON SOURCE OF DRINKING WATER**

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	419	188	201	13	8	5	3	57	62	5	8	17	9	158	141	17
2	Primary with Upper Primary	150	68	83	15	6	2	4	33	34	1	8	5	3	35	23	12
3	Upper primary with Secondary or Higher Secondary	131	52	52	0	10	7	3	32	42	10	8	8	-	29	18	11
	<b>Total</b>	<b>700</b>	<b>308</b>	<b>336</b>	<b>28</b>	<b>24</b>	<b>14</b>	<b>10</b>	<b>122</b>	<b>138</b>	<b>16</b>	<b>24</b>	<b>30</b>	<b>12</b>	<b>222</b>	<b>182</b>	<b>40</b>

- a) Quantitative Value of items as per DISE Data - 700
- b) Quantitative Value of items as per PES Data - 700
- c) Quantitative Value of deviations ignoring  $\pm$  signs - 106
- d) Percentage deviation of DISE Data with PES Data - 15%
- e) Precision level of DISE data with relation to PES Data - 85%

FIGURE-3.7: COMPARISON OF PES DATA WITH DISE DATA ON SOURCE OF DRINKING WATER



**TABLE NO.3.19: 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	419	167	186	19	252	240	12
2	Primary with Upper Primary	150	68	86	18	82	61	21
3	Upper primary with Secondary or Higher Secondary	131	88	98	10	43	29	14
	Total	<b>700</b>	323	370	47	377	330	47

- a) Quantitative Value of items as per DISE Data - 700
- b) Quantitative Value of items as per PES Data - 700
- c) Quantitative Value of deviations ignoring  $\pm$  signs - 94
- d) Percentage deviation of DISE Data with PES Data - 13%
- e) Precision level of DISE data with relation to PES Data - 87%

**TABLE NO.3.20: 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	419	61	34	27
2	Primary with Upper Primary	150	40	18	22
3	Upper primary with Secondary or Higher Secondary	131	476	318	158
	Total	<b>700</b>	<b>577</b>	<b>370</b>	<b>207</b>

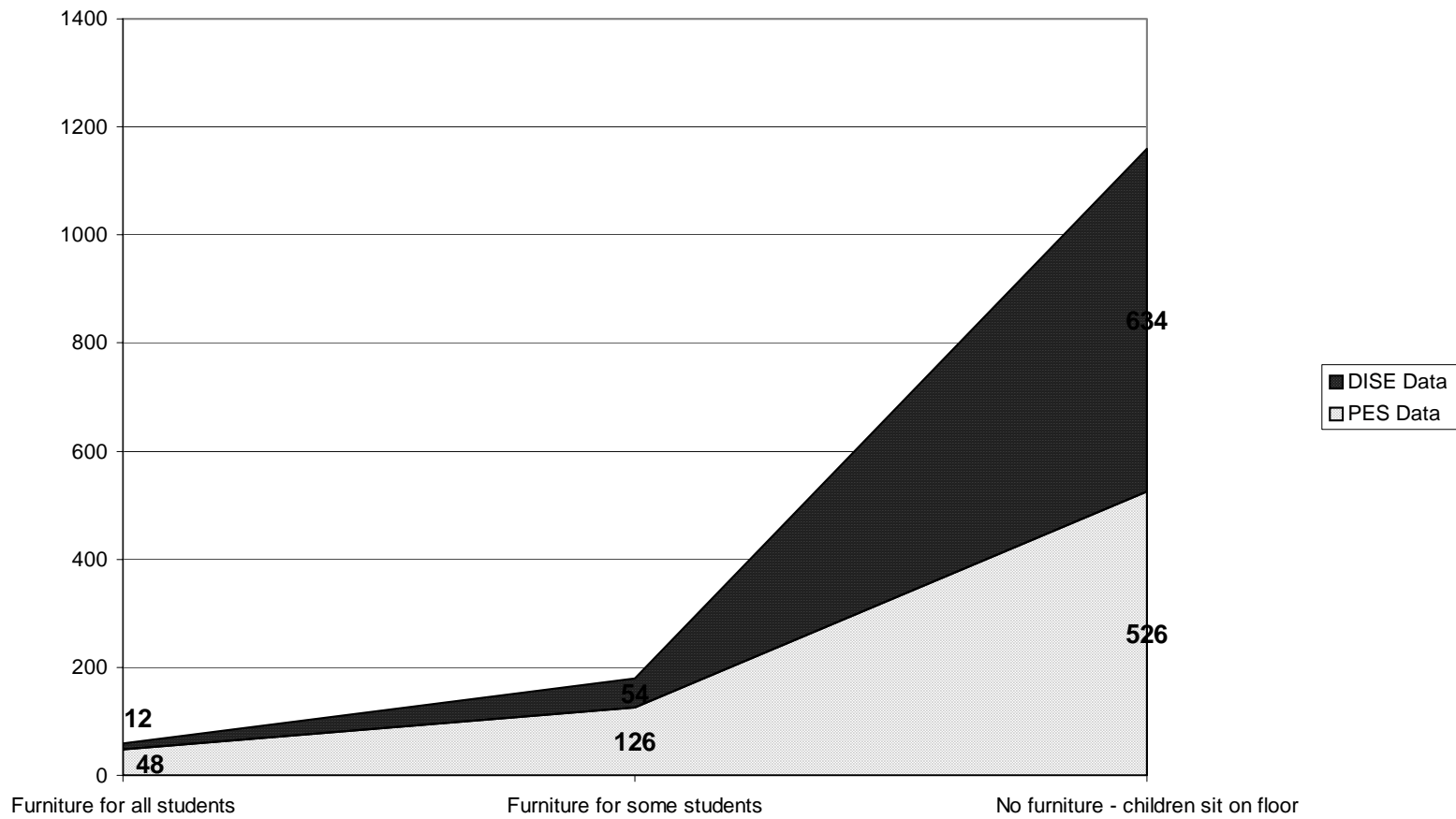
- a) Quantitative Value of items as per DISE Data - 700
- b) Quantitative Value of items as per PES Data - 700
- c) Quantitative Value of deviations ignoring  $\pm$  signs - 207
- d) Percentage deviation of DISE Data with PES Data - 36%
- e) Precision level of DISE data with relation to PES Data - 64%

**TABLE NO.3.21: 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	419	19	7	12	37	37	0	363	382	19
2	Primary with Upper Primary	150	10	2	8	32	6	26	108	139	31
3	Upper primary with Secondary or Higher Secondary	131	19	3	16	57	11	46	55	113	58
	Total	700	48	12	36	126	54	72	526	634	108

- a) Quantitative Value of items as per DISE Data - 700
- b) Quantitative Value of items as per PES Data - 700
- c) Quantitative Value of deviations ignoring  $\pm$  signs - 216
- d) Percentage deviation of DISE Data with PES Data - 31%
- e) Precision level of DISE data with relation to PES Data - 69%

**FIGURE-3.8: COMPARISON OF PES DATA WITH DISE DATA ON AVAILABILITY OF FURNITURE IN SCHOOLS**

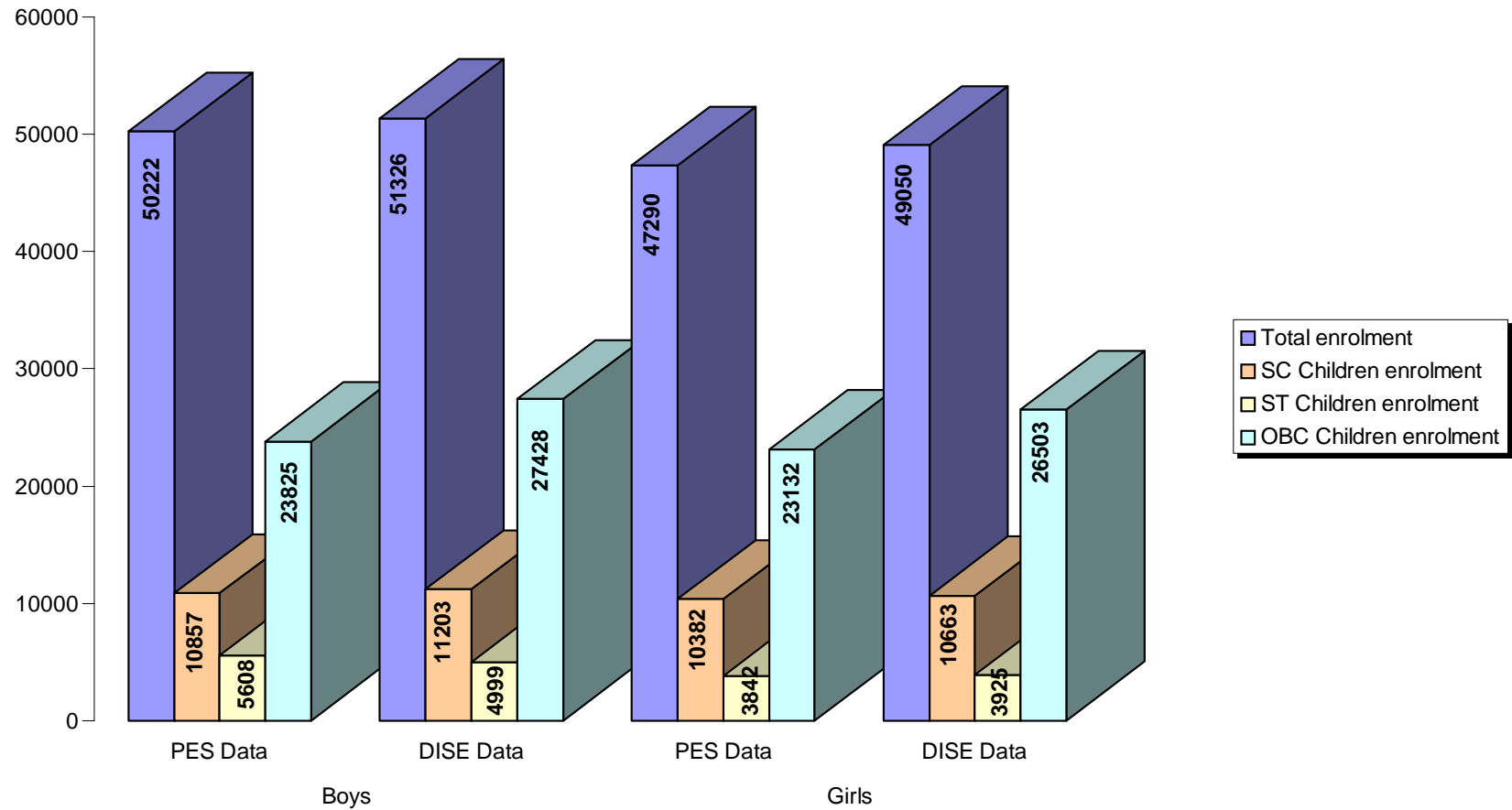


**TABLE NO.3.22: COMPARISON OF PES DATA WITH DISE DATA ON ENROLMENT OF CHILDREN IN 2005-06 – BOYS & GIRLS**

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	419	35193	39414	4221	9265	10326	1061	3557	3431	126	15124	20700	5576
2	Primary with Upper Primary	150	30873	33594	2721	6225	6520	295	2587	2801	214	16113	18865	2752
3	Upper primary with Secondary or Higher Secondary	131	31446	27368	4078	5749	5020	729	3306	2692	614	15720	14366	1354
	<b>Total</b>	<b>700</b>	<b>97512</b>	<b>100376</b>	<b>11020</b>	<b>21239</b>	<b>21866</b>	<b>2085</b>	<b>9450</b>	<b>8924</b>	<b>954</b>	<b>46957</b>	<b>53931</b>	<b>9682</b>

