Chapter - III

An Analysis of Growth Pattern of Enrollment and Drop-outs of Elementary Education
3.1 Introduction:

In this chapter, the study mainly concentrates on the growth pattern of school education at the elementary stage in India during the period of 2002-2011. Apart from that, some of the important issues like: growth pattern in sex-wise enrollments and drop-outs, growth pattern among social groups and also the growth of infrastructures like; common toilet facilities, drinking water facilities and PTR ratios are analyzed in this chapter descriptively. Further, it also examines the main cause for the enrollment as well as drop-out fluctuations and the reason for the growth of drop-outs in elementary schools in India. Subsequently, the performance of social categories and gender differences in terms of their enrollment and drop-outs and the reason for differences in enrollments and drop-outs are incorporated in this study. In addition to that, the growth of infrastructure facilities and its impact on the growth of enrollment and drop-outs over a period of time (2002-2011) has been discussed.

The study has estimated the growth pattern of enrollment and drop-outs firstly at the macro level that is India level later it has been discussed such things at state level and finally, it examines the growth pattern in enrollment, drop-outs and infrastructure related factors in the study area i.e., Chamarajanagara district particularly.

3.2. Growth pattern of Enrollment and Drop-Outs of Elementary Schools in India

Firstly the study has analyzed about the growth pattern of the schools located in India before entering into the enrollment illustration of the elementary schools.

3.2.1 The Annual Growth of Number of Elementary Schools in India

Both government as well as private institutions is playing a dominant role in providing good education in India. But compared to government schools, the private schools have undergone rapid growth in recent years, primarily to satisfy the
educational aspirations of middle-class children and their parents. Although reliable statistics are difficult to come by, The New York Times recently (Arash Vafa Fazli 2008) said that "tens of thousands" of private schools have been started up across India in recent decades. The trend extends to villages in rural areas, and poor families have increasingly expressed a willingness to pay at least a small percentage of their income to bolster the educational prospects for their children. Recent reports (DISE 2011,) have proved that, the growth of private schools in India has been increasing gradually during the past two decades compared to government schools.

Figure 3.1: Number of Elementary Schools in India 2002-2011

The figure 3.1 shows that, the trends of the total number of elementary schools in India during the study period 2002-03 to 2010-11. In the above chart, it is obviously clear; the total number of government schools and the rural government schools are very high in all the years but in the urban areas, the annual growth of government schools is very low. And the total number of private schools is declined compared to the total government school but in the urban areas, the private schools have been rose progressively from year to year. It has also been proved statistically as follows;
Table 3.1: Average Annual Growth of Total Number of Elementary Schools in India

<table>
<thead>
<tr>
<th>Dependent Variables</th>
<th>Constant</th>
<th>Parameter (β1)</th>
<th>Sig</th>
<th>R Square</th>
</tr>
</thead>
<tbody>
<tr>
<td>Government Schools</td>
<td>7.568</td>
<td>.043</td>
<td>.000</td>
<td>.922</td>
</tr>
<tr>
<td>Private Schools</td>
<td>1.045</td>
<td>.120</td>
<td>.000</td>
<td>.877</td>
</tr>
<tr>
<td>Rural Government Schools</td>
<td>7.127</td>
<td>.047</td>
<td>.000</td>
<td>.911</td>
</tr>
<tr>
<td>Rural Private Schools</td>
<td>.653</td>
<td>.125</td>
<td>.000</td>
<td>.870</td>
</tr>
<tr>
<td>Urban Government Schools</td>
<td>.442</td>
<td>-.044</td>
<td>.039</td>
<td>.478</td>
</tr>
<tr>
<td>Urban Private Schools</td>
<td>.392</td>
<td>.112</td>
<td>.000</td>
<td>.890</td>
</tr>
</tbody>
</table>

In the above results of the table 3.1, the average annual growth of government schools is 4.3 percent which is statistically significant at the 1 percent level with 0.922 R Square value. Likewise, in the private sector, the average annual growth is doubled with an amount of 12.0 percent and it has the highest growth rate. It is also statistically significant at the 1 percent level with the R Square value of 0.877. Whereas in the rural areas, the average annual growth of government schools is 4.7 percent and it is also statistically significant at the 1 percent level and the R Square value is 0.911. Whereas in the rural private schools, the average annual growth is 12.5 percent which is higher growth rate compared to all kinds of elementary schools annual growth rates in India, it is also statistically significant and the R Square value is 0.870. Whereas in the urban government schools, the average annual growth is negative, it means -4.4 percent and it is statistically significant at the 5 percent level and the R Square value is 0.478. Finally, the urban private schools have a positive growth rate, that is 11.2 percent and it is also has an impressive growth rate which is statistically significant at the 1 percent level with the R Square value of 0.890.

Thus, the reported results have revealed that, the average annual growth of the total number of government schools has lower compared to the private institutions, it means that almost 3 times lower than the private schools. And the private schools are positive in nature in terms of its growth. But in rural areas the average annual growth of government school is declined but the private schools have a progressive growth rate. Where as in the urban areas, the average annual growth of government schools is negative but the private schools have a positive growth rate. It means that, the private schools in urban areas are growing rapidly compared to all kinds of elementary
schools in India because, private management have given much importance to every individual student. They also create a commendable atmosphere through providing good infrastructure facilities. Consequently, the annual growth of enrollment increased rapidly as a result of that the number of schools also growing progressively. But the government schools have failed to do such succession due to their inefficiency of managements.

3.2.2 The Growth of Enrollment in Elementary Schools of India

Private and government schools have been contributed in the total enrollment in elementary schools of India. The contribution of private schools is more in terms of its enrollment compared to government schools. Because, the people want to provide quality education to their children and they are ready to invest more income for that purpose. Parents participation is the best reason for the highest growth of enrollments in private institutions and also in private schools, infrastructure level of the schools, quality education like Medium of Instruction, curriculum activities has been given. Further, there is no teacher related problem i.e., absenteeism and lack of teachers and they will give preference to every individual student and such schools have more concentrated on the education attainment as well as outcome. Hence, the level of enrollment in private management schools is more compared to government schools in both rural as well as urban areas. Let’s see the various trends and growth of enrollment.

Figure 3.2: Total Enrollment in Elementary Schools of India-2002-2011
Figure 3.2 illustrates that, the fluctuating trends of enrollment in elementary schools of India over a period of time 2002-03 to 2010-11. In this chart, the enrollment of government schools and the rural government school is very high but it has in progressive trend in the beginning of the study period but later it has fluctuated. But in the urban government schools, the enrollment level is very deprived. Whereas in private schools, the enrollment has been rose every year in both rural as well as urban areas but compared to the government schools it has been very poor.

Table 3.2: Average Annual Growth of Enrollment in Elementary Schools of India 2002-2011

<table>
<thead>
<tr>
<th>Dependent Variable</th>
<th>Constant</th>
<th>Parameter (β1)</th>
<th>Sig</th>
<th>R square</th>
</tr>
</thead>
<tbody>
<tr>
<td>Government Schools</td>
<td>18.506</td>
<td>0.026</td>
<td>0.004</td>
<td>0.721</td>
</tr>
<tr>
<td>Private Schools</td>
<td>17.04</td>
<td>0.108</td>
<td>0.001</td>
<td>0.9</td>
</tr>
<tr>
<td>Rural Government Schools</td>
<td>18.371</td>
<td>0.028</td>
<td>0.004</td>
<td>0.72</td>
</tr>
<tr>
<td>Rural Private Schools</td>
<td>16.447</td>
<td>0.108</td>
<td>0.001</td>
<td>0.879</td>
</tr>
<tr>
<td>Urban Government Schools</td>
<td>16.424</td>
<td>0.013</td>
<td>0.274</td>
<td>0.167</td>
</tr>
<tr>
<td>Urban Private Schools</td>
<td>16.235</td>
<td>0.109</td>
<td>0.001</td>
<td>0.922</td>
</tr>
</tbody>
</table>

The results of the growth of enrollment in government, private, rural and urban elementary schools in India are reported in Table 3.2. The average growth of enrollment in government schools is 2.6 percent and it is statistically significant at the 1 percent level and the value of the R Square is 0.72. Whereas the enrollment in private schools was increased with an amount of 10.8 percent approximately four times higher than government schools and it is statistically significant at the 1 percent level and the value of the R Square is 0.90. The study has also compared the enrollment of rural and urban elementary schools, the average of enrollment in rural government schools is 2.8 percent and it is statistically significant at the 1 percent level and the value of the R Square is 0.72. In the same way, enrollment of rural private schools also increased with an amount of 10.8 percent, again it is higher than the rural government Schools. It is statistically significant at the 1 the percent level and the R Square value is 0.879. Whereas in the urban government schools, the overall average annual growth of enrollment is 1.3 percent and it is statistically insignificant compared to the growth of enrollment in all types of elementary schools.
the value of R Square is 0.167. Finally, the average annual growth of enrollment in urban private schools is 10.9 percent approximately it has a higher average of annual growth in enrollment of all types of elementary schools in India. It is statistically significant at the 1 percent level and the value of R Square is 0.922.

The above result reveals that, both government and private schools are participating well in providing good education. Unfortunately, the level of enrollments in government schools is very low in both rural and urban areas. But compared to government schools, the private schools have lion share in the growth of enrollment as well as providing standard education at the elementary school level. The main reason for the decreasing trend of enrollment in government schools are firstly, the inefficiency of management, medium of instruction, lack of infrastructure facilities rather than the PTR ratio is also problematic in such institutions as a result of the above problems the level of enrollment in government schools is very poor. Whereas, in private management schools the situation is completely opposite to the government schools. Because, the above mentioned obstacles we cannot see in private institutions. Consequently, the level of enrollment has been increased compared to the government schools.

**Figure 3.3: Sex- Wise Enrollments in Elementary Schools of India 2002-2011**

![Figure 3.3: Sex- Wise Enrollments in Elementary Schools of India 2002-2011](image)

*Source: Elementary schools in India: Where Do We Stand? State Report Cards*

*Note: Boys Primary, Boys Upper Primary, Girls Primary, Girls Upper Primary*

The figure.3.3 explores the trends of sex – wise enrollments in the primary and upper primary schools in India from 2002-03 to 2010-11. Here, the chart has been clearly exposed the variations of enrollment in boys and girls. The girls’ and boys’
enrollment are very high at the primary level but in the upper primary level the status of enrollment has been declined in both boys and girls.

