CHAPTER IV

RESULTS

4.0. INTRODUCTION

This chapter deals with descriptive and statistical analysis of data and interpretations which are mainly collected through different tools. The term 'analysis' refers to the computation of certain measures along with searching for patterns of relationship that exist among data groups. The present study is mainly descriptive survey in nature. The main purpose of this study was to analyze the management of Government Primary Schools in relation to Teaching Inputs and Learning process in Kamrup metro urban. Accordingly, the management of the Government Primary schools in relation to Teaching outcomes were described and analyzed on the basis of the responses of Head masters, Questionnaire, Interview and observation method. The data were analyzed and interpreted based on the following objectives:

4.1. OBJECTIVE NO.1: TEACHING INPUT

Under this objective, the teaching inputs have been discussed in terms of infrastructure facilities and manpower available. The physical facilities include structure of building playground and basic amenities, provision of class rooms, library facilities, teaching learning materials, classroom infrastructure, furniture, toilet facilities, separate toilet facilities for girls, and safe drinking water provision. Manpower available includes number of teachers, Head masters and non-teaching staffs.

Table 4.1: Sample of the Study:

Category	Total	Percentage (%)
No. of schools	160	100
No. of students	15520	100
No. of male Teachers	268	39
No. of female Teachers	426	61
Trained Teachers	452	65
Untrained Teachers	242	35

Table 4.1 shows the total no. of sampled schools as 160. The table reveals that the total no. of students in the sampled Schools is 15520 and the numbers of teachers are 694. The teacher pupil ratio was found to be 1:22 out of which 39% (268) are male teachers and the rest 61% (426) are female teachers. Data also reveals that 65% (452) teachers are trained and 35% (242) are untrained teachers. As per the provision of RTE Act, all teachers should be compulsorily trained.

Graphical representation of Sample of the study:

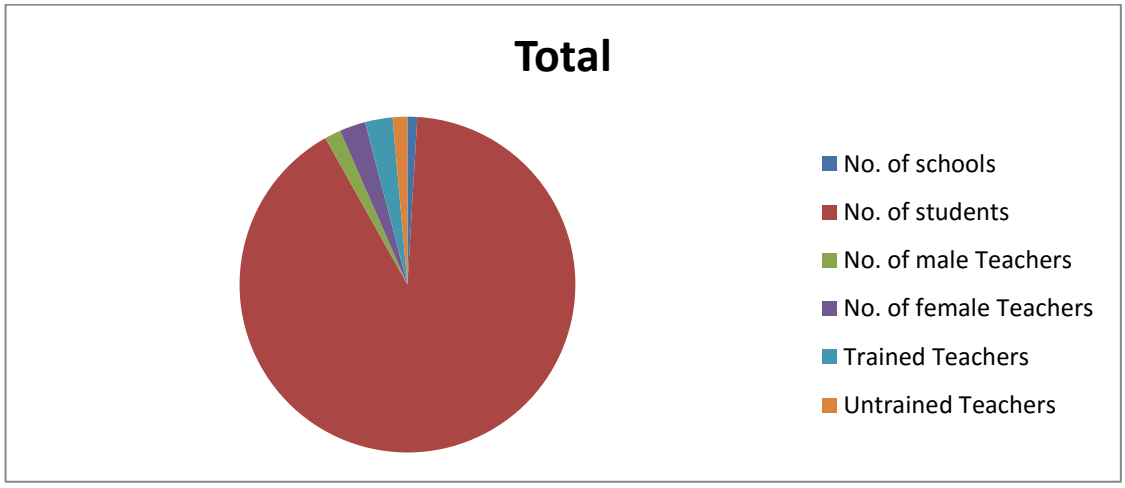

Figure: 4.1. Sample of the study

Table 4.2: Qualification of Teachers:

Qualification	Total No. Of Teachers	Percentage (%)
HSLC Teachers	83	12
Under graduate Teachers	245	35
Graduate Teachers	366	53

Table 4.2 reveals that out of the total 694 teachers, 53% (366) teachers are graduates, 35% (245) are undergraduates and 12% (83) are HSLC passed teachers. The reason for more graduate primary teachers is because more qualified graduate candidates applied for the post of primary teachers. Most of the matriculate teachers are aged who are nearing retirement whereas graduate primary teachers are mostly newly appointed teachers.

Graphical Representation of Qualification of Teachers:

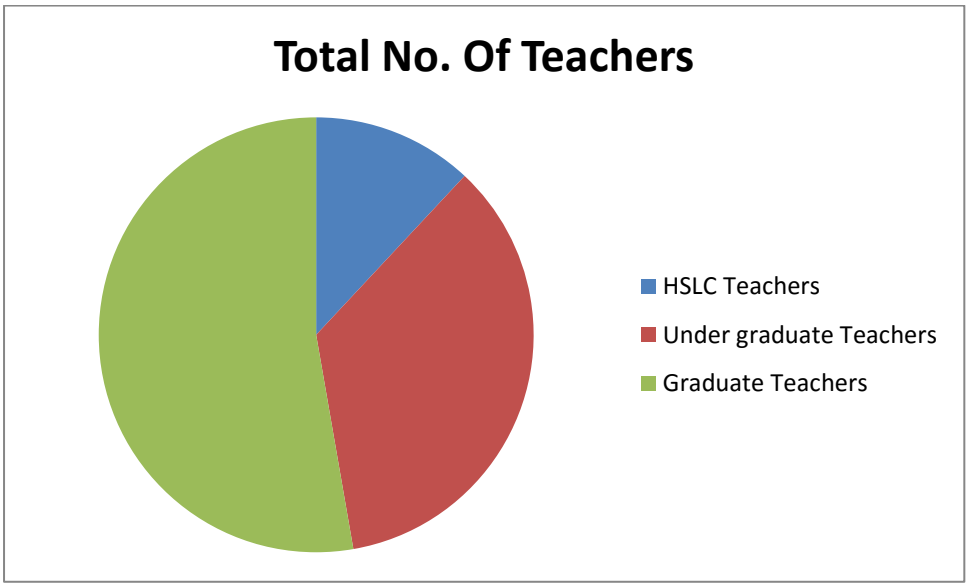

Figure: 4.2 Qualification of Teachers

Table 4.3: Structure, condition of Building and classroom:

Structure of Building	Pucca	%	Semi-Pucca	%	AT-Type	%
	160	100	Nil		Nil	
Condition of School Building	Good	%	Average	%	Below average	%
	48	30	6	3.8	106	66.2
No. of Classrooms	3 - 4 rooms	%	5-6 rooms	%	7-8 rooms	%
	83	51.9	73	45.6	4	2.5

Table 4.3 reveals that all 160 sampled schools constructed by Government of Assam has pucca building out of which, 30% (48) schools are found to be in good condition, 3.8% (6) schools are average and 66.2% (106) schools are found to be below average. Some deteriorating school buildings were newly constructed and were found to be in good condition. The main reason for the below average condition of the school structures is shortage of fund and non-funding for maintenance by the Government. Out of the total sampled schools, 51.9% (83) schools has 3-4 rooms, 45.6% (73) has 5-6 rooms and 2.5% (4) has 7-8 rooms; since the school building authority of the government has built school structures with lesser rooms, most of the schools are facing problems of inadequate class rooms.