- a) Quantitative Value of items as per DISE Data - **100376**
- b) Quantitative Value of items as per PES Data - **97512**
- c) Quantitative Value of deviations ignoring  $\pm$  signs - **11020**
- d) Percentage deviation of DISE Data with PES Data - **11%**
- e) Precision level of DISE data with relation to PES Data - **89%**

**FIGURE-3.9: COMPARISON OF PES DATA WITH DISE DATA ON ENROLMENT OF CHILDREN IN 2005-06 – BOYS & GIRLS**



**TABLE NO.3.23: COMPARISON OF PES DATA WITH DISE DATA ON ENROLMENT OF CHILDREN IN 2005-06 – 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	419	16852	19170	2318	4484	5083	599	1875	1785	90	7133	9997	2864
2	Primary with Upper Primary	150	16003	17555	1552	3242	3417	175	1635	1768	133	8121	9558	1437
3	Upper primary with Secondary or Higher Secondary	131	17367	14601	2766	3131	2703	428	2098	1446	652	8571	7873	698
	<b>Total</b>	<b>700</b>	<b>50222</b>	<b>51326</b>	<b>6636</b>	<b>10857</b>	<b>11203</b>	<b>1202</b>	<b>5608</b>	<b>4999</b>	<b>875</b>	<b>23825</b>	<b>27428</b>	<b>4999</b>

- a) Quantitative Value of items as per DISE Data - 51326
- b) Quantitative Value of items as per PES Data - 50222
- c) Quantitative Value of deviations ignoring  $\pm$  signs - 6636
- d) Percentage deviation of DISE Data with PES Data - 14%
- e) Precision level of DISE data with relation to PES Data - 86%

**TABLE NO.3.24: COMPARISON OF PES DATA WITH DISE DATA ON ENROLMENT OF CHILDREN IN 2005-06 – 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	419	18341	20244	1903	4781	5243	462	1682	1646	36	7991	10703	2712
2	Primary with Upper Primary	150	14870	16039	1169	2983	3103	120	952	1033	81	7992	9307	1315
3	Upper primary with Secondary or Higher Secondary	131	14079	12767	1312	2618	2317	301	1208	1246	38	7149	6493	656
	<b>Total</b>	<b>700</b>	<b>47290</b>	<b>49050</b>	<b>4384</b>	<b>10382</b>	<b>10663</b>	<b>883</b>	<b>3842</b>	<b>3925</b>	<b>155</b>	<b>23132</b>	<b>26503</b>	<b>4683</b>

- a) Quantitative Value of items as per DISE Data - **49050**
- b) Quantitative Value of items as per PES Data - **47290**
- c) Quantitative Value of deviations ignoring  $\pm$  signs - **4384**
- d) Percentage deviation of DISE Data with PES Data - **9%**
- e) Precision level of DISE data with relation to PES Data - **91%**

**Table 3.25**

**PERCENTAGE DEVIATION AND PRECISION LEVEL OF DISE DATA FROM / WITH THE PES DATA TAKEN TOGETHER ALL COMPARABLE ITMES**

Sl. No.	Description of Comparable items	Quantitative Value under			Percentage	
		DISE	PES	Deviation ignoring $\pm$ within Sub-items	Deviation	Precision
1	2	3	4	5	6	7
1	Location of Schools	700	700	24	3	97
2	Type of Schools	700	700	34	5	95
3	Category of Schools	700	700	14	2	98
4	Lowest Class in Schools	700	700	80	11	89
5	Highest Class in Schools	700	700	56	8	92
6	Management of Schools	700	700	138	20	80
7	Residential Status of Schools	700	700	22	3	97
8	Part of Shift School	700	700	52	7	93
9	Sanctioned Teachers	3838	3330	508	15	85
10	In-Position Teachers	3318	3102	288	9	91
11	Status of School Building	700	700	186	27	73
12	Condition of Class Rooms	2567	2807	240	9	91
13	Electricity in Schools	700	700	24	3	97
14	Common Toilet in Schools	700	700	126	18	82
15	Separate Toilet for girls in Schools	700	700	128	18	82
16	Condition of Boundary Wall in Schools	700	700	96	14	86
17	Source of Drinking Water in Schools	700	700	106	15	85
18	Availability of Play Ground in Schools	700	700	94	13	87
19	Availability of Furniture in Schools	700	700	216	31	69
20	Children Enrolment - 2005-06	100376	97512	11020	11	89
	<b>Total</b>	<b>121299</b>	<b>117951</b>	<b>13452</b>	<b>11.40</b>	<b>88.60</b>

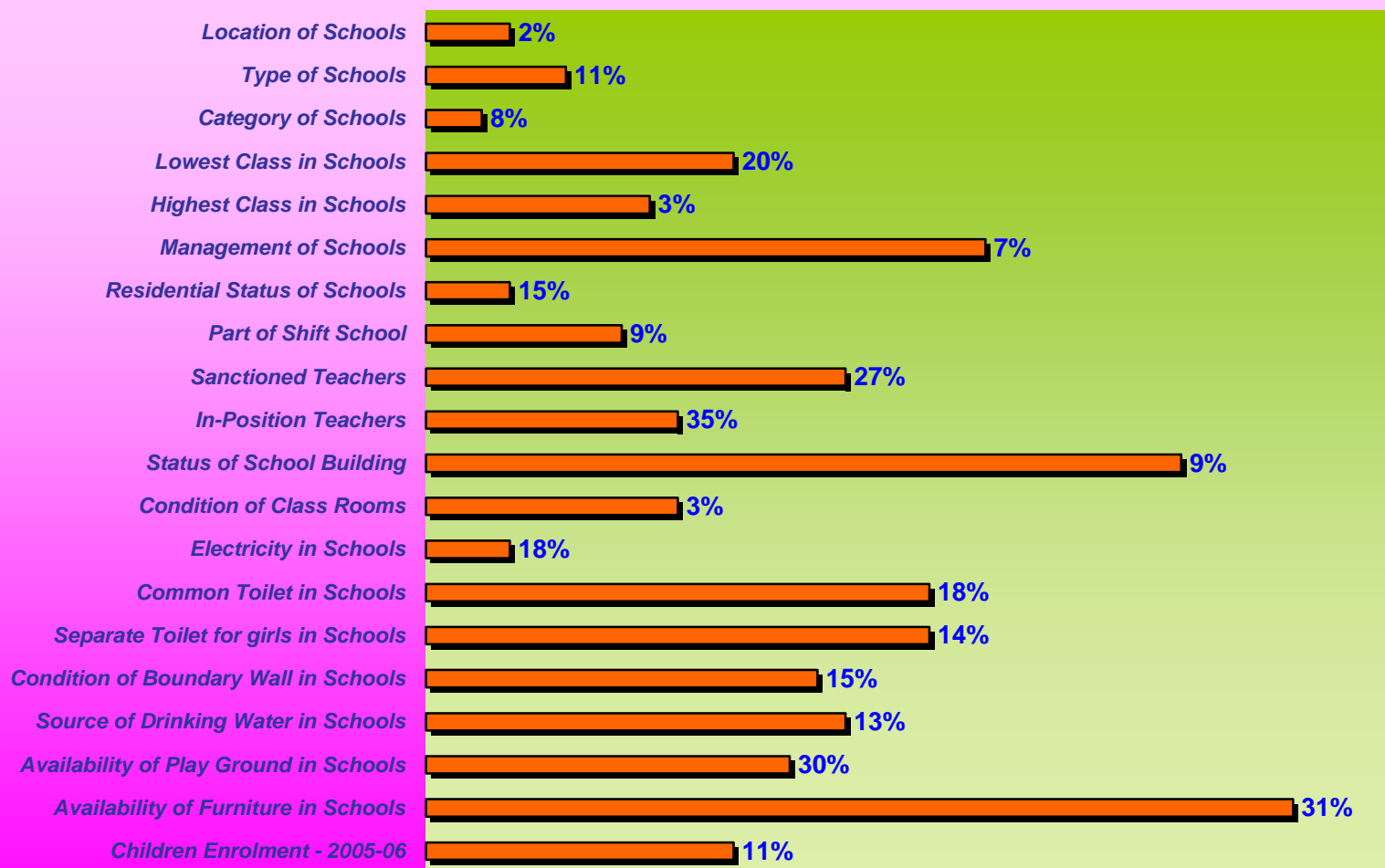
The above table infers that the overall deviations of data from PES data within the comparable items are 11.4% and thereby giving a precision level of 88.6%. The highest deviation of data is noticed in availability of computers in schools, number of blocks in schools, Availability of furniture in schools, and status of buildings, common toilets, children enrollment. This is because of the respondents in ability to interpret the item and under reporting 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. If necessary they can take the support of statistical department officials from Mandal and District.

The over all deviation is 11.4%, which is slightly above the permissible limit of 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.