Table 3.3: Average Annual Growth of Sex-Wise Enrollment in Elementary Schools of India

<table>
<thead>
<tr>
<th>Dependent Variable</th>
<th>Constant</th>
<th>Parameter (β1)</th>
<th>Sig</th>
<th>R Square</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boys Primary</td>
<td>60.923</td>
<td>.015</td>
<td>.155</td>
<td>.266</td>
</tr>
<tr>
<td>Boys Upper Primary</td>
<td>23.753</td>
<td>.037</td>
<td>.162</td>
<td>.258</td>
</tr>
<tr>
<td>Girls Primary</td>
<td>54.505</td>
<td>.020</td>
<td>.007</td>
<td>.667</td>
</tr>
<tr>
<td>Girls Upper Primary</td>
<td>19.071</td>
<td>.042</td>
<td>.001</td>
<td>.838</td>
</tr>
</tbody>
</table>

As per the results given in the table 3.3, the average annual growth of enrollment of boys at primary level is 1.5 percent which is also statistically insignificant and the R Square value is 0.266. Whereas, in upper-primary level, the average annual growth of enrollment is 3.7 percent which is also statistically insignificant. So, the R Square value is 0.258. The average growth of enrollment of girls at primary level is 2.0 percent which is statistically significant at the 1 percent level with 0.667 R Square value. Similarly, in the upper primary level, the average annual growth of enrollment is 4.2 percent, statistically significant at the 1 percent level and the value of the R Square is 0.838.

The reported result says that, the boys’ enrollment is better in both primary as well as upper primary levels but not in progressive trend. In the same way the girls’ participation is very remarkable in enrollment of primary school but in the upper primary level the annual growth of enrollment is very poor compared to the boys. But the enrollments of girls in both primary and upper primary schools are positive in nature and also statistically significant compared to the boys.

The reason for the growth of boys’ enrollment is gender bias. Among children at primary level, discrimination takes the form of parents sending their sons to school first and only enrolling their daughters in school if they can still afford to do so. So at these ages, girls tend to be out of school because of credit constraints. So, parents have voluntarily shown interest to give proper education to the boys for securing their future better than girls. Hence, the girls are neglected by their parents to continue the education up to the level of upper primary. On the other hand, in India people have
been poor economic conditions due to lack of income, assets etc. The country has failed to give universal elementary education to all. Consequently, the boys get more educational opportunity than girls.

**Figure 3.4: Caste-Wise Enrollment in Elementary Schools of India 2002-2011**

![Figure 3.4](image)

*Source: Elementary schools in India: Where Do We Stand? State Report Cards*

Figure 3.4 reveals that, the variations in caste-wise enrollments in primary as well as upper primary schools of India during the period of 2002-03 to 2010-11. In the chart, it is very clear; the SC’s enrollment in both primary and upper primary school level is low compared to ST’s but in the upper primary level the enrollment of SC’s has been decreased slightly. Whereas, in ST’s enrollment in both primary and upper primary school level is remarkable compared to the SC’s in India. It has also been calculated statistically as follows

**Table 3.4: Average Annual Growth of Caste-Wise Enrollment in Elementary Schools of India**

<table>
<thead>
<tr>
<th>Dependent Variables</th>
<th>Constant</th>
<th>Parameter (β1)</th>
<th>Sig</th>
<th>R Square</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary Enrollment SC’s</td>
<td>12.516</td>
<td>.016</td>
<td>.268</td>
<td>.171</td>
</tr>
<tr>
<td>U.Primary Enrollment SC’s</td>
<td>10.786</td>
<td>.029</td>
<td>.056</td>
<td>.428</td>
</tr>
<tr>
<td>Primary Enrollment ST’s</td>
<td>10.569</td>
<td>.134</td>
<td>.023</td>
<td>.548</td>
</tr>
<tr>
<td>U.Primary Enrollment ST’s</td>
<td>8.915</td>
<td>.143</td>
<td>.022</td>
<td>.552</td>
</tr>
</tbody>
</table>
According to the results mentioned in the table 3.4, the average annual growth of enrollment of SC’s at primary level is 1.6 percent which is statistically insignificant with the R Square value of 0.171. Similarly, at upper primary level, the average annual growth of boys’ enrollment is 2.9 percent, which is statistically significant at the 10 percent level. Hence the R Square value is 0.428. Taking into consideration of ST girls’ enrollment at the primary level, the average annual growth is 13.4 percent which is statistically significant at the 5 percent level. So, the obtained R Square value is 0.548. Where as in upper primary level, the average annual growth of ST girls enrollment is 14.3 percent, which is also statistically significant at 5 percent level with the R Square value of 0.552.

From the observation of the above results, it is quite clear that, the enrollment of SC’s in both primary and upper primary level is low compared to ST’s. The annual growth of SC’s enrollment in upper primary level is slightly low compared to the enrollment of primary school. In contrast, the annual growth of enrollment of ST’ students are in a better position compared to the SC’s.

Table 3.5: Average Annual Growth of Single Teacher Schools in India

<table>
<thead>
<tr>
<th>Dependent Variables</th>
<th>Constant</th>
<th>Parameter ($\beta_1$)</th>
<th>Sig</th>
<th>R Square</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single Teacher Schools primary</td>
<td>10.208</td>
<td>.030</td>
<td>.124</td>
<td>.304</td>
</tr>
<tr>
<td>Single Teacher Schools U.Primary</td>
<td>2.241</td>
<td>.051</td>
<td>.201</td>
<td>.221</td>
</tr>
</tbody>
</table>

The results of the table 3.5 illustrate that, the average annual growth of the total number of single teachers’ schools at primary level is 3.0 percent and it is statistically insignificant. Hence, the R Square value is 0.304. Similarly, the average annual growth of single teachers’ schools at the upper primary level in 5.1 percent and it is also statistically insignificant with the R Square value of 0.221.

As per the above results, the growth of single teacher schools at upper primary level is very low compared to primary schools in India. But the annual growth of single teacher schools at upper primary level is in progressive trend. Because, in India most of the primary schools having lot of infrastructure problems like lack of buildings, rooms and also the important reason for the growth of single teacher schools is lack of teachers and teacher absenteeism.
Table 3.6: Average Annual Growth of Schools with Common Toilets in India 2002-2011

<table>
<thead>
<tr>
<th>Dependent Variables</th>
<th>Constant</th>
<th>Parameter (β1)</th>
<th>Sig</th>
<th>R Square</th>
</tr>
</thead>
<tbody>
<tr>
<td>Schools With Common Toilets primary</td>
<td>22.929</td>
<td>.113</td>
<td>.036</td>
<td>.488</td>
</tr>
<tr>
<td>Schools With Common Toilets U.Primary</td>
<td>34.742</td>
<td>.034</td>
<td>.476</td>
<td>.075</td>
</tr>
</tbody>
</table>

The common toilet facility is one of the best infrastructures provided by the government to improve the level of enrollment in both primary as well as upper primary schools in the country. The results of table 3.6 reveal that, the average annual growth of the total number of primary and upper primary schools which having common toilet facility is 11.3 percent, it is statistically significant at the 5 percent level. And the R Square value is 0.488. Whereas in upper primary schools the average annual growth of common toilets is 3.4 percent which is statistically insignificant compared to primary schools with the R Square value of 0.075.

According to the stated results, it is quite clear; the primary schools have more number of common toilet facility. So, the average annual growth of such schools is also very high. Subsequently, in upper primary schools the average annual growth is low compared to the primary schools in India. Because, in India only some of the upper primary schools having the facility of common toilets. In the year of 2009-10 and 2010-11 the percentages of schools which are having the toilet facility have been decreased. Because, there is no specific grant available from the government for the operation and maintenance of these toilets and also in construction of toilets in elementary schools. Similarly, even though there is availability of toilet facilities in elementary schools some of those have not maintained properly due to lack of water supply and breakage problem. So, because of these obstacles the percentages of elementary schools which are having toilet facilities are decreased.
Table 3.7: Average Annual Growth of Schools with Drinking Water Facilities in India

<table>
<thead>
<tr>
<th>Dependent Variables</th>
<th>Constant</th>
<th>Parameter (β1)</th>
<th>Sig</th>
<th>R Square</th>
</tr>
</thead>
<tbody>
<tr>
<td>Schools With Drinking Water Facilities primary</td>
<td>42.146</td>
<td>.103</td>
<td>.002</td>
<td>.765</td>
</tr>
<tr>
<td>Schools With Drinking Water Facilities U.Primary</td>
<td>46.821</td>
<td>.079</td>
<td>.005</td>
<td>.705</td>
</tr>
</tbody>
</table>

Drinking water facility is another basic need of a school. It is also an important infrastructure provided by the government of India through SSA to improve the condition of elementary schools in India. The results mentioned in the table 3.7 illustrates that, the average annual growth of primary schools which having drinking water facility is 10.3 percent it is statistically significant at the 1 percent level and the R Square value is 0.765. Similarly, the average annual growth of upper primary schools which having drinking water facility is 7.9 percent and it is also statistically significant at the 1 percent level. So, the R Square value is 0.705.

According to the above results, the average annual growth of primary schools which having drinking water facility is very high compared to upper primary schools. Consequently, the upper primary schools which having such facilities are little low compared to primary schools. It means that, these kinds of facilities have much influence on the primary schools than the upper primary schools. But in the upper primary schools the average annual growth is low because, majority of the schools in rural India especially in upper primary schools have large student strength run with inadequate drinking water and sanitation facilities. This is not because investments have not been made structure have been installed but without considering the needs of the schools in terms of student strength or sex deviation. Further, systems for the maintenance and upkeep of the structure have neither thought about nor installed in the schools resulting in the gradual degradation of the water resources and colossal waste of resources. Hence the percentages of the upper primary schools which having drinking water facilities are decreased.
Table 3.8: Average Annual Growth of Pupil Teacher Ratio in India

<table>
<thead>
<tr>
<th>Dependent Variables</th>
<th>Constant</th>
<th>Parameter (β)</th>
<th>Sig</th>
<th>R Square</th>
</tr>
</thead>
<tbody>
<tr>
<td>PTR primary</td>
<td>25.021</td>
<td>.010</td>
<td>.519</td>
<td>.062</td>
</tr>
<tr>
<td>PTR U.Primary</td>
<td>19.453</td>
<td>.015</td>
<td>.366</td>
<td>.118</td>
</tr>
</tbody>
</table>

The result of the table 3.8 reveals that, the average annual growth of the PTR ratio of primary schools in India is 1.0 percent it is statistically insignificant and the R Square value is 0.062. Where as in upper primary schools the average annual growth of the PTR ratio is 1.5 percent, it is statistically insignificant with 0.118. R Square value.