Graphical representation of Structure, condition of school building and no. of classrooms:

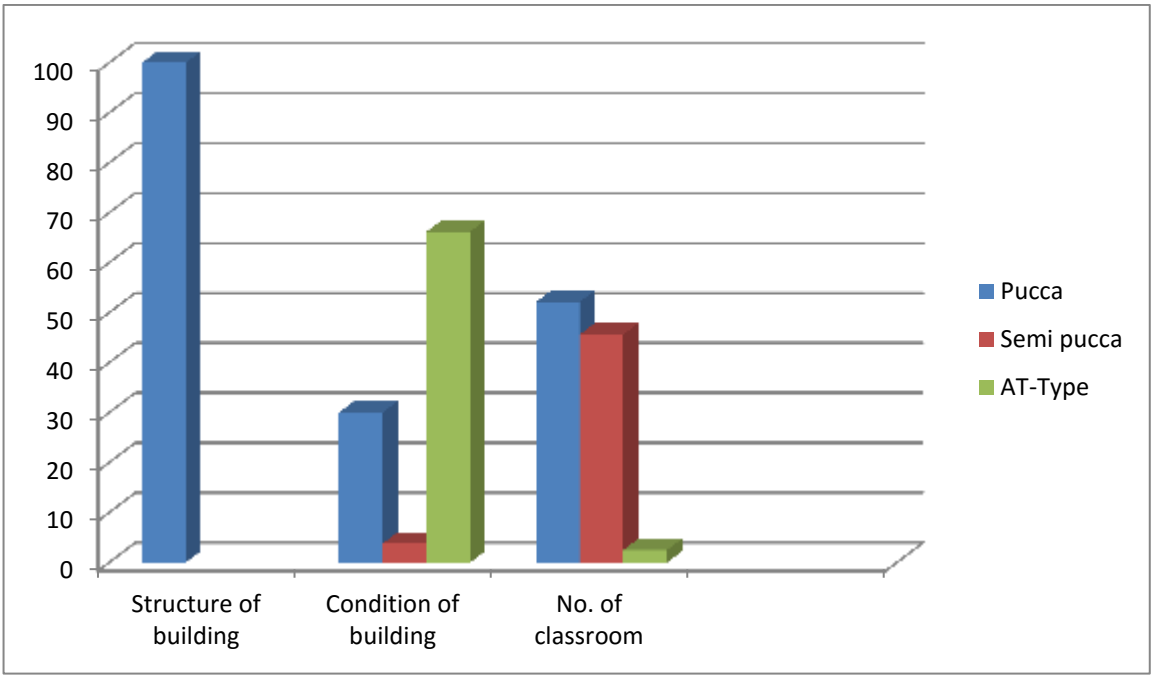

Figure: 4.3 Structure, condition of school building and no. of classrooms

Table 4.4: Playground and basic amenities

Categories	**Yes (No. of Schools)**	**%**	**No (No. of Schools)**	**%**
Provision of Playground	67	41.9	93	58.1
Provision of Electrification	130	81.2	30	18.8
Provision of Fire Extinguisher	74	46.3	86	53.7
Provision of First Aid	90	56.3	70	43.7

The above Table reveals that 41.9% (67) schools are found with playgrounds and 58.1% (93) schools are not having playgrounds. It has also been found that 81.2% (130) schools have electrification and 18.8% (30) schools without electricity, 46.3% (74) schools have fire extinguisher and 53.7% (86) do not have this provision, 56.3%

(90) schools have first aid kits and 43.7% (70) schools are found without this provision. The funds for electrification, fire extinguisher and first aid kits are managed by the respective school management itself and not provided by the Government.

Graphical representation of Playground and basic amenities:

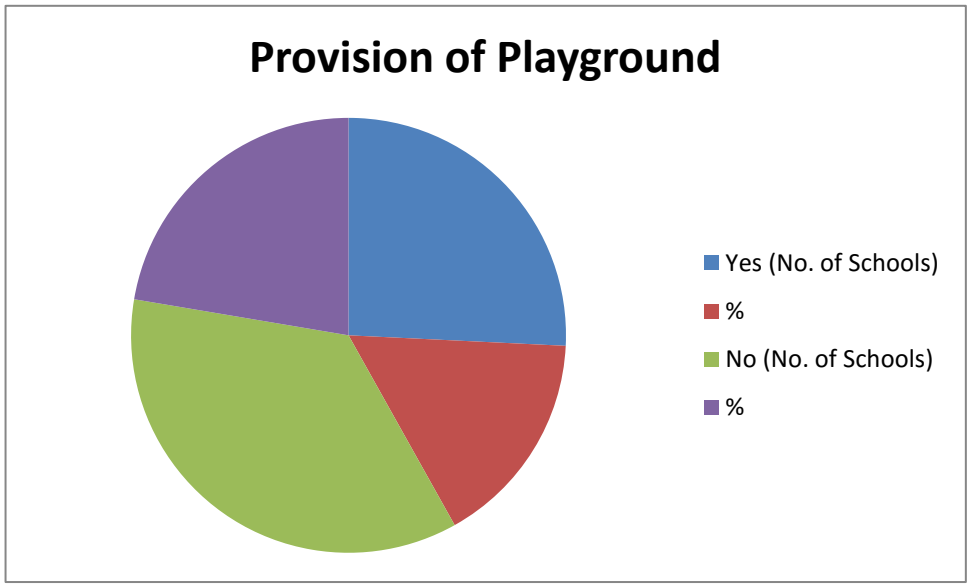

Figure: 4.4 Playground and basic amenities

Table 4 .5: Provision of Rooms:

Categories	Yes	%	No	%
Head Master's Room	26	16.2	134	83.8
Common Room	32	20	128	80
Office Room	48	30	112	70
Store Room	13	8.1	147	91.9
Ramp	26	16.2	134	83.8

Table 4.5 reveals that 16.2% (26) of the 160 schools have separate Headmaster's room and all the remaining 83.8% (134) schools were found without separate room for Headmaster; 20% (32) schools have separate room for teachers whereas 80% (128) schools does not have this facility; 30% (48) schools have separate office rooms whereas 70% (112) schools do not have separate office rooms; only 8.1% (13) schools have store rooms whereas 91.9% (147) schools do not have this facility. It was also found that 16.2% (26) schools have ramps but 83.8% (134) schools are without ramp. Lack of the above infrastructures was mainly due to low financial assistance from Government for school infrastructural development.