**FIGURE-3.10: PERCENTAGE DEVIATION OF DISE DAT FROM / WITH THE PES DATA TAKEN TOGETHER ALL COMPARABLE ITMES**



# **CHAPTER -IV**

## **PES RESULTS**

## CHAPTER IV

### POST ENUMERATION SURVEY RESULTS

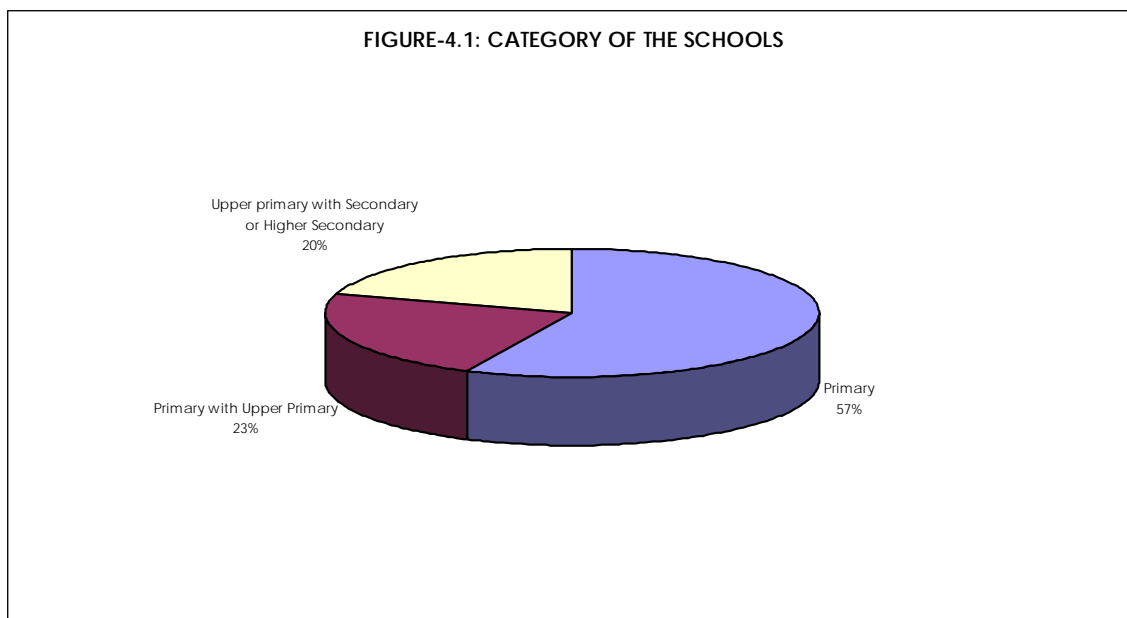
The inadequacy, up-to-date, reliable and comprehensive data about the state of school education, especially the primary education, render it difficult for the Planners, Policy and Decision Makers to identify appropriate measures and action on how to improve the quality of education and make it more accessible and available to the people. The Post Enumeration Survey envisioned to assess the quality check, verify 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 Table 4.1, the total number of schools covered under the study was 700 under Post Enumeration Survey. Out of this, majority of them i.e. 438(57%) were of Primary schools and 176 (23%) Primary with Upper Primary schools and the remaining 156 (20%) were Upper Primary with Secondary or Higher Secondary institutions. Graphical presentation of analysed data is presented in Fig. 4.1.

**TABLE- 4.1: DISTRIBUTION OF SAMPLE BY SCHOOL CATEGORY**

Sl. No.	School Category	Frequency	Percent	Valid Percent	Cumulative Percent
1	Primary	438	56.9	56.9	56.9
2	Primary with Upper Primary	176	22.9	22.9	79.7
3	Upper primary with Secondary or Higher Secondary	156	20.3	20.3	100
	<b>Total</b>	<b>770</b>	<b>100</b>	<b>100</b>	



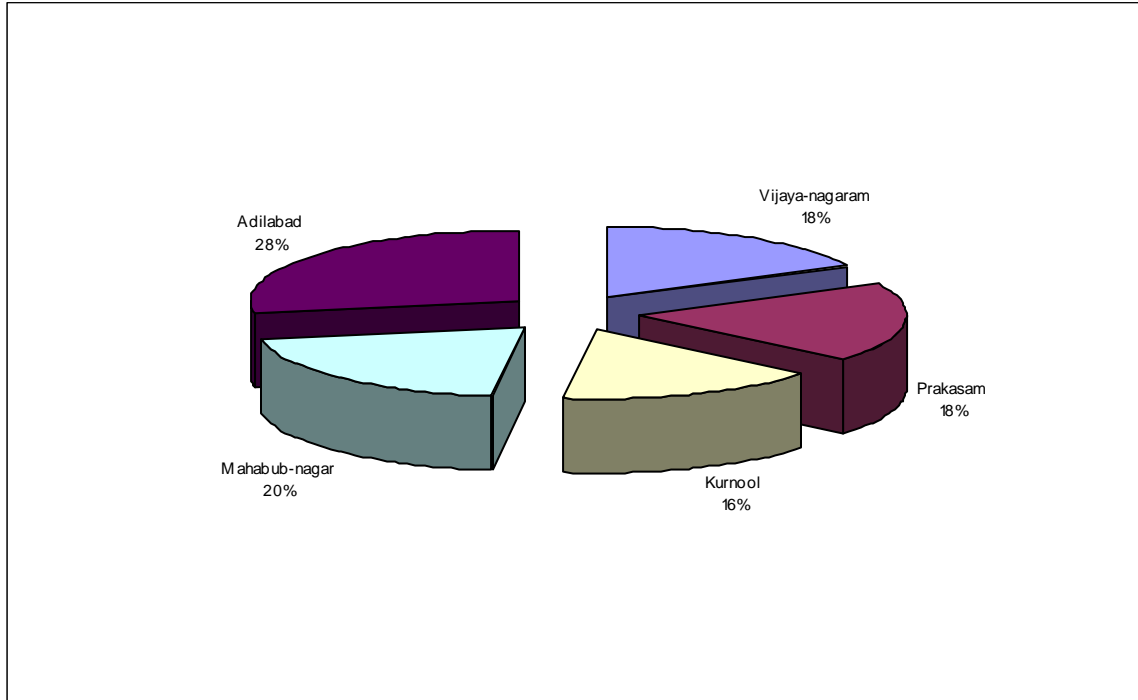
**b. Sample Distribution Across Districts**

In reference to distribution of sample schools by district the details are presented in Table 4.2 as well as Fig. 4.2.

**TABLE – 4.2: DISTRIBUTION OF SAMPLE BY DISTRICT**

Sl. No.	School Category	District					Total
		Vizia-nagaram	Prakasam	Kurnool	Mahabub-nagar	Adilabad	
1	Primary	81	95	70	86	106	438
2	Primary with Upper Primary	30	22	33	40	51	176
3	Upper primary with Secondary or Higher Secondary	25	24	20	30	57	156
	<b>Total</b>	<b>136</b>	<b>141</b>	<b>123</b>	<b>156</b>	<b>214</b>	<b>770</b>
	<b>%</b>	17.66	18.31	15.97	20.26	27.79	100

**Figure 4.2: Graphical Presentation on Sample Distribution by District**

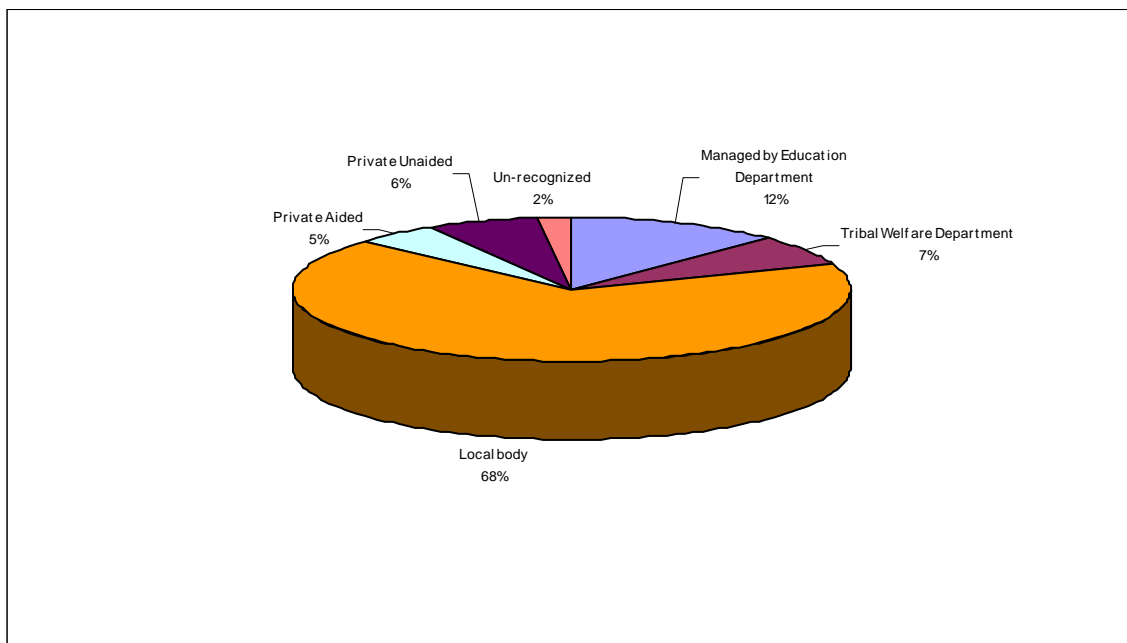


Among the five districts selected for the survey, Adilabad district (28%) has more coverage of schools than other districts and then followed by Mahaboobnagar (20%), Vizianagaram and Prakasham (18% each) and the remaining 16% were from Kurnool district. The variation in terms of number of schools was occurred due to sampling procedure based on revenue divisions and number of schools there of from the particular district. Consequently, Adilabad district, which has five revenue divisions, contributed more number of schools to the sample.

**c. Sample Distribution By School Management**

The distribution of sample by School Management is presented in Figure 4.3.

**Figure 4.3: Sample Distribution By School Management**



As per the details presented in Figure 4.3, it reveals that out of total 770 schools, 68% are run under local body ( Panchayati Raj Management), followed by 12% managed by Education Department, 7% under Tribal and Social Welfare department, 6% are private Aided and the remaining 2% are un recognized schools.