From the observation of the stated results, the PTR ratio of both primary and upper primary schools is insignificant due to lack of teacher and teacher absenteeism. It means that most of the primary and upper primary schools in India having more number of students but the number of teachers are not proportionately distributed among such kind of schools.

Where as in upper primary schools in India is in a better position in terms of their PTR ratio compared to the primary schools. The Right to Education Act mandates a pupil teacher ratio (PTR) of 30:1 in order to ensure that children learn better in the classroom. A detailed three year long empirical study by the Azim Premji Foundation (2006) had underlined the importance of PTR and its direct correlation with students and school performance. The study shows that a PTR of less than 30:1 has a high correlation with superior school performance. Also when PTR goes beyond 40:1, schools seem to have less than 2% chance of turning in a strong performance. Schools are turned in good performances if their Pupil Teacher Ratio is less than 30:1. At the same time, schools with PTR of more than 40 have very little chance of demonstrating that a majority of their children achieve the learning outcomes for their age or grade. It is imperative that government schools – both state and central – follow the guidelines laid out by the RTE Act and ensure they have enough teachers to guarantee learning in the classroom.
There is also a need to simultaneously address issues of infrastructure, and the need to build the academic and the pedagogic capability of teachers to take advantage of lower PTR. Many of the crucial classroom processes can be better implemented if the teacher could operate in an environment of favorable PTR.

3.2.3 Analyses of Growth Pattern in Drop-outs in India

The drop-out problem is pervasive in the Indian Education system. Many children, who enter school, are unable to complete school education and multiple factors are responsible for children dropping out of school. Risk factor begins to add up even before student enroll in school that include; poverty, low education level of parents, the weak family structure, pattern of schooling of sibling, and lack of pre-school experiences. Family background and domestic problems create an environment which negatively affects the value of education (Chug, 2011). Further, students could drop-out as a result of multitude of school factors such as uncongenial atmosphere, poor comprehension, absenteeism, attitude and behavior of the teachers, and failure or repetition in the same grade etc.

The problem of drop-out children at the primary stage is deeply seated in almost all the developing countries and thus it has attracted the attention of academicians, researchers and policy makers for a long time. Despite progress towards universal primary education, 75 million of children are still not enrolled in primary schools, over a third of children drop-out before completing primary school and many more leave having failed (UNESCO 2009).

In this section the study has analyzed the growth pattern of drop-outs in India during the period of 2001-02 to 2009-10 descriptively as follows
Figure 3.5: Drop-outs in Primary and Elementary Schools of India 2001-2010

![Graph showing drop-outs in primary and elementary schools of India from 2001 to 2010.]

Source: Ministry of Human Resource Development Government of India (13456)

Note:

The figure 3.5 enumerates that, the discrepancies in the growth of drop-outs in both primary as well as elementary schools of India over a period of time. Here, the average drop-outs are very higher in elementary schools compared to primary schools. But it is very clear in the chart; the average of drop-out in primary school is very lower than the elementary schools in India.

Table 3.9: Average Annual Growth of Drop-outs in Primary Schools of India

<table>
<thead>
<tr>
<th>Dependent Variables</th>
<th>Constant</th>
<th>Parameter (β1)</th>
<th>Sig</th>
<th>R Square</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary Schools Drop-out Boys</td>
<td>37.784</td>
<td>-.044</td>
<td>.012</td>
<td>.618</td>
</tr>
<tr>
<td>Primary Schools Drop-out Girls</td>
<td>35.019</td>
<td>-.049</td>
<td>.033</td>
<td>.499</td>
</tr>
</tbody>
</table>

Dropping out of school children at primary and Elementary level is the main drawback to achieve universalisation of Elementary Education (UEE). There is a lot of variations in drop-out rate among the boys and girls at primary as well elementary level in India during the period of 2001-2010.

The research study has found out the annual growth pattern in drop-outs between boys and girls at the primary and elementary school children by employing an appropriate exponential growth model. The result of the table 3.9 illustrates that,
the average drop-outs among the girls and boys at primary and elementary school level. According to that result, the average drop-out of all boys and girls at primary and elementary level has negative values. So, the average drop-out in boys at primary level is -4.4 percent. It is statistically significant and the R Square value is 0.618. Where as in primary level the average annual growth of girls drop-out is -4.9 percent which is also statistically significant at the 5 percent level and the R Square value is 0.499.

From the above results, it is very clear; the drop-out average in boys is less than the average of girls drop-out at primary level. The main reason for the decline of drop-outs is the Government of India and Government of Karnataka have launched so many programmes like MDM, Labour to School, Special Enrollment Drive and Distribution of Bicycles etc. to decrease the level of drop-outs through SSA. Consequently, the boy’s drop-outs have declined. Later, the government has concentrated to reduce the drop-outs in girls by employing the programmes like KGBV, NPGEL and Mahila Samakhya and also Distribution of Bicycles. In addition to that, the government has given lot of constitutional support to education through launching the various acts like RTE, UEE (Article 45). As a result of the above drop-out reducing programmes of government lead to decline the drop-out.

**Table 3.10: Average Annual Growth of Drop-outs in Elementary Schools of India**

<table>
<thead>
<tr>
<th>Dependent Variables</th>
<th>Constant</th>
<th>Parameter (β1)</th>
<th>Sig</th>
<th>R Square</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elementary Schools Drop-out Boys</td>
<td>56.198</td>
<td>-.032</td>
<td>.000</td>
<td>.928</td>
</tr>
<tr>
<td>Elementary Schools Drop-out Girls</td>
<td>59.216</td>
<td>-.043</td>
<td>.001</td>
<td>.838</td>
</tr>
</tbody>
</table>

The result of the table 3.10 reveals that, the average of drop-outs in boys at the elementary school is -3.2 percent which is statistically significant at the 1 percent level. And the R Square value is 0.928. Similarly, the average of girls drop-out at the elementary stage is -4.3 percent which is statistically significant at the 1 percent level with 0.838 R Square value.
According to the reported result, the average of girls drop-out at the elementary level is greater than the boys. It means that, the girls are dropping more from the schools compared to the boys. Because of lack of parental participation, distance of schools and lack of infrastructure facilities these are all the various reasons for the dropping out of girl children at the elementary school level. But the boys drop-out is declined compared to the girls. Moreover, the overall drop-out rate is declined due to the proper implementation of government programmes and policies by the Government of India.

**Figure 3.6: Drop-outs in Primary and Elementary Schools of SC Category in India 2001- 2010**

The figure 3.6 explores the fluctuation in the drop-out of SC category at primary and elementary school level during the study period. According to the above chart, the drop-out average of SC category at elementary schools is very high compared to the primary schools drop-outs. But the growth of SC girls’ drop-outs is gradually declined at primary schools but at the elementary school level it is increased. But the boy’s drop-out growth has been declined compared to the girls in SC category.
Table 3.11: Average Annual Growth of Drop-outs in Primary Schools of SC Category in India

<table>
<thead>
<tr>
<th>Dependent Variables</th>
<th>Constant</th>
<th>Parameter ($\beta_1$)</th>
<th>Sig</th>
<th>R Square</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary Schools Drop-out Boys(SC)</td>
<td>42.033</td>
<td>-.038</td>
<td>.006</td>
<td>.680</td>
</tr>
<tr>
<td>Primary Schools Drop-out Girls(SC)</td>
<td>50.373</td>
<td>-.083</td>
<td>.002</td>
<td>.779</td>
</tr>
</tbody>
</table>

The results have shown that, the average drop-outs in SC category at primary school level during the above study period. The average of SC boys drop-outs in primary schools is -3.8 percent which is statistically significant at the 1 percent level with 0.680 R Square value. Whereas, the average of drop-outs in SC girls at primary level is -8.3 percent and the R Square value is 0.779.

Above mentioned results concluded that, the average of boy’s drop-outs in SC category is low compared to the girls from SC category. In other words, the drop-outs of primary school girls belongs to SC category is also greater than boy’s drop-outs at the primary school level in India but it is in a negative trend. Moreover, it is quite clear that, in India most dropping out children at primary school level are girls belongs to SC category.

The people belongs to backward caste are socially and economically very weak compared to other communities. And the geographical reason also one of the reasons for drop-outs because, in rural India these types of people are living in the hilly area, so, they have voluntarily not interested in studies. Consequently, the education opportunity also less among such people. Therefore, the children came from such communities were missed their education opportunity and some of those children have dropped-out from the schools. But now, the scenario is fully changed. There is a constitutional support to enhance their socio-economic conditions. From the last decades the government has been made a drastic change in elementary education through various programmes and constitutional acts. Now, the backward community people are getting education opportunities universally hence, the drop-out level is declined negatively.
Table 3.12: Average Annual Growth of Drop-outs in Elementary Schools of SC Category in India

<table>
<thead>
<tr>
<th>Dependent Variables</th>
<th>Constant</th>
<th>Parameter (β1)</th>
<th>Sig</th>
<th>R Square</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elementary Schools Drop-out Boys (SC)</td>
<td>60.007</td>
<td>-.020</td>
<td>.000</td>
<td>.914</td>
</tr>
<tr>
<td>Elementary Schools Drop-out Girls (SC)</td>
<td>67.990</td>
<td>-.039</td>
<td>.002</td>
<td>.776</td>
</tr>
</tbody>
</table>

The results of table 3.12 have shown the average annual growth of drop-out in boys and girls at the elementary school level belongs to SC caste. The average annual growth of drop-out rates of SC boys in elementary schools is -2.0 percent which is statistically significant at the 1 percent and the R Square value is 0.914. Similarly, in girls belongs to SC caste, the average of drop-out is more than the boys that is -3.9 percent. It is statistically significant at the 1 percent level and also the R Square value is 0.776. But the total average of drop-out is less than the girls’ drop-out rates and not proportionate to the boys drop-out rates.