Graphical representation of Provision of rooms:

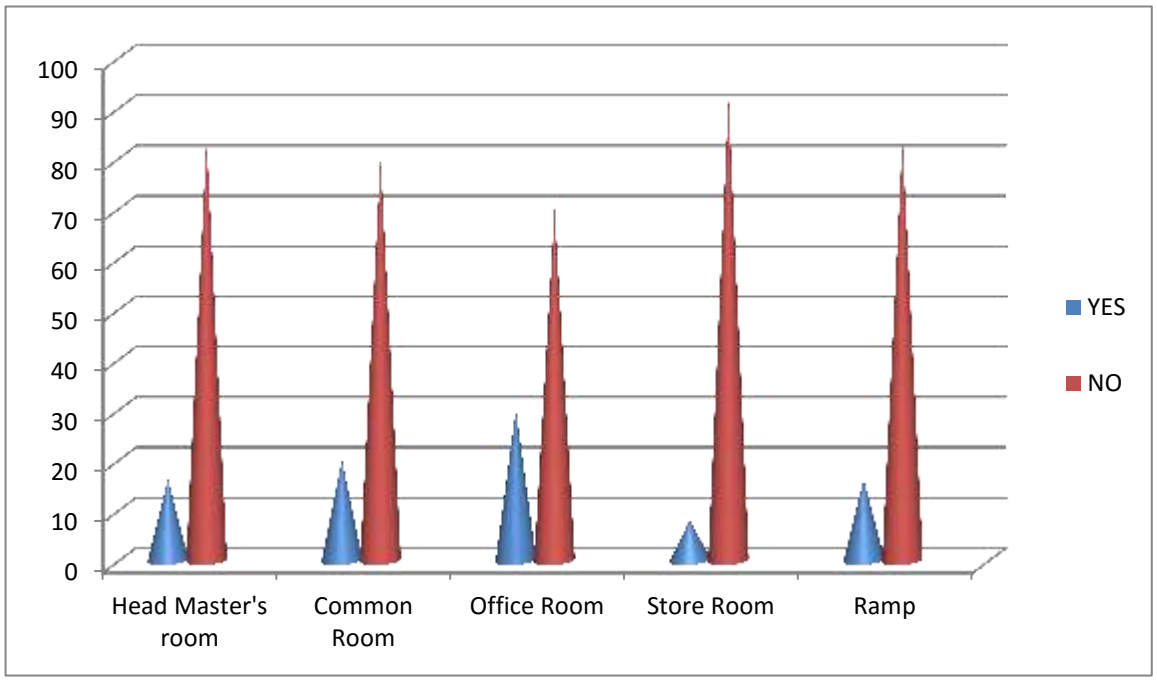

Figure: 4.5 Graph of Provision of rooms

Table 4.6: Library facilities:

Items	Yes	%	No	%
Books	70	43.8	90	56.2
Journal	16	10	144	90
Newspaper	67	41.9	93	58.1

Table 4.6 reveals that 43.8% (70) schools have Library books whereas 56.2% (90) do not have Library books; 10% (16) schools subscribes to Journals whereas 90% (144) schools do not subscribe Journals. Of the selected schools, 41.9% (67) school's library subscribes newspapers whereas 58.1% (93) schools do not provide newspapers in the Library. The above Library facilities are self managed by the respective schools and not financed by the government. Computer, internet, Xerox machines, library room and reading room were not found in all the schools.

Table 4,7: Teaching aids

Items	**Yes**	**%**	**No**	**%**
Maps	83	51.9	77	48.1
Charts	109	68.1	51	31.1
Pictures	109	68.1	51	31.9
Models	12	7.5	148	92.5
Globes	90	56.3	70	43.7
Science kits	6	3.7	154	99.3

Table 4.7 reveals that 51.9% **(**83) schools have maps whereas 48.1% (77) does not have maps as a teaching aid. Of the total Schools, 68.1% (109) have charts and pictures whereas 31.9% (51) do not have pictures as teaching aids. Only 7.5% (12) schools use models as teaching aid whereas 92.5% (148) do not use models; 56.3% (90) of the schools were found to have globes whereas 43.7% (70) are without globes. All the 160 schools used Black boards and chalks; 3.7% (6) of the schools have science kits whereas 99.3% (154) do not have science kit. None of the schools have laboratory and equipments.

Table 4.8: Classroom, furniture and infrastructure

Category	Good	%	Average	%	Below average	%
Provision of Desks	32	20	76	47.5	52	32.5
Provision of Benches	33	20.6	77	48.1	50	31.3
Provision of Almirahs	40	25	76	47.5	44	27.5
Provision of Tables	34	21.3	78	48.7	48	30
Provision of Chairs	36	22.5	80	50	44	27.5
Provision of Doors	32	20	78	48.7	50	31.3
Provision of Windows	37	23.1	75	46.9	48	30

Table 4.8 reveals that 20% (32) schools have good quality desk; 47.5% (76) have average and 32.5% (52) have below average quality desks; 20.6% (33) schools have good quality bench, 48.1% (77) have average and 31.3% (50) have below average benches; 25% (40) schools have good quality Almirahs, 47.5% (76) have average and 27.5% (34) have below average Almirahs; 21.3% (34) schools have good quality tables, 48.7% (78) have average and 30% (48) have below average tables; 22.5% (36) schools have good quality chairs; 50% (80) have average and 27.5% (44) have below average quality chairs; 20% (32) schools have good quality doors, 48.7% (78) have average and 31.3% (50) have below average quality doors; 23.1% (37) schools have good quality windows, 46.9% (75) have average and 30% (48) have below average windows.