**d. Distribution of Sample By Location**

Details on sample distribution by location of schools are presented in Table 4.3.

**TABLE- 4.3: DISTRIBUTION OF SCHOOLS BY LOCATION**

Sl. No.	School Category	Rural / Urban		Total
		Rural	Urban	
1	Primary	359	79	438
2	Primary with Upper Primary	134	42	176
3	Upper primary with Secondary or Higher Secondary	109	47	156
	<b>Total</b>	<b>602</b>	<b>168</b>	<b>770</b>
	<b>%</b>	78.18	21.82	100.00

It is observed from the above Table that 602 schools (76.18%) were located in rural areas while 168 schools (21.82%) are located in urban areas. Within rural area schools, greater majority of schools (359) were Primary schools followed by 134 Primary with Upper Primary schools. In reference to urban area, majority of them (79) were Primary schools and then followed by 47 Upper Primary with Secondary and the remaining 42 were Primary with Upper Primary classes.

**e. Distribution of Sample By Type of Schools**

A detail of sample in this regard is presented in Table 4.4.

**TABLE-4: DISTRIBUTION OF SCHOOLS BY TYPE OF SCHOOL**

Sl. No.	School Category	Type of School			Total
		Boys only	Girls only	Co-educational	
1	Primary	2	8	428	438
2	Primary with Upper Primary	2	4	170	176
3	Upper primary with Secondary or Higher Secondary	11	21	124	156
	<b>Total</b>	<b>15</b>	<b>33</b>	<b>722</b>	<b>770</b>
	<b>%</b>	1.95	4.29	93.77	100.00

Out of 770 schools, 722 of them (93.8%) were co-educational schools and then followed by 33(4.3%) exclusively girls schools and 15(2%) Boy's schools.

**f. Detail of Sample by Type of School Building**

Detail on sample in this regard is presented in Table 4.5.

**TABLE- 4.5: DISTRIBUTION OF SCHOOLS BY TYPE OF SCHOOL BUILDING**

Sl. No.	School Category	Type of School Building					Total
		Pucca	Partially Pucca	Kuccha	Tent	No Building	
1	Primary	370	39	8	1	20	438
2	Primary with Upper Primary	147	26	2		1	176
3	Upper primary with Secondary or Higher Secondary	131	19	3		3	156
	<b>Total</b>	<b>648</b>	<b>84</b>	<b>13</b>	<b>1</b>	<b>24</b>	<b>770</b>
	<b>%</b>	84.16	10.91	1.69	0.13	3.12	100

It is seen from the above table that the greater majority of the schools - 648 (84%) - were being run in Pucca school building and then followed by 84(11%) in partially pucca buildings. Whereas 24 schools (3.12%) were not having buildings besides there are 13(1.6%) schools functioning in kuccha buildings.

**g. Distribution of Sample by Status of School Building**

Details on status of school building in reference to sample schools are presented in Table 4.6.

**TABLE- 4.6: 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	16	33	337	38	14	438
2	Primary with Upper Primary	27	18	111	16	4	176
3	Upper primary with Secondary or Higher Secondary	28	18	91	17	2	156
	<b>Total</b>	<b>71</b>	<b>69</b>	<b>539</b>	<b>71</b>	<b>20</b>	<b>770</b>
	<b>%</b>	9.22	8.96	70.00	9.22	2.60	100

The above table infers the status of school buildings. Majority of the schools 539(70%) were having Government own buildings, followed by 69(9%) schools in rented buildings, where as 71(9%) located in rent-free buildings and the remaining 20(2.60%) schools not having any buildings.

**h. Condition of Boundary Wall Among Sample School**

Particulars of sample schools in reference to condition of boundary wall are presented in Table 4.7.

**TABLE- 4.7: 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	
1	Primary	111	27	9	25	266	438
2	Primary with Upper Primary	58	16	10	2	90	176
3	Upper primary with Secondary or Higher Secondary	76	16	4	5	55	156
	<b>Total</b>	<b>245</b>	<b>59</b>	<b>23</b>	<b>32</b>	<b>411</b>	<b>770</b>
	<b>%</b>	31.82	7.66	2.99	4.16	53.38	100

The above table indicates the conditions of boundary wall in the sample schools. Out of 770 schools, 411 schools (53%) were not having the boundary wall, followed by 245 schools (31.8%) having Pucca boundary wall, where as 59 schools (7.66%) having pucca boundary wall but broken. Besides this, in 23 schools (3%) compounds were barbed with fencing and 32 schools (4.16%) with Heges.

**i. Source of Drinking Water in Sample Schools**

A detail of Drinking Water source in sample schools is presented in Table 4.8 as well as Figure 4.8.

**TABLE- 4.8: 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	196	8	59	10	165	438
2	Primary with Upper Primary	75	8	43	9	41	176
3	Upper primary with Secondary or Higher Secondary	60	13	42	9	32	156
	<b>Total</b>	<b>331</b>	<b>29</b>	<b>144</b>	<b>28</b>	<b>238</b>	<b>770</b>
	%	42.99	3.77	18.70	3.64	30.91	100

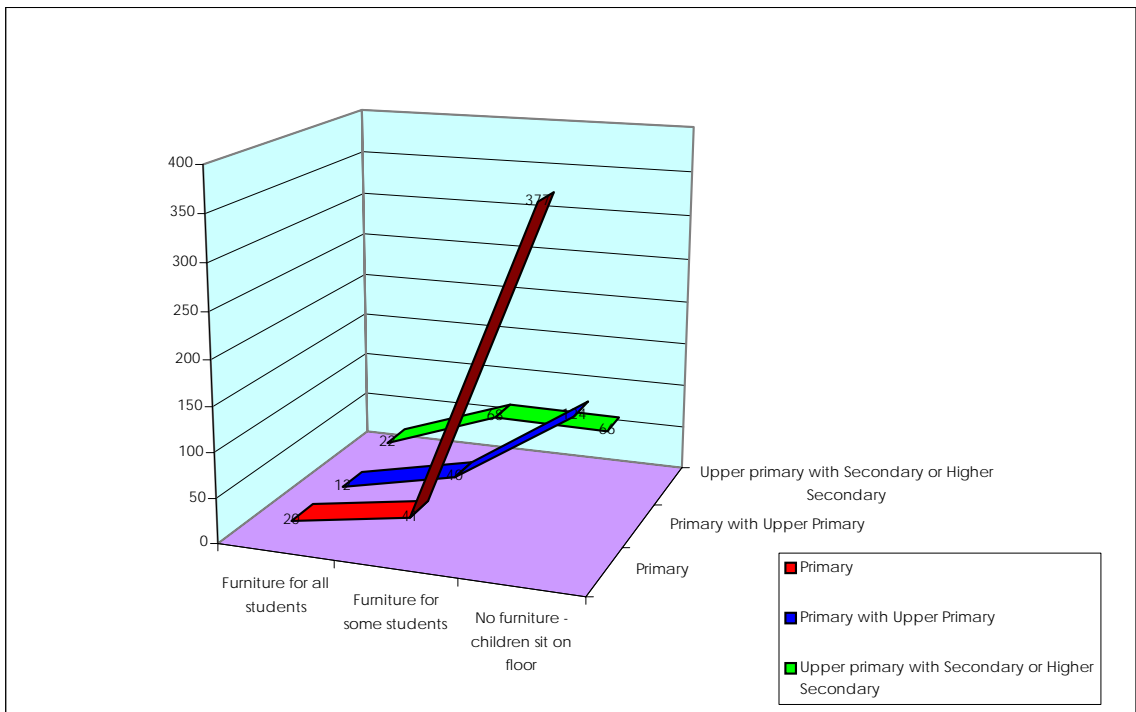
As detailed in the above-cited Table 4.8, majority of the schools (42.99%) were having Hand Pump as source of drinking water. However, considerable number of schools (30.91%) was not at all having drinking water facility. Tap Water as drinking water facility is found only in 144 schools (18.7%) and Well

Water in 29 schools (3.7%) and the remaining 28 schools (3.64%) depend on other sources for drinking water.

**h. Seating Arrangement for Children in Schools**

A detail in this regard is presented in Figure 4.4.

**Figure 4.4: Seating Arrangements for Children in Sample Schools**



The graph on seating arrangements for children in the schools reveals that out of 770 schools, 567 (73.63%) are not having furniture for children to sit, they are sitting on the floor and this includes majority of primary and upper primary schools. Only 54 schools (7%) were having furniture to all the students. Besides this, in 149 schools (19.3%) furniture is available for some students.

**i. 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 4.9.

**TABLE- 4.9: NUMBER OF TEACHER POSTS SANCTIONED AND IN POSITION**

Sl. No.	School Category	No. of Teacher Posts Sanctioned	No. of Teachers in Position
1	Primary	1142	1011
2	Primary with Upper Primary	1036	979
3	Upper primary with Secondary or Higher Secondary	1538	1442
	<b>Total</b>	<b>3716</b>	<b>3432</b>

The above cited Table on Number of teacher posts sanctioned and in position shows that a total of 3716 teachers posts were sanctioned in 770 sample schools and out of this 3432(92%) were in position.

**j. Number of Blocks in Sample Schools**

A detail on number of blocks in sample schools is presented in Table 4.10.