The results conclude that, here also the study has observed similar situation as previously quoted in drop-outs of primary schools. It means that, the average of drop-outs in girls is more than the boys in SC caste. The boys drop-out is very low compared to the girls in elementary school education. From the observation of the above results, compared to primary schools most of the children are dropping-out at the elementary school level. Because of illiteracy, the people will neglect to promote their children in to schools especially girls due to the economic problem and also child labour and child marriage. Hence, the boys automatically get more education opportunities than girls. As a result of that the girls drop-out is higher than the boys. On the whole, the overall drop-out rates are declined due to the government interference.
Figure 3.7: Drop-outs in Primary and Elementary Schools of ST Category in India 2001-2010

The figure 3.7 illustrates that, the various deviations occurred in the growth of drop-outs of ST category at primary and elementary school level in India during the period of time (2001-10). According to the chart, the growth of drop-outs in primary school girls belongs to ST category was very high in the beginning but later it has been declined. Whereas in the elementary level the growth of drop-out in ST girls is very high compared to the boys but later, it has been declined gradually. Likewise, the growth of drop-out in ST boys at primary level is low compared to girls but it has been slightly rose at the end of the study period. And in the elementary level the growth of drop-outs in ST boys has been declined compared to the girls.

Table 3.13: Average Annual Growth of Drop-outs in Primary Schools of ST Category in India

<table>
<thead>
<tr>
<th>Dependent Variables</th>
<th>Constant</th>
<th>Parameter (β1)</th>
<th>Sig</th>
<th>R Square</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary Schools Drop-out Boys (ST)</td>
<td>55.605</td>
<td>-.068</td>
<td>.002</td>
<td>.777</td>
</tr>
<tr>
<td>Primary Schools Drop-out Girls (ST)</td>
<td>58.406</td>
<td>-.076</td>
<td>.000</td>
<td>.913</td>
</tr>
</tbody>
</table>
The stated results in the table 3.13 gives a clear picture about the annual growth pattern in drop-outs of students (boys & girls) belong to the ST community at primary school level. The average of drop-outs in primary school boys belongs to ST caste is -6.8 percent which is statistically significant at the 1 percent level with 0.777 R Square value. Where as in primary school girls belong to ST caste, the average of drop-outs is -7.6 percent which is also significant at the 1 percent level and the R Square value is 0.913.

From the observation of the above results, the girls’ students are more dropping out from the primary school education but there is no much difference in the average growth of drop-outs among boys and girls belong to ST caste. And another important fact is, the average of drop-out is in higher level especially in ST community compared to all communities in India at the primary school level. Here also some of the causes like lack of parent’s participation, illiteracy among parents distance of schools various obstacles are the main reasons for the drop-outs.

Table 3.14: Average Annual Growth of Drop-outs in Elementary Schools of ST Category in India

<table>
<thead>
<tr>
<th>Dependent Variables</th>
<th>Constant</th>
<th>Parameter (β1)</th>
<th>Sig</th>
<th>R Square</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elementary Schools Drop-out Boys (ST)</td>
<td>71.337</td>
<td>-.025</td>
<td>.000</td>
<td>.843</td>
</tr>
<tr>
<td>Elementary Schools Drop-out Girls (ST)</td>
<td>74.861</td>
<td>-.027</td>
<td>.000</td>
<td>.903</td>
</tr>
</tbody>
</table>

In addition to that, the average of drop-outs in ST children at the elementary school level is very low compared to primary schools. The average of drop-out of ST boys’ students is -2.5 which is statistically significant at the 1 percent level with 0.843 R Square value. Where as in girls belong to ST caste, the average annual growth of drop-out is -2.7 and it is also statistically significant at the 1 percent level. So, the R Square value is 0.903. Similarly, the average of total ST student’s drop-out is -2.5 it is also has significant values with 0.919 R Square value.

The reported results clearly illustrate that, the average of drop-outs among girls and boys at the elementary level is almost similar and the girls have little more drop-outs in ST category. Consequently, the average of drop-out is very low between boys
and girls at the elementary stage. Because, the government policies, free education programmes and girls education programmes are helped to decline the drop-out of girls and boys belongs to ST caste at the elementary level.

Moreover, the reported results have shown that the variation in growth among number of elementary schools and its enrollment as well as drop-outs in elementary schools of India. And it also clearly shows that the private education institutions have Lion share in providing quality education compared to the government schools in both rural as well as urban areas. Where as in gender-wise enrollment, the boys and girls almost similar in primary enrollments but in upper primary level both have poor in average annual growth of enrollment. The social groups such as, The SC’s and ST’s have also contributed to the enrollment at the elementary stage. But the overall performance of elementary schools in growth of enrollment has rose positively in the past decades. Similarly in India, the average drop-out in boys is less than the average of girls drop-out at primary level. Whereas in SC and ST’s the drop-out is very high in upper primary level among boys and girls but in the primary level the growth is very low compared to upper primary level. On the whole the overall growth of drop-out has been declining due to the implementation of various government programmes and policies in India. Even though there is a lot many steps have taken to reduce the drop-out but unfortunately, that problem is still existed.

3.3 Differences in Enrollment and Drop-outs in Elementary Schools of India

The study has intends to evaluate the differences in enrollment and drop-outs among girls and boys and social groups in government, private as well as rural and urban elementary schools in India. Here, the study has used the appropriate ANOVA statistical tool to find out the exact differences among the enrollment and drop-outs in various elementary schools in India. In addition to that the LSD Post Hoc test has also been used to examine the differences between enrollment and drop-outs among gender and social groups in both rural as well as urban areas in this study.
The table 3.15 has shown that the results of the ANOVA tool which has been conducted to examine the Mean differences in enrollment of elementary schools of India. From the above table it has been proved that the enrollment value is statistically significant at the 1% level which is also means that there is a significant difference in enrollment of elementary schools in India with the ‘F’ value of 175.239. The post hoc test also calculated to know the Mean differences in enrollment within the groups as follows;

Table 3.16: Region and Management - wise Multiple Comparison of the Enrollment of Elementary Schools in India

<table>
<thead>
<tr>
<th>Enrollments LSD</th>
<th>Mean Difference (I-J)</th>
<th>Std. Error</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>(I) SlNo</td>
<td>(J) SlNo</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Government School</td>
<td>Private Schools</td>
<td>79.58889*</td>
<td>-</td>
</tr>
<tr>
<td>Rural Schools</td>
<td>10.26444*</td>
<td>5.57850</td>
<td>.075</td>
</tr>
<tr>
<td>Urban Schools</td>
<td>89.86444*</td>
<td>-</td>
<td>.000</td>
</tr>
<tr>
<td>Private Schools</td>
<td>Government School</td>
<td>-79.58889*</td>
<td>-</td>
</tr>
<tr>
<td>Rural Schools</td>
<td>-89.85333*</td>
<td>-</td>
<td>.000</td>
</tr>
<tr>
<td>Urban Schools</td>
<td>10.27556</td>
<td>5.57850</td>
<td>.075</td>
</tr>
<tr>
<td>Government School</td>
<td>10.26444</td>
<td>5.57850</td>
<td>.075</td>
</tr>
<tr>
<td>Rural Schools</td>
<td>89.85333*</td>
<td>-</td>
<td>.000</td>
</tr>
<tr>
<td>Private Schools</td>
<td>100.12889*</td>
<td>-</td>
<td>.000</td>
</tr>
<tr>
<td>Urban Schools</td>
<td>-10.27556</td>
<td>5.57850</td>
<td>.075</td>
</tr>
<tr>
<td>Government School</td>
<td>-89.86444*</td>
<td>-</td>
<td>.000</td>
</tr>
</tbody>
</table>

*. The mean difference is significant at the 0.05 level.
According to the results of the Post Hoc test given in the table 3.16 almost all the groups have been statistically significant with the various Mean differences. Whereas in the first group there is significant differences in enrollments between government and Urban schools with the highest Mean difference of 89.86 and the private schools are in the next place in Mean differences followed by 79.58 which is also statistically significant with the enrollment in government school. Similarly in the next group the result is completely opposite of what the study stated in the first group it means that the Mean differences are very low (negative) but it has the significant value in enrollment difference with private schools. Whereas in the third group all differences have significant with the enrollment in rural school but the Mean difference between rural and urban schools is very high which constitutes 100.12 and the private school have the differences of around 89.85 with rural schools in enrollments. Finally, in the last group, almost all have negative Mean differences with urban schools in enrollments but they have statistically significant.

### 3.3.1 Differences in Enrollment among Social Groups

Further, there is also a significant difference in enrollments among social groups especially in SC and ST’s. It is also witnessed in the below statistics.