Table 4.9: Toilet facilities

Structure of toilets	Pucca	%	Semi-pucca	%	AT-Type	%
	147	91.9	13	8.1	Nil	
Condition of toilets	Good	%	Average	%	Below Average	%
	10	6.3	Nil	Nil	150	93.7

Table 4.9 reveals that 91.9% (147) schools have Pucca structure toilets whereas 8.1% (13) were found to have semi-pucca type. The toilets of only 6.3% (10) schools were found to be in good condition whereas in 93.7% (150) schools the conditions were below average. Toilets constructed newly were found in good condition. Most of the toilets are in below average condition as the toilets were not properly maintained.

Table 5.0: Separate toilets facilities

Provision of Toilet	**Yes**	**%**	**No**	**%**
Teachers	140	87.5	20	12.5
Boys	160	100	Nil	Nil
Girls	160	100	Nil	Nil

Table 5.0 shows that 87.5% (140) schools have teachers' separate toilets whereas 12.5% (20) do not have separate toilets for teachers. All the 160 schools have separate toilets for boys and girls provided by government fund.

Table 5.1: Safe drinking water facility

Condition of water facility	**Good**	**%**	**Average**	**%**	**Below average**	**%**
	22	13.8	Nil	Nil	138	86.2

Table 5.1 shows that 13.8% (22) schools have safe good drinking water whereas 86.2% (138) have below average drinking water. The water facilities were managed by the respective schools. No government funds for the provision of safe drinking water.

Table 5.2: Enrolment of students

Year	Class-wise enrolment of students					
	Class I	**II**	**III**	**IV**	**V**	**Total**
2010	3540	3237	2778	2589	2274	14418
2011	3843	3345	3189	2424	2503	15304
2012	3708	3474	3309	2787	2352	15630
2013	3525	3375	3408	3075	2709	16092
2014	3588	3417	3210	2051	2034	14300
Total	18204	16848	15894	12926	11872	59652

Table 5.2 reveals the ascending and descending trend of student enrolment during 2010 to 2014 for classes I to V as 18204, 16848, 15894, 12926 and 11872 for respective classes. The number of enrolment in Class I is higher because of the awareness of free education among the parents in the first place but eventually the trend sets to descend because of increase in dropout. It can also be seen that the fluctuation in the total figure for Classes I to V for each year starting from 2010 to 2014 as 14418, 15304, 15630, 16092 and 14300. The main reason for this year wise fluctuation in enrolment in the total figure is due to the age appropriate enrolment as per the RTE provision.

4.2. OBJECTIVE 2: TEACHING LEARNING PROCESS

Under this objective, lesson plan and teaching aids, methods of teaching, attendance of teachers and students, co-curricular activities, inspection by the inspector, and inspection by School Management Committee (SMC) had been discussed.

Table 5.3: Attendance of teachers and students

Attendance	Regular	%	Off and On	%	Irregular	%
Teachers	**150**	**93.8**	**10**	**6.2**	**Nil**	
Students	**76**	**47.5**	**10**	**6.2**	**74**	**46.3**

Table 5.3 projects that 93.8% (150) teachers are regular and 6.2% (10) are found off and on regular. No teachers were found to be irregular. The teachers are regular in school as they normally get only 1 (one) casual leave per month and the school management and authority strictly observe teachers' attendance. It can also be seen that students in 47.5% (76) schools are regular; students in 6.2% (10) schools are off and on whereas 46.3% (74) schools have irregular attendance of students. The irregularities of students are mainly due to lack of interest in study, helping parents in house hold works and daily bread earning and negligence of the parents in children's study.

Table 5.4: Method of teaching

Method of teaching adopted by the teachers	Demonstration	%	Activity method	%	Field trip	%
	150	93.8	7	4.3	3	1.9

Table 5.4 reveals that teachers in 93.8% **(**150) schools adopted Demonstration method, teachers in 4.3% (7) schools adopted Activity method whereas in 1.9% (3) schools adopted Field trip methods.

Table 5.5: Lesson plan and teaching aids:

Category	Yes	%	Yes	%
Teachers with lesson plan	13	8.1	147	91.9
Using Teaching Aids	15	9.4	145	90.6

Table 5.5 projects teachers in 8.1% (13) prepared lesson plans whereas majority teachers in 91.9% (147) schools do not prepare lesson plans. It was also found that teachers in 9.4% (15) schools were using teaching aids all the time whereas 90.6% (145) schools do not use teaching aids.

Table 5.6: Co-curricular activities

Provision of co-curricular activities	Games & Sports	%	Artistic activities (Dance, drama, music, painting, drawing)	%	Both	%
	12	7.5	70	43.8	78	48.7

Table 5.6 projects that 68.1% (109) schools organize annual co-curricular activities participation programme for students and 31.9% (51) schools do not organize co-curricular activities. It can be seen that 7.5% (12) schools organized Games & Sports, 43.8% (70) schools organized artistic activities, 48.7% (78) schools organized games & sports and Artistic activities.

Table 5.7: Inspection by the Inspector

No. of Inspection by Inspector	Year	Regularly	%	Sometimes	%	Never	%
	2010	96	60	Nil	NIL	64	40
	2011	96	60	Nil	NIL	64	40
	2012	106	66.2	4	2.5	50	31.3
	2013	118	73.8	4	2.5	38	22.7
	2014	134	83.7	4	2.5	22	13.8

Table 5.7 reveals that in 2010 and 2011, 60% (96) schools were inspected by the inspector regularly whereas 40% (64) schools had no inspection; in 2012, 66.2% (106) schools were inspected regularly whereas 2.5% (4) schools were inspected sometimes and i.e.50 (31.3%) schools were not inspected. ln 2013, 73.8% (118) were inspected regularly; 2.5% (4) were inspected sometimes and 22.7% (38) have no visits from the inspector; in 2014, 83.7% (134) schools have regular inspection; 2.5% (4) schools were sometimes and 13.8% (22) schools have no inspection. The visiting Inspector checked the problems of the school, attendance of the teacher and students. As per record received from Head master, Inspection is done four times or more in a year which is regular and less than four recorded as sometimes.