**TABLE- 4.10: NO. OF BLOCKS IN SAMPLE SCHOOLS**

Sl. No.	School Category	No. of Blocks in school
1	Primary	829
2	Primary with Upper Primary	678
3	Upper primary with Secondary or Higher Secondary	705
	<b>Total</b>	<b>2212</b>

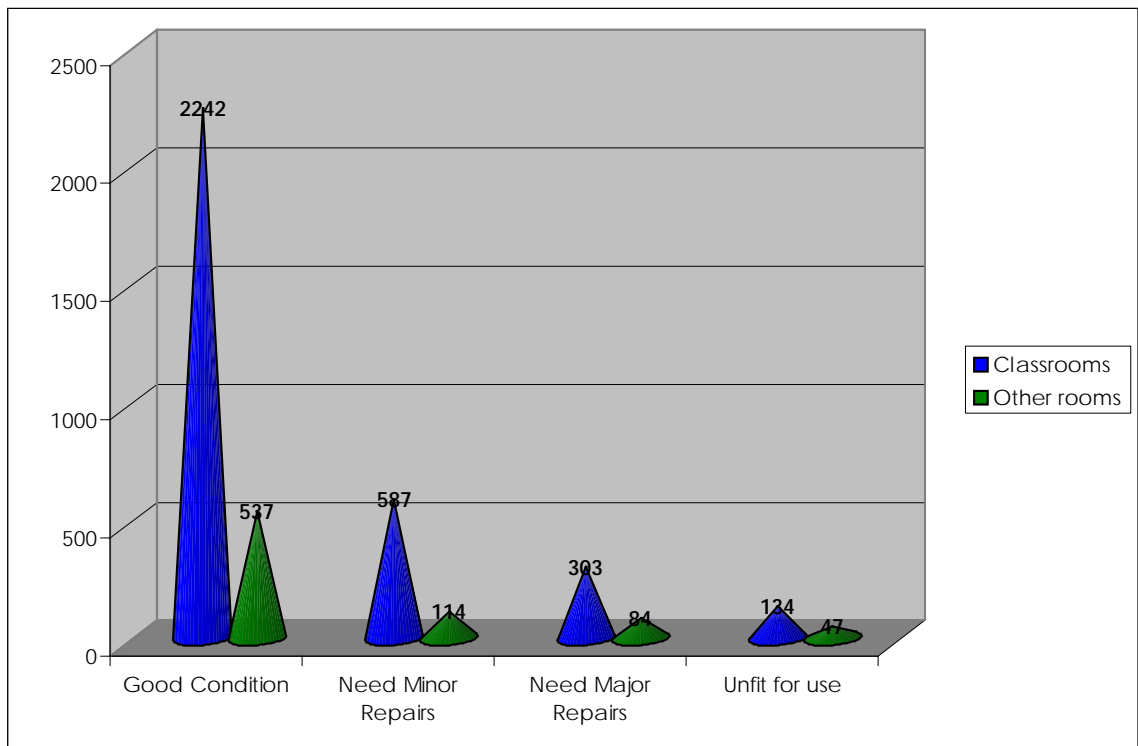
The above table reveals the number of Blocks in sample schools. There were 2212 blocks in 770 schools. Out of this 829 were in Primary Schools,

705 in Upper Primary with Secondary and the remaining 678 Primary with Upper Primary sections.

**k. Condition of Rooms in Schools**

A detail on physical condition of classrooms in sample schools is presented in Figure 4.5.

**Figure 4.5: Condition of Class Rooms and Other Rooms in Schools**



The above Figure reveals the condition of classrooms and other rooms of the sample schools. Out of total 770 schools, majority was in Good condition (68.65%). In reference to remaining schools, 17% of them (701) need minor

repairs, 9.5%(387) need major repair whereas the remaining 4.47% (181) rooms of the schools are not fit for use.

**I. Availability of Computers in Schools**

A detail in this regard is presented in Table 4.11.

**TABLE- 4.11: AVAILABILITY OF COMPUTERS IN GOOD WORKING CONDITION**

<b>Sl. No.</b>	<b>School Category</b>	<b>No. of computers available in good working condition</b>
1	Primary	61
2	Primary with Upper Primary	48
3	Upper primary with Secondary or Higher Secondary	514
	<b>Total</b>	<b>623</b>

The above table shows that out of 770 schools, 623 schools were having computers and are working in good condition and this includes 514 Upper Primary with Secondary schools followed by 61 Primary schools and the remaining 48 Primary with Upper Primary schools.

**j. Facilities in Schools**

A detail on various facilities in schools is presented in Figure 4.6. Out of 770 sample schools, as many as 742 of them were Day schools. Similarly, only in 27 schools there was a shift system while running the schools. However, in only 548 schools Electricity facility was available. As far as toilet facilities were concerned 357 schools have common toilets. However, only in 212 schools separate toilet facility for girls was available. In reference to play ground facility; only 412 schools have a playground facility for children.

Thus, in reference to facilities for school children, it is quite significant to observe that majority of the schools were devoid of separate toilet facility for girls

and this might be a hindering factor in improving girl's education in Andhra Pradesh.

**k. Enrolment of Children in Schools – 2005 - 06**

The details of enrolment for the academic year 2005 – 06 were presented in Figure 4.7. It indicates that enrolment ratio between boys and girls were quite encouraging though the girl's enrolment is marginally low. In reference to number of repeaters, Girls number is higher than that of boys. Among SC, ST and OBC children enrollment, there was a substantial gap observed only in ST Boys and Girls as well as Differently able children. Only 2% of the total enrolled children had left the school due to various reasons.

The observation in this regard necessitates more attention on girl child enrollment as well as improved means for retaining ST and Disabled children.

**l. Comparison of enrollment of children (2005-06 and 2006-07):**

A detail on comparison of the enrollment of children is presented in Figure 4.8 and 4.9 it indicates that SC and ST children's enrolment has come down in the year 2005-06 where as OBC and Disabled children's enrolment is more or less equal. The number of repeaters was increased from 750 to 1124. However, there was a decrease in number of dropouts from 2133 to 1491 in the sample schools, which has in fact been quite encouraging.

**m. 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 4.10. The attendance percentage was 82% in SC Boys, 81% in SC Girls is quite encouraging. Where as the attendance percentage among ST girls (78%)

and Boys (74%) was quite lesser. Besides this the overall Boys and Girls attendance percentage recorded was 84%.

## **INVESTIGATOR FEEDBACK ON SCHOOLS UNDER PES**

### **n. Functioning of Schools on the Day of Visit for PES**

A detail on functioning of schools selected for the sample is provided in Figure 4.11. The graph reveals that 93% of schools were found opened on the first visit in connection with PES and the remaining 7% schools found closed. To collect the Quality check data the investigators made a second visit to the 7% of schools among the 770 Schools selected for the survey.

### **o. Attributes Pertaining to the Principal Towards PES Investigators**

A detail in this regard is presented in Figure 4.12. The Graph shows the reaction of principal/HM towards the investigators of PES. The initial reactions of HM was quite positive in 85% schools where as in 15% of the schools the reaction was so casual and have shown least interest towards PES. In reference to response towards the survey, majority of the Hams (82.5%) showed good response and where as the remaining 17.5% Hams response could be accessed with much difficulty. Regarding the availability of records in the sample schools, it was revealed that in 79% of the schools record maintenance was good and in the reaming 21% records were not maintained properly.

### **p. Investigators Feedback on Different Variables of PES**

A detail in this regard is presented in Figure 4.13. In reference to providing information, It was noticed that 88% of the school Hams could able to provide the needful information and where as 22% Hams unable to provide the required

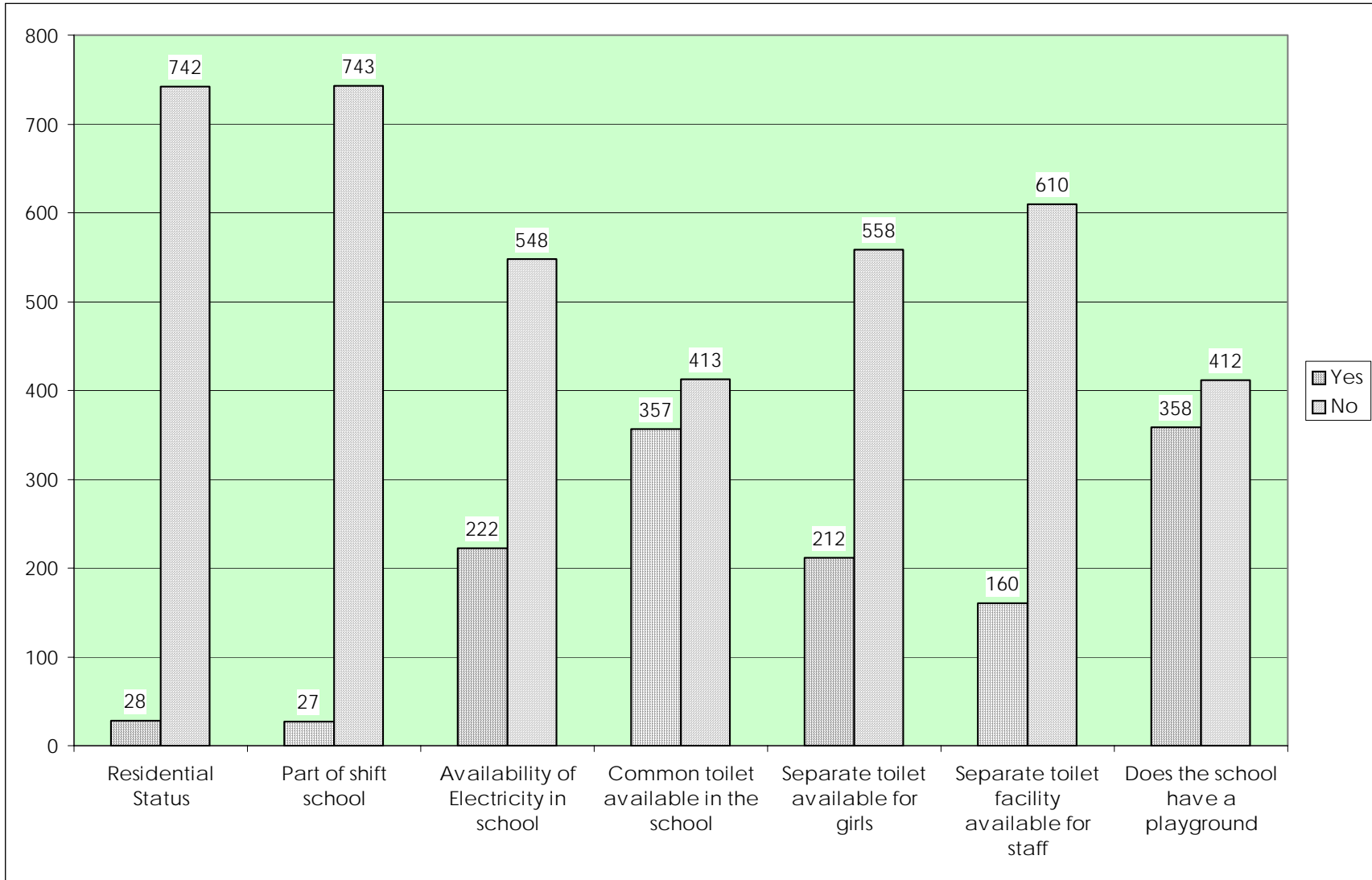
information. In reference to maintaining attendance register in schools, it was found that in 83% of the schools that teachers were properly filling up the attendance registers and in the remaining 17% of the schools there was a lapse in properly filling the registers concerned.