<table>
<thead>
<tr>
<th>Enrollment</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>621.699</td>
<td>3</td>
<td>207.233</td>
<td>8.116</td>
<td>.000</td>
</tr>
<tr>
<td>Within Groups</td>
<td>817.063</td>
<td>32</td>
<td>25.533</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>1438.762</td>
<td>35</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The table 3.17 illustrates the differences in enrollment among the social groups especially SC’s and ST’s in India. As per the above results it is quite the enrollment values are statistically significant at the 1% level with the “F” value 8.116. So’ it means that there is a significant difference in enrollment among SC’s and ST’s in India. In the next table the study has clearly found out the exact differences in enrollment within the groups and also with various Mean differences.
Table 3.18: Multiple comparison of the Differences in Enrollment of Social Groups

<table>
<thead>
<tr>
<th>Enrollments LSD</th>
<th>(I) Sl. No.</th>
<th>(J) Sl. No.</th>
<th>Mean Difference (I-J)</th>
<th>Std. Error</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary SC</td>
<td>Upper Primary SC</td>
<td>1.03444</td>
<td>2.38203</td>
<td>.667</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Primary ST</td>
<td>-8.81667*</td>
<td>2.38203</td>
<td>.001</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Upper primary ST</td>
<td>-6.32889*</td>
<td>2.38203</td>
<td>.012</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Primary SC</td>
<td>-1.03444</td>
<td>2.38203</td>
<td>.667</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Primary ST</td>
<td>-9.85111*</td>
<td>2.38203</td>
<td>.000</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Upper primary ST</td>
<td>-7.36333*</td>
<td>2.38203</td>
<td>.004</td>
<td></td>
</tr>
<tr>
<td>Upper Primary SC</td>
<td>Primary SC</td>
<td>8.81667*</td>
<td>2.38203</td>
<td>.001</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Upper Primary SC</td>
<td>9.85111*</td>
<td>2.38203</td>
<td>.000</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Upper primary ST</td>
<td>2.48778</td>
<td>2.38203</td>
<td>.304</td>
<td></td>
</tr>
<tr>
<td>Primary ST</td>
<td>Upper Primary SC</td>
<td>6.32889*</td>
<td>2.38203</td>
<td>.012</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Upper Primary ST</td>
<td>7.36333*</td>
<td>2.38203</td>
<td>.004</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Primary ST</td>
<td>-2.48778</td>
<td>2.38203</td>
<td>.304</td>
<td></td>
</tr>
</tbody>
</table>

*. The mean difference is significant at the 0.05 level

Table 3.18 examines that the multiple comparison of differences in enrollments of social groups. According to the results of the above table, in the first group there is an insignificant difference in enrollment between primary SC’s and upper primary SC’s. But ST’s at primary and upper primary level are significant with SC’s of primary with the negative Mean differences. Whereas in the second group except SC”s at primary level remaining two are statistically significant differences in enrollment with upper primary SC’s. But here also the Mean differences are negative. Similarly, in the third group, except ST’s at upper primary level remaining SC’s at both the levels are statistically significant in the differences of enrollments with primary ST’s with the positive Mean differences. Subsequently in the last group SC’s are statistically significant at primary as well as upper primary level with the Upper primary ST’s.
3.3.2 Differences in Drop-out rate in Elementary School Children in India

Table 3.19: Gender – wise Differences in Drop-outs of Elementary School Children in India

<table>
<thead>
<tr>
<th>Dropouts</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>3222.824</td>
<td>3</td>
<td>1074.275</td>
<td>38.953</td>
<td>.000</td>
</tr>
<tr>
<td>Within Groups</td>
<td>882.525</td>
<td>32</td>
<td>27.579</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>4105.349</td>
<td>35</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The table 3.19 explores the gender – wise differences in drop-outs of elementary schools in India. According to the table the drop-out values are statistically significant at the 1% level with the ‘F’ value of 38.953. It means that there is a significant difference in drop-outs of children in elementary schools of India.

Table 3.20: Gender wise Multiple Comparison of the differences in drop-outs of Primary and Elementary Schools in India

<table>
<thead>
<tr>
<th>Drop-outs LSD</th>
<th>(I) Sl. No.</th>
<th>(J) Sl. No.</th>
<th>Mean Difference (I-J)</th>
<th>Std. Error</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary Boys</td>
<td>Primary Girls</td>
<td>2.78000</td>
<td>2.47561</td>
<td>.270</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Elementary boys</td>
<td>-17.34667*</td>
<td>2.47561</td>
<td>.000</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Elementary girls</td>
<td>-17.51444*</td>
<td>2.47561</td>
<td>.000</td>
<td></td>
</tr>
<tr>
<td>Primary Girls</td>
<td>Primary Boys</td>
<td>-2.78000</td>
<td>2.47561</td>
<td>.270</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Elementary boys</td>
<td>-20.12667*</td>
<td>2.47561</td>
<td>.000</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Elementary girls</td>
<td>-20.29444*</td>
<td>2.47561</td>
<td>.000</td>
<td></td>
</tr>
<tr>
<td>Elementary boys</td>
<td>Primary Boys</td>
<td>17.34667*</td>
<td>2.47561</td>
<td>.000</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Primary Girls</td>
<td>20.12667*</td>
<td>2.47561</td>
<td>.000</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Elementary girls</td>
<td>-.16778</td>
<td>2.47561</td>
<td>.946</td>
<td></td>
</tr>
<tr>
<td>Elementary girls</td>
<td>Primary Boys</td>
<td>17.51444*</td>
<td>2.47561</td>
<td>.000</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Primary Girls</td>
<td>20.29444*</td>
<td>2.47561</td>
<td>.000</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Elementary boys</td>
<td>.16778</td>
<td>2.47561</td>
<td>.946</td>
<td></td>
</tr>
</tbody>
</table>

* The mean difference is significant at the 0.05 level.
The table 3.20 has shown that the gender-wise multiple comparison of the differences in drop-outs of primary and elementary schools of India. As per the results of the given table, in the first group there is an insignificant difference between primary boys and primary girls with the positive Mean differences of 2.78. But the remaining elementary level drop-outs are statistically significant with negative Mean differences. Whereas in the second group, only girl and boys dropout is insignificant but the drop-outs in elementary schools is having significant difference in drop-outs with primary girls’ drop-outs. So, the Mean differences are negative in nature. Subsequently, the third group, between elementary boys and girls the drop-outs have insignificant difference with the negative Mean differences but the remaining are having significant differences in drop-outs with the drop-outs in elementary schools with the Mean differences of 17.34 and 20.12 respectively. Whereas in the final group, except elementary school girls and boys, remaining primary school girls and boys have statistically significant differences in drop-outs with elementary girls with the following mean differences like 17.51, 20.29 and 0.16 which are also positive in nature.

Thus, the study has tried to know about the differences in enrollment and drop-outs of elementary schools in India. It is found from the study there is significant differences in enrollment of elementary schools among rural, urban, government and private schools. Because, the private schools are very impressive in terms of giving quality education rather than the government schools and in urban areas also, they have more impact on the good education attainment. Hence, the difference in enrollment has taken place among rural, urban, government and private schools. Whereas, in social groups also, there is a significant difference in enrollments among SC, ST’s as well as the in the general category. Because, the SC and ST’s are socially and economically very deprived compared to others. Therefore, they have been boycotting from the education opportunities. Subsequently, there is no significant difference in drop-outs between girls and boys at primary level but the difference is occurred in elementary level among girls and boys. Because, in primary level the opportunity has been given equally to both girls and boys but in upper primary level the boys get more education opportunities.
3.4 Scenario of Growth Pattern of Students Enrollment and Drop-outs in Elementary Schools of Karnataka

One of the Millennium Development Goals (MDGs) approved in September 2000 at a UN summit of world leaders is the achievement of universal primary school attendance for boys and girls. This, of course, implies a complete closing of the gender gap. It also requires a 100% primary school completion rate, that is, all students entering grade 1 are retained until grade 5. The MDG couched in these terms reflects recognition of the importance of basic (primary) education. This is particularly pertinent in India where primary education has historically been neglected by the state, with educational expenditures being concentrated on the tertiary sector (e.g. Dreze and Sen 1995). As a result, there are vast inequalities in educational attainment in India, a remarkable degree of illiteracy coexisting with frontier research in science and technology.

Government of India and Karnataka are playing a vital role in the achievements of universalisation of elementary education and also providing good education facilities to the people of the country through the various education improvement programmes. Consequently, now the overall scenario of the elementary schools is very impressive in terms of growth pattern in number of schools and its enrollment and state of school education in India as well as in the Karnataka so far.

Karnataka has been made a remarkable progress in school education during the last two decades. The study has discussed coherently about the growth pattern in number of elementary schools and its enrollment as well as drop-outs from the year of 2002-2011 in this section.

3.4.1 The Growth pattern in Number of Elementary Schools of Karnataka

In this context the study has enumerated the overall school education performance of Karnataka state in terms of its growth pattern in Number of schools, enrollments and related issues descriptively.
Figure 3.8: Number of Elementary Schools in Karnataka 2002-2011 (in thousands)

![Chart showing the number of elementary schools in Karnataka from 2002 to 2011.](chart.png)

Source: Elementary schools in India: Where Do We Stand? State Report Cards

The figure 3.8 demonstrates that, the trends of the total number of elementary schools in Karnataka over a period of time (2002-03 to 2010-11). In the chart, it is evidently clear; the total number of government schools and the rural government schools are progressive and also both have similarities in growth but in the urban areas, the government schools are very peak compared to all types of schools in the state. And the total number of private schools is in the lowest place compared to the government school in rural as well as urban areas. Similarly, the number of private schools has risen drastically in urban areas in recent days. It has also been proved statistically as follows;

Table 3.21: Average Annual Growth of Number of Elementary Schools in Karnataka

<table>
<thead>
<tr>
<th>Dependent Variables</th>
<th>Constant</th>
<th>Parameter (β1)</th>
<th>Sig</th>
<th>R Square</th>
</tr>
</thead>
<tbody>
<tr>
<td>Government Schools</td>
<td>42.734</td>
<td>.010</td>
<td>.000</td>
<td>.969</td>
</tr>
<tr>
<td>Private Schools</td>
<td>7.561</td>
<td>.059</td>
<td>.000</td>
<td>.964</td>
</tr>
<tr>
<td>Rural Government Schools</td>
<td>38.148</td>
<td>.010</td>
<td>.000</td>
<td>.895</td>
</tr>
<tr>
<td>Rural Private Schools</td>
<td>3.467</td>
<td>.056</td>
<td>.000</td>
<td>.860</td>
</tr>
<tr>
<td>Urban Government Schools</td>
<td>80.889</td>
<td>.010</td>
<td>.000</td>
<td>.946</td>
</tr>
<tr>
<td>Urban Private Schools</td>
<td>11.033</td>
<td>.058</td>
<td>.000</td>
<td>.953</td>
</tr>
</tbody>
</table>
As per the results of the given in table. 3.21, the average annual growth of total government schools is 1.0 which is statistically significant at the 1 percent level with 0.969 R Square value. Where as in the private sector, the average annual growth is 5.9 percent and it is very high growth values. It is also statistically significant at the 1 percent level so, R Square value is 0.964. Whereas in the rural areas, the average annual growth of rural government schools is 1.0 which is statistically significant at the 1 percent level and the R Square value is 0.895. When we looked at the rural private schools, the average annual growth is 5.6 percent, it is also statistically significant and the R Square value is 0.860. Whereas, in the urban government schools, the average annual growth is 1.0, it is statistically significant at the 1 percent level and the R Square value is 0.946. Finally, in the urban private schools have positive annual growth rate, that is 5.8 percent and it is the highest annual growth rate than total elementary schools growth rates. It is statistically significant at 1 percent level and the R Square value is 0.953.