Graphical Representation of Inspection by the Inspector:

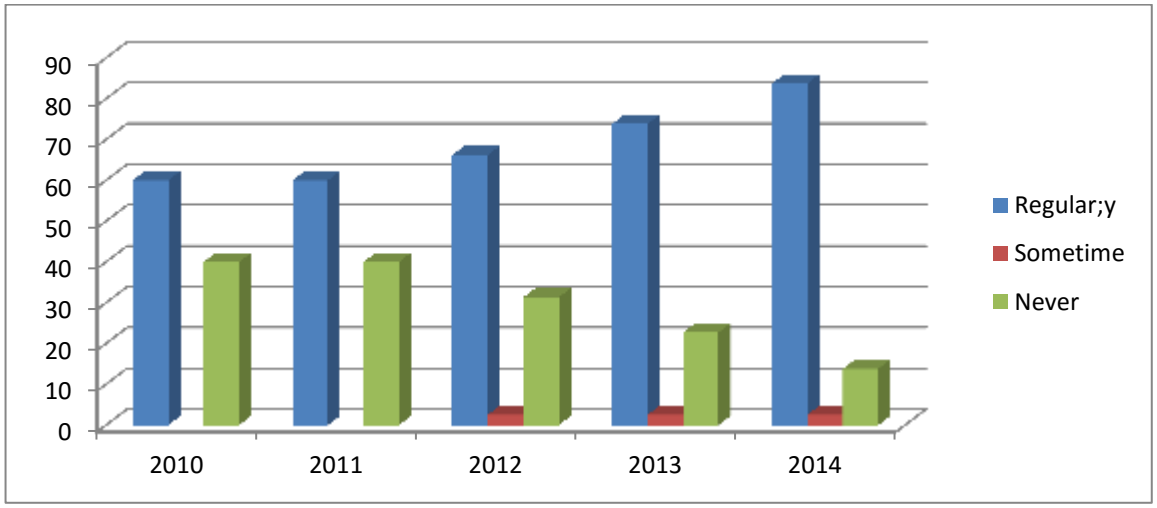

Figure: 4.6 Inspections by School Inspector

Table 5.8: Inspection by School Management Committee (SMC)

No. of Inspection by SMC	Year	Regularly	%	Sometimes	%	Never	%
	2010	87	54.4	10	6.2	63	39.4
	2011	79	49.3	14	8.8	67	41.9
	2012	87	54.4	25	15.6	48	30
	2013	108	67.6	30	18.7	22	13.7
	2014	107	66.8	25	15.7	28	17.5

Table 5.8 reveals that in the year 2010, 54.4% (87) schools have been inspected regularly by SMC, 6.2% (10) schools inspected sometimes, 39.4% (63) schools never inspected by SMC. ln 2011, 49.3% (79) schools inspected regularly; 8.8% (14) sometimes; 41.9% (67) never inspected. In 2012, 54.4% (87) schools inspected regularly by SMC; 15.6% (25) schools inspected sometimes. ln 2012, 54.4% (87) schools inspected regularly; 15.6% (25) inspected sometimes; 30% (48) never inspected by SMC. In 2013, 67.6% (108) schools inspected regularly by SMC; 18.7%

(30) inspected sometimes and 13.7% (22) school never inspected. ln 2014, 66.8% (107) schools were inspected regularly by SMC; 15.7% (25) schools inspected sometimes; 17.5% (28) schools never inspected. The SMC checked the school problems, the attendance of the teachers and students more regularly.

Graphical Representation of Inspection by the Inspector:

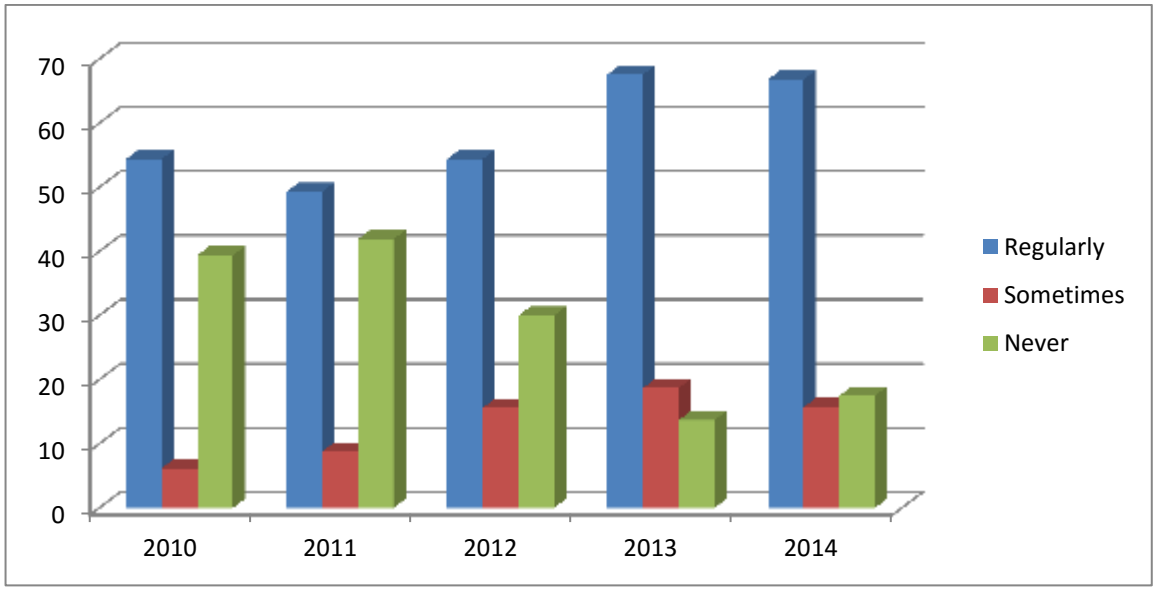

Figure: 4.7 Inspections by School Management Committee

4.3: OBJECTIVE 3: TEACHING LEARNING OUTCOMES

This objective dealt with the techniques of evaluation adopted by the teachers, feedback, home assignment and project work, extent of dropout; and year-wise dropout.

Table 5.9: Techniques of Evaluation

Techniques of evaluation	Written Test	%	Oral Test	%	Both	%
	89	55.6	Nil		71	44.4

Table 5.9 reveals that 55.6% (89) schools gave Written Test and 44.4% (71) schools did both written and oral as the technique of evaluation.