Approximately three fourth of the sample school Hams (71%) were having summary details of children in respective schools as well as habitations. In reference to remaining Hams, none of them were having access to needful data. In terms of School Report Cards, slightly more than half of the sample schools (57%) were having School report cards and the remaining 43% schools do not have the school report card.

In reference to timely attendance of teachers in respective schools, it was found that only in 83% of the schools it was noticed that teachers come on time where as in the remaining 17% schools teachers do not come on time.

Out of 770 sample schools, only 67% of schools posses photocopy of DISE filled in format where as the remaining 33% schools do not have the photocopy of DISE format. Similarly, only in 62,5% schools display boards were available and where as 37.5% schools display boards were not available.

**Figure 4.6: Facilities in Sample Schools**



**Figure 4.7: Enrolment Particulars of the Children in Schools – 2005-06 (1 to 8 Classes)**

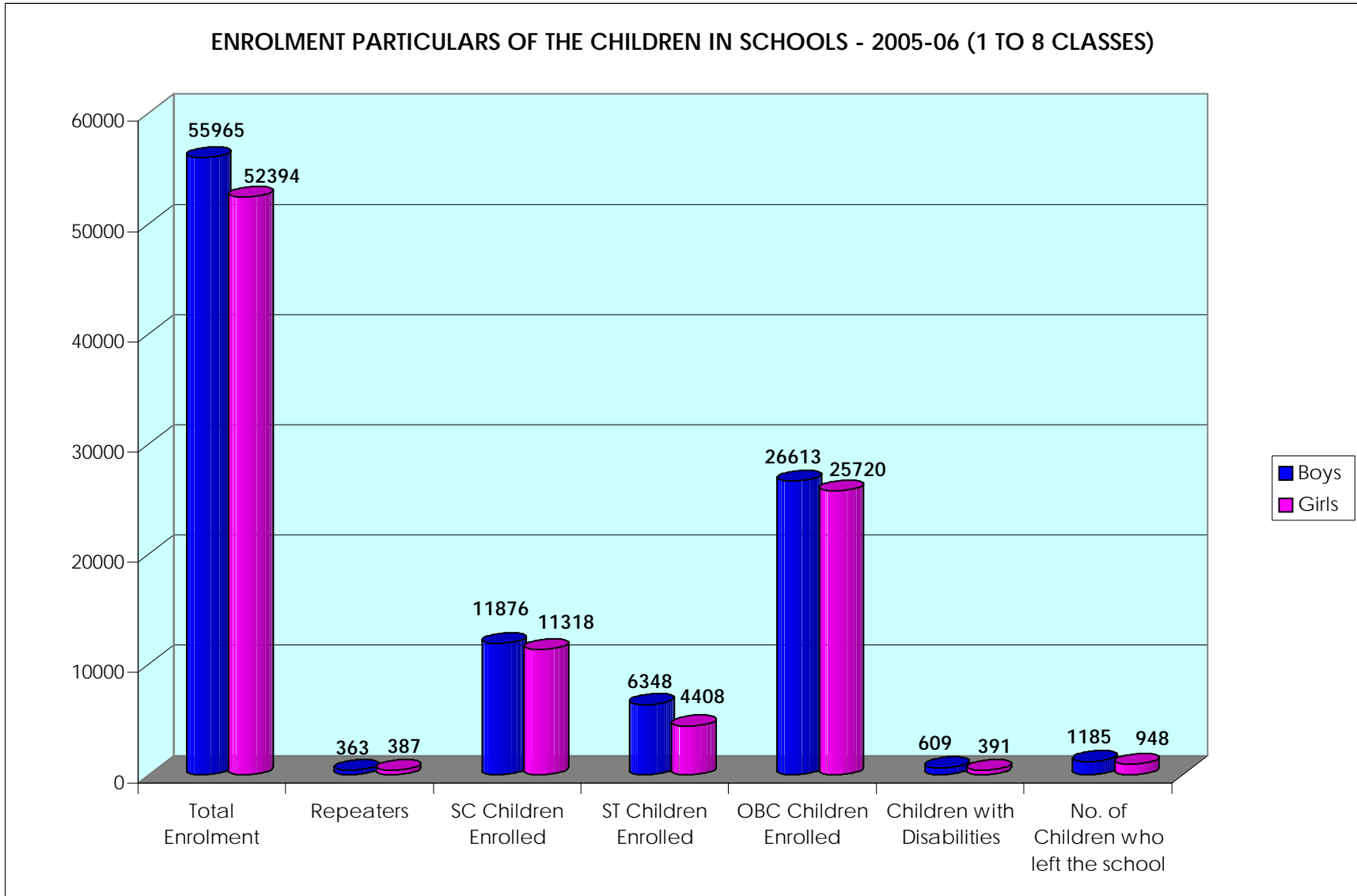
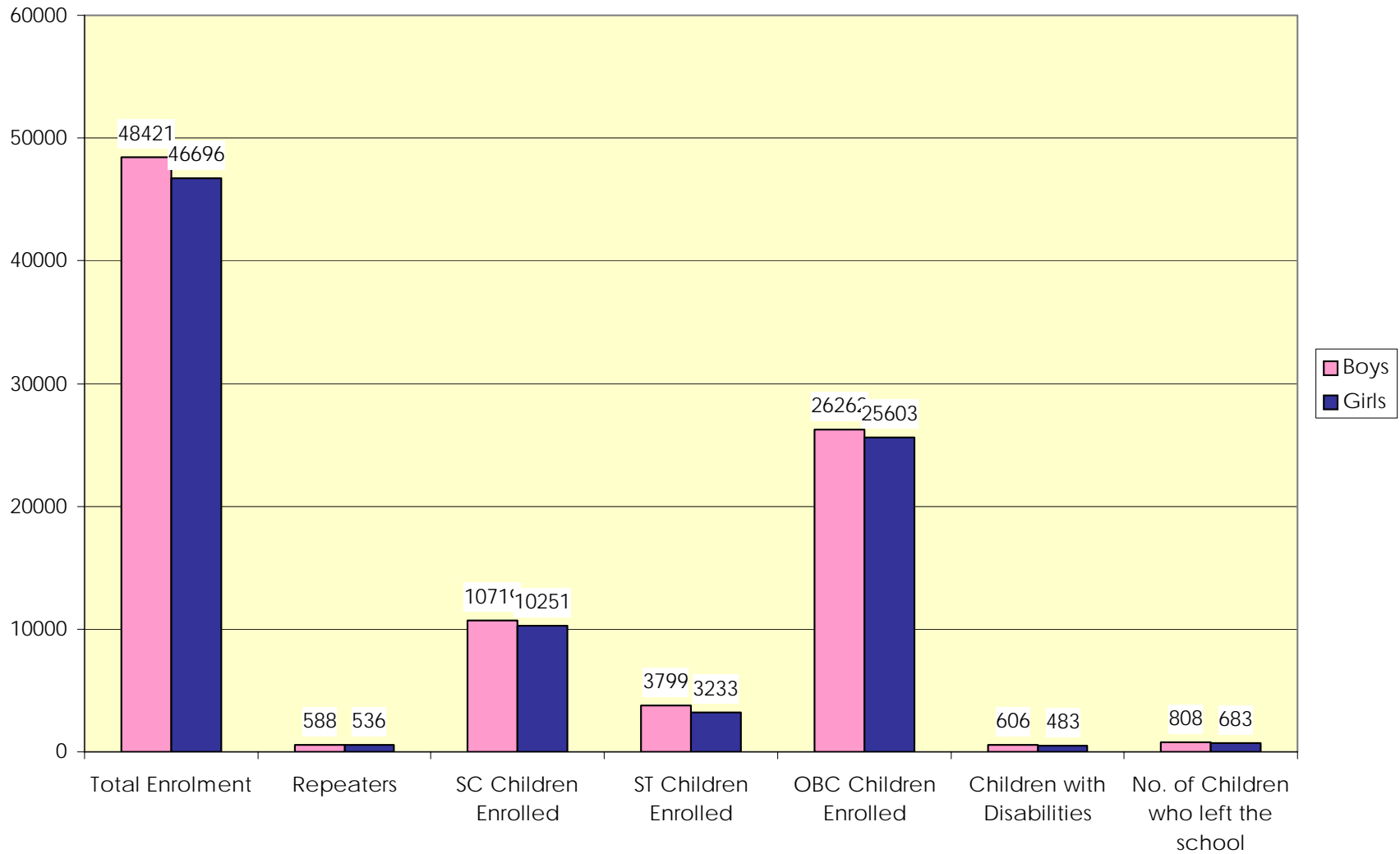


Figure 4.8: CHILDREN ENROLMENT IN THE PRESENT ACADEMIC YEAR – 2006-07 (1st to 8th Class)