Thus, the reported result reveals that, the Average annual growth of government schools is decreased compared to private schools growth rate. But the private schools are positive in nature in terms of its annual growth in rural as well as urban areas in Karnataka. Where as in rural area the annual growth of government schools is little low compared to rural private schools. In addition to that in urban areas, the average annual growth of government schools is very slow in nature but the private schools have positive annual growth rate. It means that, the private schools are growing rapidly in rural and urban areas compared to all kinds of elementary schools in Karnataka state. The main reason for the high growth rate of private schools are, have good infrastructure facilities, management efficiency, appriciatable PTR ratio and private schools have been given individual preference to every child to secure their life through good and quality education. Consequently, the people attracted towards the private institution and the student strength also improved as a result the private institutions in urban areas are grown rapidly in recent days especially in Karnataka.

3.4.2 Growth of Enrollment in Elementary Schools of Karnataka

Karnataka is also contributing to the total literacy rate of the country with the implementation of various enrollment enriched programmes. Elementary education in the state is very impressive compared to other backward state of India. Private and
government elementary schools of Karnataka also have contributed to the total enrollment in elementary school education in India. The involvement of private schools is more in terms of its enrollment compared to government schools. Because, of the impact of private institution and its standard education.

**Figure 3.9: Enrollments in Elementary Schools in Karnataka 2002-2011 (in Lakhs)**

![Graph showing enrollment trends in elementary schools in Karnataka from 2002 to 2011.](image)

*Source: Elementary schools in India: Where Do We Stand? State Report Cards*

Figure 3.9 demonstrates that, the trends of enrollment in elementary schools of Karnataka during the particular period of time (2002-03 to 2010-11). In the above chart, the enrollment in government schools and rural government school is very high but it has in progressive trend in the beginning of the study period later it has fluctuated and then declined. But in the urban government schools, the enrollment level is very deprived. Whereas in private schools, the annual growth of enrollment has been rose every year in both rural as well as urban areas but compared to the government schools it has been very poor.

**Table 3.22: Average Annual Growth in Enrollment of Elementary Schools of Karnataka**

<table>
<thead>
<tr>
<th>Dependent Variables</th>
<th>Constant</th>
<th>Parameter (β1)</th>
<th>Sig</th>
<th>R Square</th>
</tr>
</thead>
<tbody>
<tr>
<td>Government Schools</td>
<td>62.124</td>
<td>-.030</td>
<td>.001</td>
<td>.825</td>
</tr>
<tr>
<td>Private Schools</td>
<td>16.462</td>
<td>.067</td>
<td>.000</td>
<td>.868</td>
</tr>
<tr>
<td>Rural Government Schools</td>
<td>51.807</td>
<td>-.032</td>
<td>.000</td>
<td>.852</td>
</tr>
<tr>
<td>Rural Private Schools</td>
<td>5.737</td>
<td>.062</td>
<td>.002</td>
<td>.766</td>
</tr>
<tr>
<td>Urban Government Schools</td>
<td>10.291</td>
<td>-.022</td>
<td>.031</td>
<td>.507</td>
</tr>
<tr>
<td>Urban Private Schools</td>
<td>10.712</td>
<td>.070</td>
<td>.000</td>
<td>.848</td>
</tr>
</tbody>
</table>
The results of the model are reported in table 3.22. The average annual growth of enrollment in government Schools is -3.0 percent and it is statistically significant at the 1 percent level and the value of the R Square is 0.825. Whereas the enrollment in private schools was increased with an amount of 6.7 percent which is higher than government schools and it is statistically significant at the 1 percent level and the value of R Square is 0.868. Similarly, the study has compared the enrollment of rural and urban elementary schools, the average annual growth of enrollment in rural government schools is -3.2 percent and it is statistically significant at the 1 percent level with 0.852 R Square value. In the same way, the growth of enrollment in rural private schools also increased with an amount of 6.2 percent, again it is higher than the rural government schools. It is statistically significant at the 1 percent level and the R Square value is 0.766. Whereas in the urban government schools the overall average growth of enrollment is -2.2 percent and it is statistically significant at 5 percent level and the value of R Square is 0.507. Finally, the average annual growth of enrollment in urban private schools is 7.0 percent approximately it has higher average of growth in enrollment of all types of elementary schools in Karnataka. It is statistically significant at the 1 percent level and the value of R Square is 0.848.

From the observation of the above results, it is quite clear that, the elementary education in the state has not much difference in terms of enrollment compared to the Indian elementary schools scenario. The above result reveals that, both government and private schools in both rural and urban areas are participated progressively in providing quality education at elementary level. Unfortunately, the level of enrollment in government schools is negative in both rural and urban areas. But compared to government schools, the private schools have a huge amount of contribution to growth of enrollment as well as providing standard education at elementary school level in Karnataka.

Because, the size of the private schools in both India and Karnataka was found to be more than double compared to the size of government schools in terms of enrollment. However, the pupil-teacher ratio is in sufficient condition in private schools. Infrastructure which is provided by the private management schools is very impressive. Subsequently, the enrollment incentive programmes like Mid Day Meal, free textbooks and stationeries etc. these programmes have been implemented by the
government of Karnataka. Consequently, the level of enrollment is in a better position in the state.

**Figure 3.10: Sex-wise Enrollment in Elementary Schools of Karnataka 2002-2011**

(in Millions)

The figure 3.10 explores the variations of sex-wise enrollment in the primary and the upper primary schools of Karnataka from 2002-03 to 2010-11. Here, the chart has been clearly exposed the variations in enrollment between boys’ and girls. The girls and boys enrollment at primary level is very high compared to upper primary school level. But in the upper primary level, the enrollment has very deprived in both boys and girls.

**Table 3.23: Average Annual Growth of Sex-wise Enrollment in Elementary Schools of Karnataka**

<table>
<thead>
<tr>
<th>Dependent Variable</th>
<th>Constant</th>
<th>Parameter (β1)</th>
<th>Sig</th>
<th>R Square</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boys Primary</td>
<td>2.282</td>
<td>.018</td>
<td>.212</td>
<td>.213</td>
</tr>
<tr>
<td>Boys Upper Primary</td>
<td>1.989</td>
<td>-.059</td>
<td>.006</td>
<td>.689</td>
</tr>
<tr>
<td>Girls Primary</td>
<td>2.144</td>
<td>.018</td>
<td>.206</td>
<td>.217</td>
</tr>
<tr>
<td>Girls Upper Primary</td>
<td>1.869</td>
<td>-.060</td>
<td>.005</td>
<td>.704</td>
</tr>
</tbody>
</table>
The results in the table 3.23 evaluates that, the average annual growth of enrollment of boys at primary school level is 1.8 and it is statistically insignificant with the R Square value of 0.213. Whereas in upper primary level the average annual growth of boys’ enrollment is -5.9, it means that the growth of enrollment is very low in upper primary school level compared to primary level but it is statistically significant at the 1 percent level. So, the R Square value is 0.689. When we observe the enrollment growth of girls at primary level is 1.8 and it is statistically insignificant with the R Square value of 0.217. Subsequently, in upper primary level the average annual growth of enrollment of girls is same as we previously quoted for boys. So, the average annual growth of girls enrollment is -6.0 it is statistically significant at the 1 percent level. The R Square value is 0.704.

Thus, the above results clearly say that, the growth of enrollment of both girls and boys at primary level is quite good but in the upper primary level the average growth of enrollment of both girls and boys are very poor compared to primary school levels. Because in recent years (2009 to 2011) the Government of Karnataka has not concentrated on the growth of enrollment in upper primary schools in other words it has failed to reach its goal in various school education programmes. In addition to that, the state has not announced the appropriate programme to bring back or to retain the students in upper primary school level.

Figure 3.11: Caste-wise Enrollment in Elementary Schools of Karnataka 2002-2011
Figure 3.11 reveals that, the fluctuations in caste-wise enrollment in primary as well as upper primary schools of Karnataka during the period of 2002-03 to 2010-11. It is very clear in the chart; the SC’s enrollment in both primary and upper primary school level is remarkable compared to ST’s. Whereas, the ST’s enrollment in both primary and upper primary school level is very low compared to the SC’s in Karnataka. But in the last year (2011) the student’s enrollment is very less in both the categories.

Table 3.24: Average Annual Growth of Caste-wise enrollment in elementary schools of Karnataka

<table>
<thead>
<tr>
<th>Dependent Variables</th>
<th>Constant</th>
<th>Parameter (β1)</th>
<th>Sig</th>
<th>R Square</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary Enrollment SC’s</td>
<td>52.617</td>
<td>-.281</td>
<td>.129</td>
<td>.298</td>
</tr>
<tr>
<td>U.Primary Enrollment SC’s</td>
<td>46.515</td>
<td>-.284</td>
<td>.110</td>
<td>.324</td>
</tr>
<tr>
<td>Primary Enrollment ST’s</td>
<td>18.363</td>
<td>-.244</td>
<td>.134</td>
<td>.291</td>
</tr>
<tr>
<td>U.Primary Enrollment ST’s</td>
<td>15.837</td>
<td>-.243</td>
<td>.118</td>
<td>.311</td>
</tr>
</tbody>
</table>

According to the results mentioned in the table 3.24, the average annual growth of enrollment of SC’s at primary level is -2.81; it is statistically not significant. So, the R Square value is 0.298. Whereas in upper primary level the average annual growth of SC’s enrollment is -2.84 and it is also statistically insignificant. Hence, the R Square value is 0.324. When we looked at the ST’s enrollment at the primary level, the average annual growth is -2.44 and it is statistically insignificant. So, the R Square value is 0.291. Whereas in upper primary level the average annual growth of ST’s enrollment is -2.43, it is also statistically insignificant with the R Square value of 0.311.