Table 6.0: Feedback, Home assignment and Project work

Category	Yes	%	No	%
Feedback is provided to the students	58	36.3	102	63.7
Home assignments	26	16.3	134	83.7
Project Work	25	15.6	135	84.4

Table 6.0 reveals that 36.3% (58) schools provided feedback to the students whereas 63.7% (102) schools did not provide feedbacks. It further shows that 16.3% (26) schools gave home assignments to students but 83.7% (134) schools gave no home assignments. And 15.6% (25) schools gave project works and 84.4% (135) did not give project works. The analysis revealed that home assignments and project works were not seriously taken by the teachers.

Table 6.1: Causes of dropout

Category	**Yes**	**%**	**No**	**%**	**Undecided**	**%**
Dropout due to lack of interest of students	76	47.5	23	14.4	61	38.1
Low economic and occupational status of parents affect dropout	86	53.8	13	8.1	61	38.1
Low educational level of parents affect dropout	99	61.9	Nil		61	38.1

Table 6.1 reveals that dropout in 47.5% (76) schools is due to lack of interest of students in study but 14.4% (23) schools did not agree to this while 38.1% (61) schools were undecided. It also reveals that 53.8% (86) schools find that low

economic condition and occupational status of parents also is a reason of dropout of children but 8.1% (13) schools do not agree to this while 38.1% (61) schools were undecided in this issue. It can also be seen that 61.9% (99) schools agreed that low educational level of parents affect dropout and 38.1% (61) were undecided. The dropping out of children from school are due to lack of interest of students in studies, occupational status of parents, low educational level of parents as well as lack of supervision of parents were the factors.

Graphical Representation of the Causes of dropout:

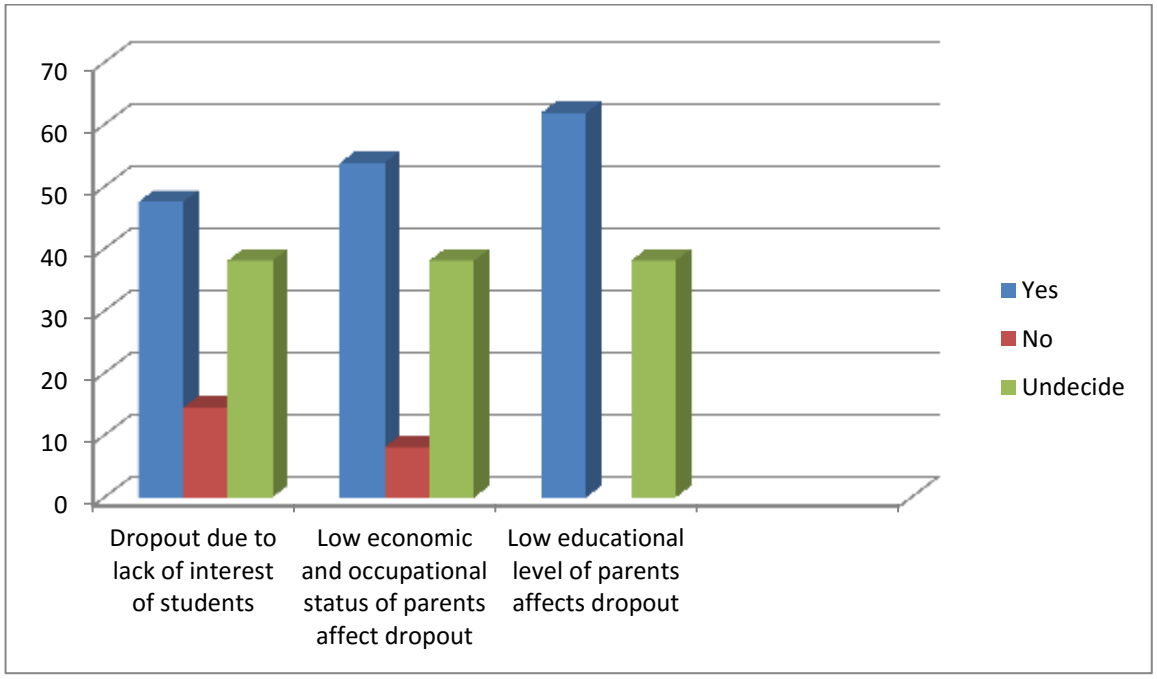

Figure: 4.8 Causes of dropout

Table 6.2: Year-wise drop-out

Year	Class					Total
	I	II	III	IV	V	
2010						
2011		552	243	96	42	933
2012		342	426	333	84	1185
2013		354	255	159	138	906
2014		351	453	255	163	1222
Total		1599	1377	843	427	4246

Table 6.2 reveals that during the period from 2010 to 2014, drop out figures for each class starting from Class II to Class V are 1599, 1377, 843, 427 respectively for the 41.9% (67) selected schools, with a total of 4246 out of total. The main reasons for dropping out are lack of interest of students in studies, occupational status of parents and low educational level of parents and lack of supervision of parents. The remaining 58.1% (93) schools have no dropping out record as no retrenchment of children in any Class was there and age appropriate admission according to the provision of RTE were properly implemented.

4.4 Implementation of RTE Act, 2009:

Category of respondent- Head Master:

RTE reveals that all the Headmasters in the schools had the idea of RTE Act 2009 and accepted the right of children to free and compulsory education till completion of elementary education. 100% schools allowed provisions for non-admitted children to be admitted to an age appropriate class. 95.6% schools agreed that the Act specifies the duties and responsibilities of appropriate governments, local authority and parents in providing free and compulsory education and sharing of financial and other responsibilities between the central and state governments whereas 4.4% denied.

48.1% agreed that there is provision of appointing trained teachers as per RTE Act whereas 51.9% do not agree. 100% schools do not inflict physical punishment as per RTE Act, 2009 provision.

Again 50% schools accepted that RTE Act prohibits private tuition by teachers whereas 50% do not agree. 70% schools accepted curriculum under RTE ensures the all-round development of the child whereas 30% do not agree. 78.1% schools agreed curriculum should be child cantered whereas 21.9% do not agree. 46.3% schools agreed curriculum ensures the potentiality and talent making the child free of fear, trauma and anxiety whereas 53.7% schools do not agree. 94.4% schools agreed the norms and standards relating inter alia to pupil teacher ratio (PTRs), building and infrastructure, school working days, teacher-working hours are covered by RTE whereas 5.6% schools do not agree. All the schools (100%) have the provision of regular mid-day meal to students.