**Figure 4.9: Comparison of Children Enrolment During 2005-06 and 2006-07**

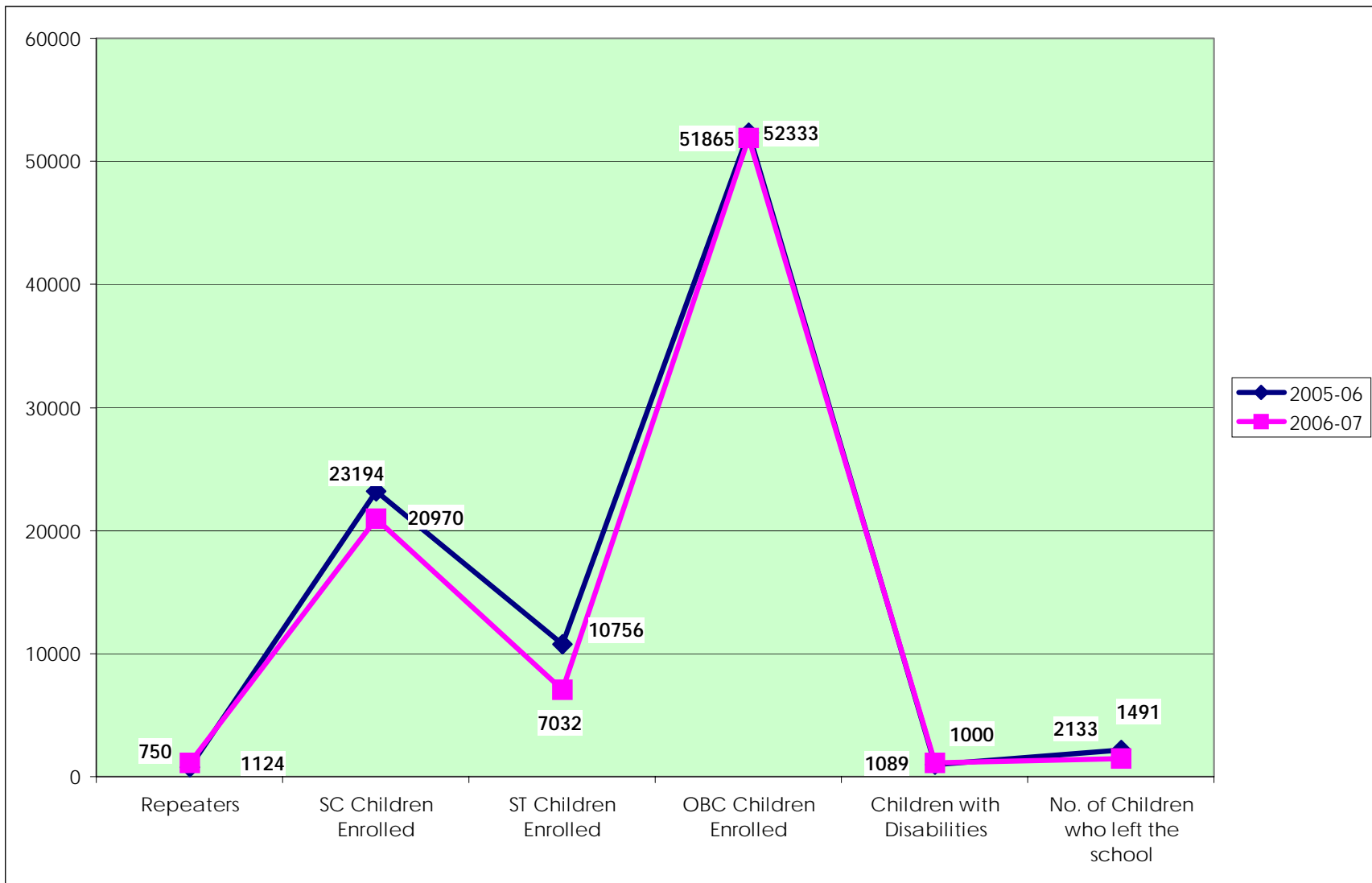
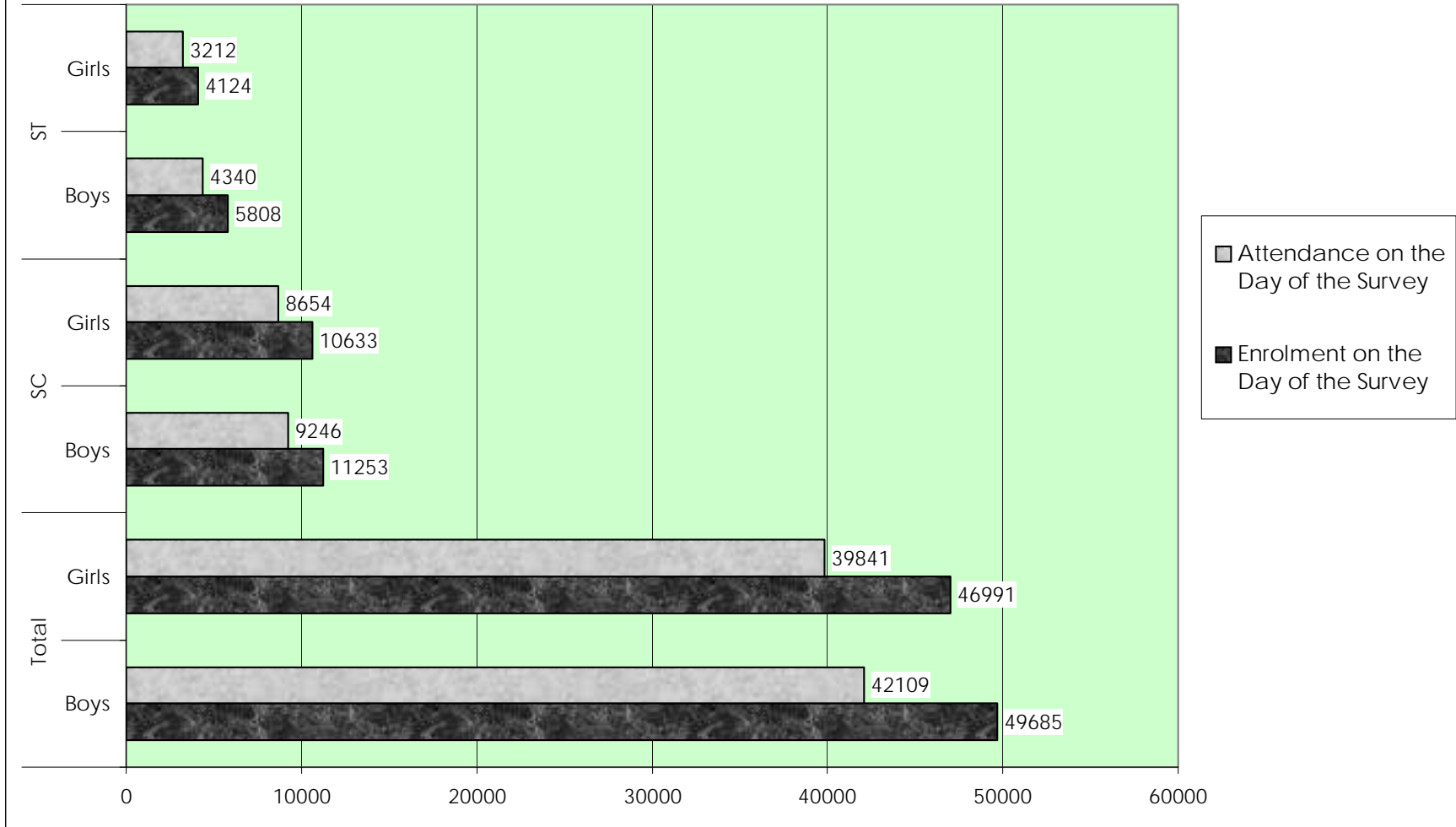
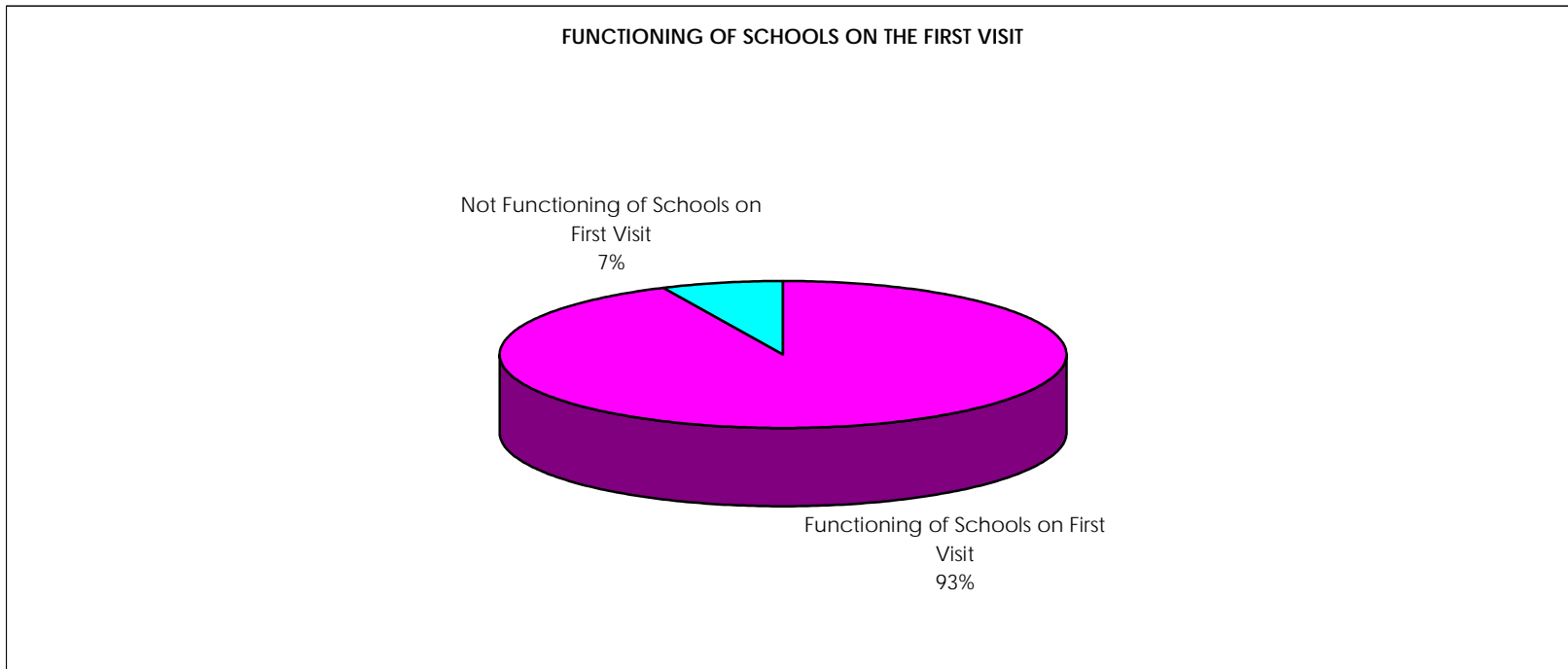