As per the above results, it is very clear, the growth of enrollment in SC’s and ST’s has negative values, it means that both the categories have negative growth in terms of their enrollment. But compared to ST’s enrollment, the average annual growth of enrollment of SC’s is very impressive in both primary and upper primary levels. Unfortunately, the average growth of SC’s and ST’s enrollment is in negative trend because, the programmes announced by the state have not reached appropriately to such categories. It is the main drawback of Karnataka related to elementary school education. Hence, the Universalization of Elementary Education is still not achieved.
Table 3.25: Average Annual Growth of Single Teacher Schools in Karnataka

<table>
<thead>
<tr>
<th>Dependent Variables</th>
<th>Constant</th>
<th>Parameter (β1)</th>
<th>Sig</th>
<th>R Square</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single Teacher Schools primary</td>
<td>21.320</td>
<td>-.037</td>
<td>.034</td>
<td>.497</td>
</tr>
<tr>
<td>Single Teacher Schools U.Primary</td>
<td>.976</td>
<td>.281</td>
<td>.001</td>
<td>.829</td>
</tr>
</tbody>
</table>

The result of the table 3.25 illustrates the annual growth of total number of single teacher schools at primary and upper primary schools in Karnataka. The reported results illustrate that, the average annual growth of total number of single teacher schools at the primary level is -3.7 and it is statistically significant at the 5 percent level. Hence, the R Square value is 0.497. When we observe the average annual growth of single teacher schools at the upper primary level is 28.1 and it is also statistically significant at the 1 percent level and the R Square value is 0.829.

From the above results, it is very clear; the growth of single teacher schools at primary level is very high compared to upper primary schools in Karnataka. And also it is statistically insignificant because the growth of such schools is very high at primary level in Karnataka which leads to diminish the condition of primary schools in terms of its level of enrollment as well as overall performances. As well as in upper primary schools, the average annual growth of single teacher schools is very low compared to primary schools in the state.

Table 3.26: Average Annual Growth of Schools with Common Toilets in Karnataka

<table>
<thead>
<tr>
<th>Dependent Variables</th>
<th>Constant</th>
<th>Parameter (β1)</th>
<th>Sig</th>
<th>R Square</th>
</tr>
</thead>
<tbody>
<tr>
<td>Schools With Common Toilets primary</td>
<td>21.101</td>
<td>.156</td>
<td>.002</td>
<td>.757</td>
</tr>
<tr>
<td>Schools With Common Toilets U.Primary</td>
<td>72.940</td>
<td>-.039</td>
<td>.315</td>
<td>.143</td>
</tr>
</tbody>
</table>

The common toilet facility has really enhanced the level of enrollments in the primary as well as upper primary schools in Karnataka. Here, the result in the table 3.26 says that, the average annual growth of total number of primary schools which having common toilet facility is 15.6, it is statistically significant at the 1 percent level. And the R Square value is 0.757. Whereas in upper primary schools the average
annual growth of such schools is -3.9, it is statistically insignificant with the R Square value of 0.143.

According to the stated results, it is quite clear; the primary schools have more number of such facilities. So, the average annual growth of such schools is also very high which leads to improve the level of enrollment and overall condition of the schools. Subsequently, in upper primary schools the average annual growth is declined compared to the primary schools in Karnataka. Because, in the state also only some of the upper primary schools having the facility of common toilets. And the very important fact is, common toilets are used only for primary school children but in upper primary level the situation is different they do not use common toilets. Hence, there is a need of separate girls’ toilets. In the state also, due to lack of funds and maintenance problem the growth of schools which having such facilities are decreased in recent years (2009 to 2011) especially in the upper primary schools.

**Table 3.27: Average Annual Growth of Schools with Drinking Water Facilities in Karnataka**

<table>
<thead>
<tr>
<th>Dependent Variables</th>
<th>Constant</th>
<th>Parameter((β1))</th>
<th>Sig</th>
<th>R Square</th>
</tr>
</thead>
<tbody>
<tr>
<td>Schools With Drinking Water Facilities primary</td>
<td>60.046</td>
<td>.031</td>
<td>.080</td>
<td>.375</td>
</tr>
<tr>
<td>Schools With Drinking Water Facilities U.Primary</td>
<td>81.052</td>
<td>.015</td>
<td>.112</td>
<td>.321</td>
</tr>
</tbody>
</table>

Providing infrastructure Facilities like drinking water facility for the elementary schools has been improved the condition of school education. The above mentioned results in the table 3.27 evaluates that, the average annual growth of primary schools in the state which having drinking water facility is 3.1 it is statistically significant at 1 percent level and the R Square value is 0.375. On the other hand, the average annual growth of upper primary schools which having such facility is 1.5 and it is also statistically insignificant with the R Square value of 0.321.

As per the above results, the situation is almost similar compared to India. The average annual growth of primary schools in Karnataka which having drinking water facility is very high compared to upper primary schools. Consequently, the upper primary schools which having such facilities are declined compared to primary
schools. It means that, these kinds of facilities have much influence on the primary schools than the upper primary schools. But in the upper primary schools the average annual growth is low because the government has not properly provided the above facility i.e. funds for maintenance to such schools especially in rural areas. Thus, these types of infrastructures have highly influenced on the overall enrollment growth of primary as well as upper primary schools in Karnataka also.

Table 3.28: Average Annual Growth of Pupil Teacher Ratio in Karnataka

<table>
<thead>
<tr>
<th>Dependent Variables</th>
<th>Constant</th>
<th>Parameter(β)</th>
<th>Sig</th>
<th>R Square</th>
</tr>
</thead>
<tbody>
<tr>
<td>PTR primary</td>
<td>29.606</td>
<td>-.056</td>
<td>.001</td>
<td>.817</td>
</tr>
<tr>
<td>PTR U.Primary</td>
<td>40.210</td>
<td>-.052</td>
<td>.019</td>
<td>.567</td>
</tr>
</tbody>
</table>

The results of the table 3.28 illustrates that, the average annual growth of the PTR ratio of primary schools in the state is -5.6 it is statistically significant at the 1 percent level and the R Square value is 0.817. Where as in upper primary schools the average annual growth of PTR ratio is -5.2, it is statistically significant at the 5 percent level. So, the R Square value is 0.567.

The stated results enumerates that, the average annual growth of the PTR ratio is negative in both primary and upper primary schools which are also having significant values. It means that, the situation is quite different compared to India level in terms of PTR ratio. Here, the primary schools have less number of students but in the upper primary level the student ratio is very high compared to the primary schools in Karnataka. But the growth of the ratio is declined in the past three years of the study in both primary and upper primary schools.

3.4.3 Status of Drop-outs in Karnataka

Even though there is a massive programmes implemented by the Government of India and Government of Karnataka through SSA, the drop-out level is not decreased but it is still existed in the state. In Karnataka also more number of school children is dropping out from the elementary school education. It is quite clear from the figure given below;
The figure 3.12 shows that the various fluctuations in drop-outs of boys and girls in both primary as well as elementary schools in Karnataka over a period of time. Here, the growth of drop-outs of both girl and boys is very higher in elementary schools compared to primary schools but it has been declined gradually. Likewise, the growth of boys and girls drop-out in primary schools is very lower than the elementary schools of Karnataka.

Table 3.29: Average Annual Growth of Drop-outs in Primary Schools of Karnataka

<table>
<thead>
<tr>
<th>Dependent Variables</th>
<th>Constant</th>
<th>Parameter (β1)</th>
<th>Sig</th>
<th>R Square</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary Schools Drop-out</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Boys</td>
<td>23.684</td>
<td>-.126</td>
<td>.026</td>
<td>.529</td>
</tr>
<tr>
<td>Girls</td>
<td>23.299</td>
<td>-.144</td>
<td>.031</td>
<td>.509</td>
</tr>
</tbody>
</table>

Achievement of Universalisation of Elementary Education (UEE) is not possible in case of India as well as Karnataka even the country is spending 3% of share in national income. Because of the problem of dropping out of school children at the primary and elementary level.
The result in table 3.29 illustrates that, the average of boy’s drop-outs at primary school level is -12.6 which is statistically significant at the 5 percent level with the R Square value of 0.529. Where as in primary level the average of girls drop-out is -14.4 which is statistically significant at the 5 percent level and the R Square value is 0.509.

From the above results, it is very clear; the drop-out average in boys is less than the average of girls drop-out at primary level. On the whole, all the growth values are negative in nature; it means that there is a declining trend in drop-outs in Karnataka due to a lot of drop-out reducing programmes implemented by the Government of Karnataka.

**Table 3.30: Average Annual Growth of Drop-outs in Elementary Schools of Karnataka**

<table>
<thead>
<tr>
<th>Dependent Variables</th>
<th>Constant</th>
<th>Parameter (β1)</th>
<th>Sig</th>
<th>R Square</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elementary Schools Drop-out Boys</td>
<td>61.976</td>
<td>-.088</td>
<td>.000</td>
<td>.870</td>
</tr>
<tr>
<td>Elementary Schools Drop-out Girls</td>
<td>62.658</td>
<td>-.085</td>
<td>.000</td>
<td>.887</td>
</tr>
</tbody>
</table>

The results from table 3.30 reveal that, the average of drop-outs in boys at elementary school in Karnataka is -8.8 which is statistically significant at 1 percent level. And the R Square value is 0.870. Similarly, the average of girls drop-out at elementary stage is -8.5 which is statistically significant at the 1 percent level with 0.887 R Square value.

According to the reported result, the average of girls and boys drop-outs at elementary level in the state is almost similar to the India level. But here a slight change has been occurred in boys’ drop-outs, the average of boy’s drop-outs at elementary school level is higher than the girls. On the whole, the drop-out level is declining because, it has negative growth rates.
The figure 3.13 explores the trends in drop-out of SC category at primary and elementary school level during the study period. According to the above chart, the drop-out of SC Category at elementary schools is higher especially boys drop-out has been declined compared to girls. But, SC girls’ drop-outs are fluctuated in the beginning period of the study but later it has been slightly increased in the primary school level.