4.5. Objective 4: EFFECTIVE UNIT COST PER PUPIL.

Under this objective, attempts had been made to estimate the approximate unit cost per pupil and the wastage resulting from low enrolment and dropout on the basis of approximate recurring salary expenditure in the following way:

ENROLMENT AND WASTAGE

(A)UNIT COST PER PUPIL AS PER ACTUAL ENROLMENT DURING 2014

(i) Total number of pupils for 160 schools: 15,520

(ii) Average number of pupils per school: 97

(iii) Average number of pupils per class: 20

(iv) Total approximate salary expenditure for 694 teachers: Rs. 22,48,56,000/-

@ Rs. 27,000/-per month per teacher.

(v) Total unit cost per pupil per year: Rs. 14,488.14/-

(B) UNIT COST PER PUPIL AS PER ESTIMATED OPTIMUM ENROLMENT SIZE DURING 2014

(i)	Total number of pupils for 160 schools:	24,000
(ii)	Average number of pupils per school:	150
(iii)	Average number of pupils per class:	30
(iv)	Total approximate salary expenditure for 694 teachers:	Rs. 22,48,56,000/- (Same as (A) (iv) above)
(v)	Total unit cost per pupil per year:	Rs. 9,369.00/-

The statement indicates that there were 694 teachers in the 160 government primary schools with a total enrolment of 15,520 pupils during 2014. The total approximate salary expenditure for 694 teachers during the period was estimated at Rs. 22,48,56,000/- @ Rs. 27,000/- per month per teacher. As a result, the unit cost per pupil was worked out to Rs. 14,488.14/- per year.

On the other hand, it would be possible to accommodate at least 30 pupils in a particular classroom. If it was so, a primary school having Classes I-V could accommodate 150 pupils. If every school had 150 pupils, the total enrolment would have been 24,000 pupils for 160 schools. If the schools were in a position to enrol 24,000 pupils, the unit cost per pupil would have been Rs. 9,369.00/- per year instead of Rs. 14,488.14/-, thereby resulting in a wastage of Rs. 5,119.14/-. In other words, an excess expenditure of Rs. 5,119.14/- per pupil had been incurred on payment of salaries of teachers during the period 2014. Thus, the total wastage due to inability to utilize the optimum enrolment size of 150 pupils per school for 160 schools accounted for Rs. 7,94,49,052.80/-.

DROPOUT AND WASTAGE

Our data indicates that there were 1,222 cases of dropout during the period 2014 in different classes for the whole 160 schools. The numbers of dropouts from Class II to V along with the corresponding amount wasted are shown in the table.

Table 7.1: Number of dropouts and amount wasted during 2014

Class	No. of drop-outs	Amounts wasted (in Rs.)
II	351	50,85,337.14/-
III	453	65,63,127.42/-
IV	255	36,94,475.70/-
V	163	23,61,566.82/-
Total:	**1,222**	**1,77,04,507.00/-**

The results in Table 7.1 indicated that the highest cases of dropout occurred in Class III with 453 pupils and wastage of Rs. 65,63,127.42 which was followed by 351 drop-outs in Class II with a total wastage of Rs. 50,85,337.14; 255 drop-outs in Class IV with a wastage amounting to Rs. 36,94,475.70 and the lowest in Class V with 163 drop-outs with a total wastage of Rs. 23,61,566.82/-. As a result, a total of Rs. 1,77,04,507.00 had been lost due to huge dropouts.

EFFECTIVE UNIT COST PER PUPIL

We may further find out here the effective unit cost per pupil. The effective unit cost means "how much amount had been invested in producing a pupil who had completed the 5-Year Primary Education Course". It is observed from the above data that out of a total enrolment of 15,520 pupils, 1,222 of them dropped out, indicating that 14,298 pupils completed the primary course. On the other hand, Rs. 7,94,49,052.80 had been lost due to inability to utilize the optimum intake capacity of 30 pupils per class, as

given above. Besides, another Rs. 1,77,04,507.00 had also been lost due to dropout of 1,222 pupils. Thus, the total amount wasted was Rs. 9,71,53,559.80. The details about the effective unit cost are as calculated below.

(i) Initial cohort: 15,520 pupils

(ii) Number of dropout: 1,222 pupils

(iii) Total survivors: 14,298 pupils

(iv) Total amount wasted: Rs. 9,71,53,559.80

(v) Unit cost per survivor: Rs. 14,488.14

(vi) Total amount wasted/ Total survivors = Rs. 9,71,53,559.80/14,298

(vii) Excess amount + Unit cost per survivor = Rs. 6,794.91 + 14,488.14

= Rs. 21,283.05 (Effective unit cost per pupil)

The results indicated that if there happened to be no wastage of Rs. 9,71,53,559.80, the optimum unit cost per pupil will be Rs. 14,488.14 instead of Rs. 21,283.05. It suggests that an excess amount of Rs. 6,794.91 had been spent on every pupil in the completion of 5-year primary education course. As a result, the effective unit cost per pupil was found to be Rs. 21,283.05.

UNIT COST ON PUPIL-TEACHER RATIO WITH REFERENCE TO RTE ACT, 2009.

THE RIGHT OF CHILDREN TO FREE AND COMPULSORY EDUCATION ACT, 2009, provides for free and compulsory education to all children of the age of six to fourteen years. The Act provides certain provisions for maintenance of pupil-teacher ratio in the primary and upper primary schools, as cited below.

Section 19, sub-section (2) “Where a school established before the commencement of this Act does not fulfil the norms and standards specified in the Schedule, it shall take

steps to fulfil such norms and standards at its own expenses, within a period of three years from the date of such commencement" (P.7).

Section 25, sub-section (1) "Within six months from the date of commencement of this Act, the appropriate Government and the local authority shall ensure that the Pupil-Teacher Ratio, as specified in the Schedule, is maintained in each school" (P.8).

(2) "For the purpose of maintaining the Pupil-Teacher Ratio under sub-section (1), no teacher posted in a school shall be made to serve in any other school or office or deployed for any non-educational purpose, other than these specified in Section 27" (P.8).

Section 27, "No teacher shall be deployed for any non-educational purposes other than the decennial population census, disaster relief duties or duties relating to elections to the local authority or the State Legislature or Parliament, as the case may be" (P.8).

THE SCHEDULE (See Sections 19 & 25)

NORMS AND STANDARDS FOR A SCHOOL

The following are Norms and Standards for Pupil-Teacher Ratio for Class I to V:

Pupil-Teacher Ratio

60:2

61-91:3

91-120:4

121-200:5

Above 150:5 + 1 Head-Teacher

Above 200: Pupil-Teacher Ratio (excluding Head-Teacher) shall not exceed forty.