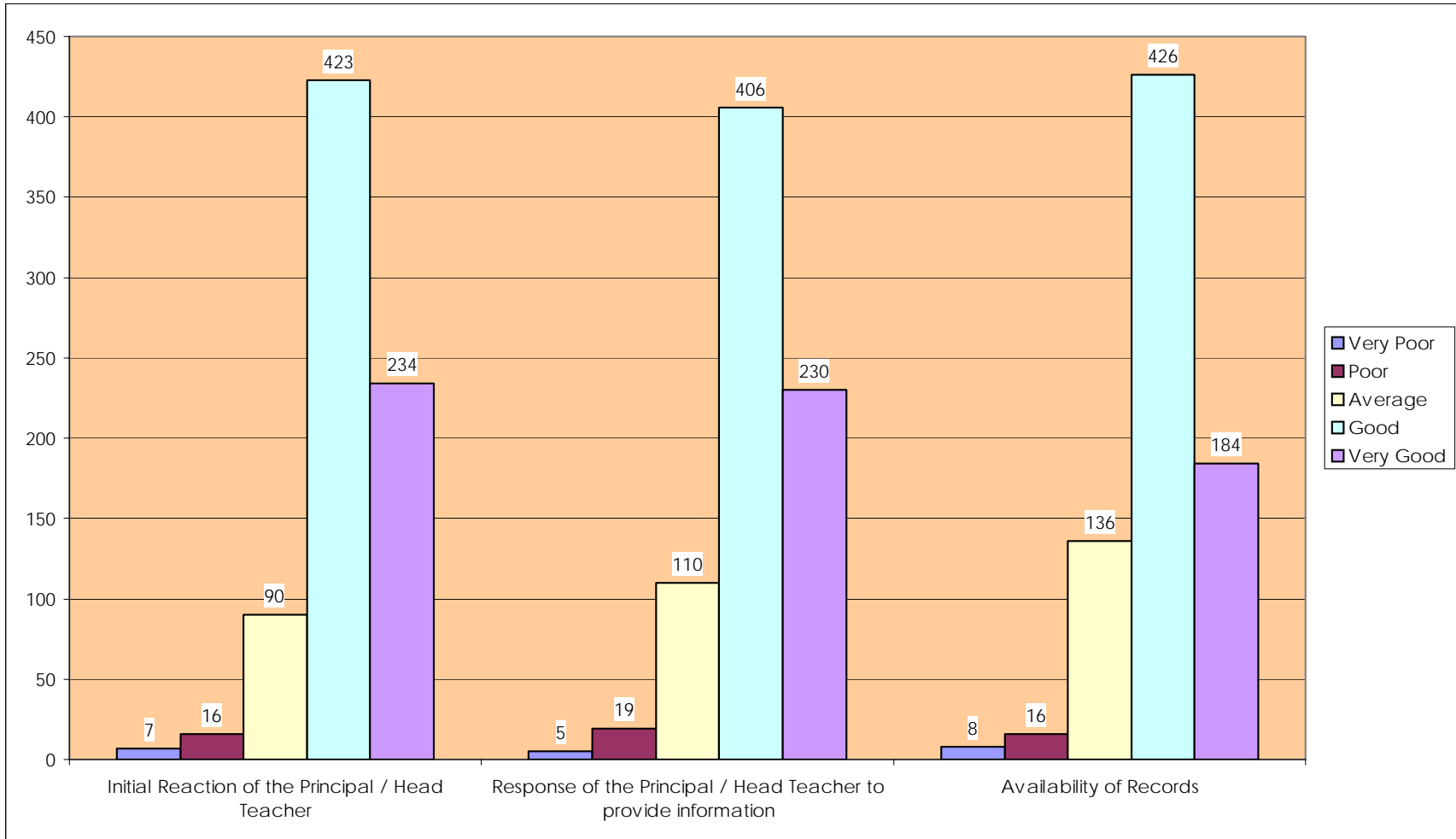
Figure 4.10: ENROLMENT AND ATTENDANCE OF CHILDREN ON THE DAY OF THE SURVEY



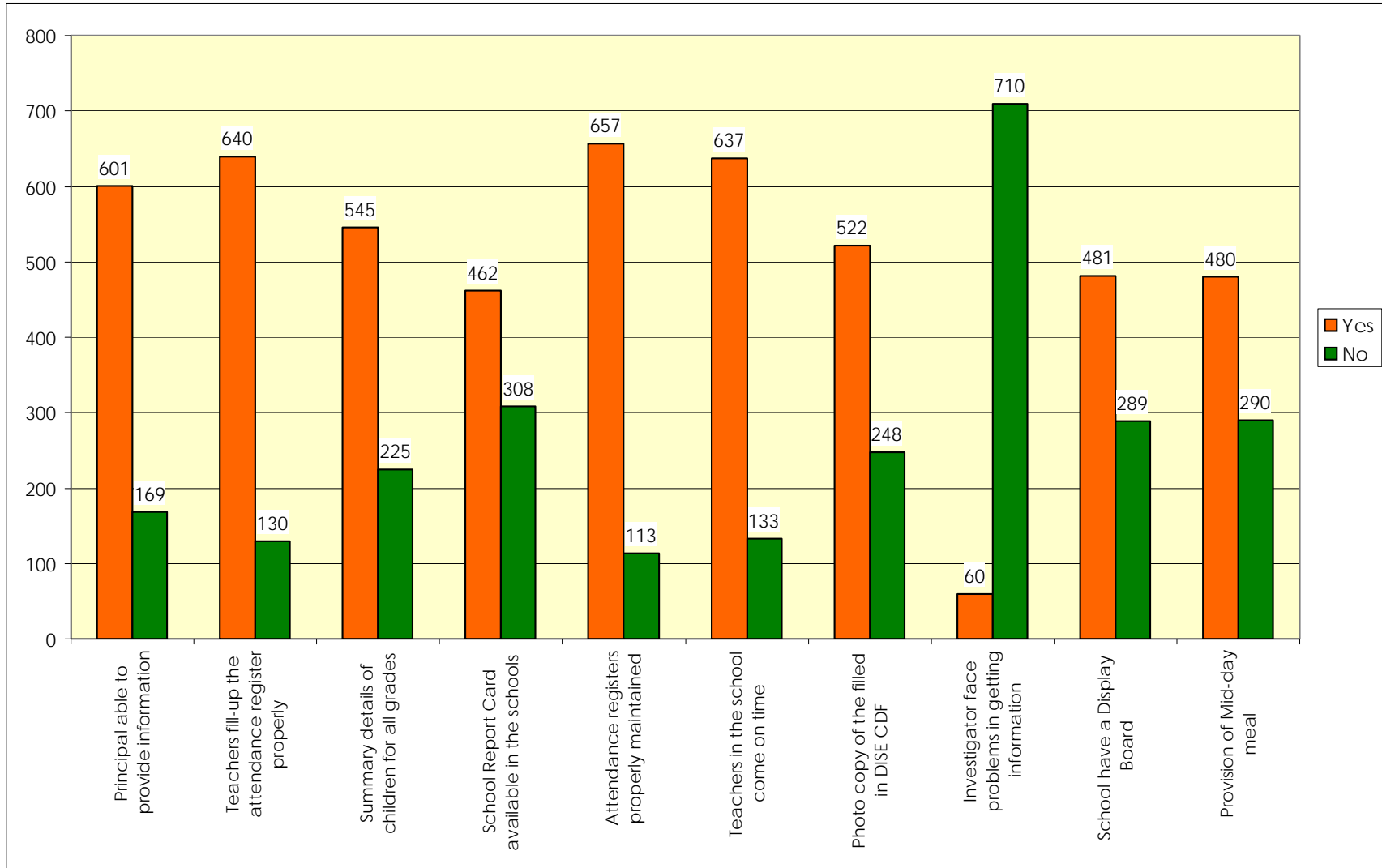
**Figure 4.11: Functioning of Schools on the First Visit of PES**



**Figure 4.12: Attributes Pertaining to the Principal Towards PES Investigators**



**Figure 4.13: Investigators Feedback on Different Variables of the PES**



# **CHAPTER-V**

## **CONCLUSIONS AND RECOMMENDATIONS**

## **CHAPTER V**

### **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 770 schools; out of this data pertaining to 70 schools was not matching with the DISE data. Hence, only 700 schools data was considered for comparison.

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

- Within the available comparable data, few schools did not provide the information on some of the items.
- The overall deviation of DISE data from PES data, in respect of all comparable of items, is 11.4%, which is slightly higher than the permissible percentage of deviation i.e. 10%, and there by giving a precision level of 88.6% for DISE data in relation to PES data.
- The highest deviation of data is observed in respect of items which are based on respondents interpretation i.e. Management, Number of Blocks in the schools, Status of school buildings, sanction of teacher posts and availability of computers, furniture etc.
- The items like number of blocks in schools, teacher posts sanctioned, teachers in position, disability, availability of

computers have not been reported properly. Hence, it was felt difficult to establish deviation on such an important variables.

- As much as seven per cent of schools among 770 schools were not open at the time of survey causing lot of inconvenience while collecting data.
- As much as 12% of Head Masters concerned could not able to provide requisite information pertaining to his/her school though records are available.
- Seventeen per cent of schools were not maintaining the records properly resulting in non-capture of data.
- Twenty Nine per cent of Head Masters do not have the details of even children enrolled in their respective schools and also habitations concerned.
- As high as 43% schools do not have School Report Card.
- In 17% of the schools, it was observed that Teachers were not on time to school for various reasons.
- Thirty Two per cent of the schools even do not have photocopy of DISE format though requisite instructions were in vogue.
- In as much as 37.5% 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 ST community, has recorded lesser frequency than other category.

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 like **enrolment, retention, dropout and attendance rate** in the data capture format resulting in effective enumeration of vital statistics.
- Certain aspects/variables found in DISE format like school establishment particulars, post sanctioned, budget releases are generally not available at school level. As a result, the DISE format suffers from vacuum in capturing such data. Hence, it would be better to collect such information from authorities of education administration at Mandal (block) or District level to maintain accuracy.
- 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. This has been resulting difficulty in establishing similarities or confirmation of data through Five Percent Check.

- The School complex 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.
- After collection of DISE data, there should be a proper scrutiny at school complex level as well as Mandal (block) level for ensuring data lapses.
- Effective supervision and monitoring should be ensured at Mandal and District level.
- Support of statistical expertise should be utilized at the mandal (block) level for scrutiny, processing and development of database. Convergence should be established with Chief Planning office at District level and at Mandal level with Statistical section of Mandal Revenue office for ensuring quality.
- MIS Units should be strengthened right from the mandal level to state level.