Calculation of Unit Cost on Pupil-Teacher Ratio

In this section, an attempt was made to work out the unit cost on pupil-Teacher Ratio and to find out whether the 160 government primary schools under study could adhere to the Norms and Standards, as prescribed in the Schedule; if not, what was the extent of wastage of resources.

(i) Number of schools: 160

(ii) Number of teachers: 694

(iii) Average number of teacher per school: 4.34

(iv) Classes: I-V

(v) Total enrolment: 15,520

(vi) Average number of pupils per school: 97

(vii) Average number of pupil per class: 20

(viii) Expected Pupil-Teacher Ratio as per the Schedule: 30:1

(ix) Actual Pupil-Teacher Ratio: 22:1 (with a shortage of 8 pupils as against the Schedule)

(x) Pupil-Teacher Ratio as per the Schedule: 91-120:4

(xi) Actual Pupil-Teacher Ratio: 97:4.34

(xii) Total salary expenditure during 2014: Rs. 22,48,56,000/-

(xiii) Unit cost per teacher per year: Rs. 3, 24, 000/-

(xiv) Unit cost per pupil as per the Schedule (30:1): Rs. 10,800/-

(xv) Unit cost per pupil as per actual ratio (22:1): Rs. 14,727.27

(xvi) Total amount wasted per school due to shortage of 8 pupils as against the Norms of Pupil-Teacher Ratio of 30:1: Rs. 31,418.16

(xvii) Total wastage for 160 schools due to inability to maintain the ratio as per the Schedule: Rs. 50,26,905.60

(xviii) Total wastage rate: 2.24%

The results indicated that the Pupil-Teacher Ratio as per the Schedule was 60:2. It indicates that there shall be one teacher for every 30 pupils. But the actual Pupil-Teacher Ratio was 22:1 with a fall of 8 pupils due to one reason or another. It suggested that the schools failed to adhere to the Norms and Standards of Pupil-Teacher Ratio.

On the other hand, the unit cost per teacher and year was Rs. 3,24,000/-. If there happened to be one teacher for every 30 pupils, the unit cost per pupil would be Rs. 10,800/-, but as a particular school could not maintain the prescribed ratio, the unit cost per pupil was increased to Rs. 14,727.27 with an excess expenditure of Rs. 3,927.27, resulting in a total wastage of Rs. 31,418.16/- per school during 2014. In this way, altogether Rs. 50,26,905.60 had been wasted due to inability to adhere to the Norms by the 160 schools during the year. The wastage rate was 2.24 per cent of the total salary expenditure.

As per the Schedule, another Pupil-Teacher Ratio is 91-120:4, indicating that there shall be four teachers for an enrolment between 91to120. Our data indicate that there were more than four teachers (97:4.34) in every school for an enrolment of 97 pupils. In this case, though the enrolment appeared to be low, the schools could adhere to the Norms and the unit cost would be more or less optimum.

TOTAL WASTAGE OF RESOURCES

The total amount wasted due to failure to utilize the optimum intake capacity (i.e., enrolment size per class), dropout of 1,222 pupils, and un-optimum Pupil-Teacher Ratio is as follows:

(i) Amount wasted due to failure to utilize the intake capacity: Rs. 7,94,49,052.80

(35.33)

(ii) Amount wasted due to dropout: Rs.1,77,04,507.00

(7.87)

(iii) Amount wasted due to un-optimum Pupil-Teacher: Rs.50,26,905.60
(2.24)

Total: **Rs. 10,21,80,465.00**

(Rupees ten crore twentyone lakh eighty thousand four hundred and sixty five) only.

(figures in the parentheses indicate percentage)

(ii) Total wastage rate: 45.44/%

The result indicated that 35.33 per cent of the total cost had been lost because of inability to utilize the optimum enrolment capacity per class; 7.87 per cent lost due to dropout; and 2.24 per cent lost due to inability to adhere to the Pupil-Teacher Ratio Norms with a total wastage of 45.44 per cent of the total salary expenditure.

DISCUSSION

The basic issues of the schools under study were low enrolment and dropout, thereby resulting in huge wastages of resources. It was found that the average number of pupils per school was 97 with 20 pupils per class and with a total enrolment of 15,520 pupils. As per the present estimate and contention, every school would have the facilities for accommodation of at least 150 pupils with 30 pupils per class. If it was so, the total enrolment for the 160 schools would have been 24,000 pupils. It indicated that there was a big gap of 8,480 pupils between the facilities created and actually utilized. In other words, the schools could not utilize 64.67 per cent of the intake capacity. Had the resources been utilized by the schools optimally, Rs. 7,94,49,052.80 could have been saved, but unfortunately lost. This was all about the wastage resulting from low enrolment.

Another wastage was dropout, in which Rs. 1,77,04,507.00 had been lost due to 1,222 cases of dropout. It was found that in every class from I to V, there were cases of dropout at varying rates and the corresponding wastages. It was because of dropout that the effective unit cost per pupil was also increased from the normal unit cost of Rs. 14,488.14 to Rs. 21,283.05.

Furthermore, a total of Rs.50,26,905.60 had been wasted due to inability to adhere to the Pupil-Teacher Ratio Norms and Standards with a loss of Rs. 31,418.16 per school during 2014 with 2.24 per cent of the total salary expenditure.

Thus, the total amount wasted was estimated at Rs. 10,21,80,465.00 (Rupees ten crore twenty one lakh eighty thousand four hundred sixty five) only. The wastage rate was 45.44 per cent of the total salary expenditure during 2014.

Furthermore, some of the limitations of the present unit cost analysis were: first, the salary cost was an approximate one for primary teachers; second, no cohort method was adopted in the study of dropout, as a result, we may not be able to ascertain the extent of internal efficiency of the primary system; and finally, a holistic approach was adopted in terms of enrolment, expenditure, teachers Pupil-Teacher Ratio, Schools, etc. Hence, generalizability of the results would merit further investigation.

However, the results of the analysis would be a real eye-opener for educational planners and policy makers, teachers, and stakeholders in understanding the ground realities, wherein huge resources had been wasted because of one reason or another. One may examine the magnitude of the wastages if such a state of affairs happened to be prevalent in other schools in the State. The results of the current analysis would also give an insight into the true nature of the problem.