**Table 3.31: Average Annual Growth of Drop-outs in Primary Schools of SC Category in Karnataka**

<table>
<thead>
<tr>
<th>Dependent Variables</th>
<th>Constant</th>
<th>Parameter (β1)</th>
<th>Sig</th>
<th>R Square</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary Schools Drop-out Boys (SC)</td>
<td>3.591</td>
<td>.195</td>
<td>.169</td>
<td>.251</td>
</tr>
<tr>
<td>Primary Schools Drop-out Girls (SC)</td>
<td>17.798</td>
<td>-.048</td>
<td>.379</td>
<td>.112</td>
</tr>
</tbody>
</table>

The drop-out rates are low at the primary schools in Karnataka but at the elementary school level the drop-out rate is very high especially in SC category in the state. The reported results in the table 3.31 evaluated that, the average of drop-outs in SC category at the primary school level is 19.5 which is statistically insignificant with 0.251 R Square value. Likewise, the average annual growth of drop-outs in SC girls at primary level is -4.8 which is also statistically insignificant. And the R Square value is 0.112.
Above mentioned results concluded that, the average of boy’s drop-outs in SC category is higher compared to the girls from the SC category. Moreover, it is quite clear that, in Karnataka most dropping out children at primary school level are boys from SC category. Here the girls drop-out has negative trend, it means that the girls drop-out has declined in Karnataka especially among SC category.

Table 3.32: Average Annual Growth of Drop-outs in Elementary Schools of SC Category in Karnataka

<table>
<thead>
<tr>
<th>Dependent Variables</th>
<th>Constant</th>
<th>Parameter (β1)</th>
<th>Sig</th>
<th>R Square</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elementary Schools Drop-out Boys (SC)</td>
<td>51.083</td>
<td>-.044</td>
<td>.155</td>
<td>.266</td>
</tr>
<tr>
<td>Elementary Schools Drop-out Girls (SC)</td>
<td>63.755</td>
<td>-.050</td>
<td>.000</td>
<td>.862</td>
</tr>
</tbody>
</table>

The results of Table 3.32 have stated that, the average of drop-out in boys at elementary schools is -4.4 which is statistically insignificant and the R Square value is 0.266. Similarly, in girls belongs to SC caste, the average of drop-out is more than the boys that is -5.0. It is statistically significant at the 1 percent level with the R Square value of 0.862.

The results have shown that, the growth of girls drop-out is very high compared to the boys at the elementary level. It means that, the average of drop-outs in girls is more than the boys in SC caste. Further, growth of drop-out of SC’s and ST’s has negative values it means that the drop-out of elementary school level is declining in both the categories.

Figure 3.14: Drop-outs in Primary and Elementary Schools of ST Category in Karnataka 2001 - 2010

Source: Ministry of Human Resource Development Government of India (13456)

Note: Primary Boys PrimaryGirls Elementary Boys Elementary Girls
The figure 3.14 exhibits the trends in drop-outs of ST category at primary and elementary school level in Karnataka over a period of time. According to the chart, the drop-outs of primary school girls belong to ST category was very high in the beginning but later it has taken faster growth but compared to the girls, the boys dropout is slowly increased. Whereas in the elementary level the drop-out of ST girls is very high compared to the ST boys and the boys drop-out rate is very low but later, both have been declined gradually.

Table 3.33: Average Annual Growth of Drop-outs in Primary Schools of SC Category in Karnataka

<table>
<thead>
<tr>
<th>Dependent Variables</th>
<th>Constant</th>
<th>Parameter (β1)</th>
<th>Sig</th>
<th>R Square</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary Schools Drop-out Boys (ST)</td>
<td>5.455</td>
<td>.070</td>
<td>.461</td>
<td>.080</td>
</tr>
<tr>
<td>Primary Schools Drop-out Girls (ST)</td>
<td>7.231</td>
<td>.065</td>
<td>.336</td>
<td>.132</td>
</tr>
</tbody>
</table>

The stated result gives a clear idea about the growth pattern in drop-outs of students (boys & girls) belong to ST the community at primary school level. The average of drop-outs in primary school boys belong to ST caste is 7.0 which are statistically insignificant with 0.080 R Square value. Whereas in primary school girls belong to ST caste, the average of drop-outs is 6.5 which is also insignificant and the R Square value is 0.132.

From the observation of the above results, the average of both girls and boys’ belongs to ST categories have a positive growth rate especially the boys growth rate is slightly increased than girls but almost similar. On the whole, there is a much difference in drop-outs between primary and elementary schools in ST category of Karnataka.

Table 3.34: Average Annual Growth of Drop-outs in Primary School of ST Category in Karnataka

<table>
<thead>
<tr>
<th>Dependent Variables</th>
<th>Constant</th>
<th>Parameter (β1)</th>
<th>Sig</th>
<th>R Square</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elementary Schools Drop-out Boys (ST)</td>
<td>65.256</td>
<td>-.100</td>
<td>.000</td>
<td>.941</td>
</tr>
<tr>
<td>Elementary Schools Drop-out Girls (ST)</td>
<td>68.225</td>
<td>-.082</td>
<td>.000</td>
<td>.920</td>
</tr>
</tbody>
</table>
In addition to that, the average of drop-outs in ST children at the elementary school level is very high compared to primary schools in Karnataka. The average of drop-out of ST boys’ students is -10.0 which is statistically significant at the 1 percent level with 0.941 R Square value. Whereas in girls belong to ST caste, the average of drop-out is -8.2 and it is also statistically significant at the 1 percent level. So, the R Square value is 0.920.

The reported results clearly illustrate that, the average of drop-outs among girls and boys at the elementary level is higher in Karnataka and the boys have little more in drop-outs in ST category. Likewise, the girls drop-out is declined compared to the boy’s drop-outs. Subsequently, the growth of drop-out is also has little difference compared to the boys drop-out. But the overall growth of drop-out has negative in nature it means that the drop-out of ST children at the elementary schools is gradually declined.

On the whole, Karnataka has been made a remarkable progress in elementary education during the last two decades. The level of enrollment also increased rapidly. The private management schools are contributed more in terms of number of schools as well as enrollment in the state. The enrollment performance of government schools is deprived compared to private management institutions in both rural as well as urban areas. The percentage of girls’ and boys’ enrollment in elementary education in the state still shows marked differentials. Subsequently, the SC category is very progressive in contribution of enrollment than ST caste. Likewise, in drop-outs also there is a significant difference between primary and the elementary schools in the state. The growth of drop-outs is very high at elementary school level compared to primary schools. In addition to that, there is a massive growth in drop-outs among SC & ST’s at the elementary schools.

3.5 Differences in Students Enrollment and Drop-outs of Elementary Schools in Karnataka

Karnataka has been made tremendous changes in the scenario of elementary school education. The remarkable changes have also been made by the state through the implementation of lot of enrollment increasing programmes which are also affected directly on the enrollments as well as drop-outs. Hence, the present study intends to analyse the differences in enrollment as well as drop-outs in Karnataka by
using appropriate ANOVA as well as LSD Post Hoc test. The result of the tool as follows

Table 3.35: Region - wise Enrollment Differences in Elementary Schools of Karnataka

<table>
<thead>
<tr>
<th>Enrollment</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>7559.855</td>
<td>3</td>
<td>2519.952</td>
<td>160.652</td>
<td>.000</td>
</tr>
<tr>
<td>Within Groups</td>
<td>501.945</td>
<td>32</td>
<td>15.686</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>8061.799</td>
<td>35</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The table 3.35 has shown that the results of the ANOVA tool which has been used to illustrate the Mean differences in enrollment of elementary schools of Karnataka. From the above results it has been proved that the enrollment value are statistically significant at the 1% level which is also means that there is a significant difference in enrollments of elementary schools in Karnataka with the ‘F’ value of 160.652.

Table 3.36: Region and Management wise Multiple Comparison of the Enrollment in Elementary Schools of Karnataka

<table>
<thead>
<tr>
<th>(I) Sl.No.</th>
<th>(J) Sl.No.</th>
<th>Mean Difference (I-J)</th>
<th>Std. Error</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Government School</td>
<td>Private Schools</td>
<td>30.26444*</td>
<td>1.86701</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>Rural Schools</td>
<td>1.31889</td>
<td>1.86701</td>
<td>.485</td>
</tr>
<tr>
<td></td>
<td>Urban Schools</td>
<td>28.96000*</td>
<td>1.86701</td>
<td>.000</td>
</tr>
<tr>
<td>Private Schools</td>
<td>Government School</td>
<td>-30.26444*</td>
<td>1.86701</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>Rural Schools</td>
<td>-28.94556*</td>
<td>1.86701</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>Urban Schools</td>
<td>-1.30444</td>
<td>1.86701</td>
<td>.490</td>
</tr>
<tr>
<td>Rural Schools</td>
<td>Government School</td>
<td>-1.31889</td>
<td>1.86701</td>
<td>.485</td>
</tr>
<tr>
<td></td>
<td>Private Schools</td>
<td>28.94556*</td>
<td>1.86701</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>Urban Schools</td>
<td>27.64111*</td>
<td>1.86701</td>
<td>.000</td>
</tr>
<tr>
<td>Urban Schools</td>
<td>Government School</td>
<td>-28.96000*</td>
<td>1.86701</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>Private Schools</td>
<td>1.30444</td>
<td>1.86701</td>
<td>.490</td>
</tr>
<tr>
<td></td>
<td>Rural Schools</td>
<td>-27.64111*</td>
<td>1.86701</td>
<td>.000</td>
</tr>
</tbody>
</table>

*. The mean difference is significant at the 0.05 level.
As per the above results of the Post Hoc test given in the table 3.36 almost all the groups have been statistically significant with the various Mean differences. Whereas in the first group except rural schools there is significant differences in enrollment between government and private schools with the highest Mean difference of 30.26 and the urban schools are in the next place in Mean differences followed by 28.96 which is also statistically significant with the enrollment in government school. Similarly, in the next group the government schools and rural schools are having significant differences in enrollment between private school and the urban schools are not significant with private schools but all the schools have negative Mean differences. Whereas in the third group only government schools are not significant in enrollment differences with rural schools but remaining all the schools are statistically significant and the Mean difference of private schools is 28.94 and for urban schools the value of difference is 27.64. Finally, in the last group, almost all have negative Mean differences with urban schools in enrollment but they have statistically significant except the private schools in the differences in enrollment.

3.5.1 Differences in Enrollment among Social Groups

The study has found out the differences in enrollment of elementary schools among the social groups especially SC’s and ST’s in Karnataka by using the ANOVA statistical tool to know the exact Mean differences. The results are as follows.

Table 3.37: Differences in Enrollment among Social Groups in Karnataka

<table>
<thead>
<tr>
<th>ANOVA</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Enrollments</td>
<td>Sum of Squares</td>
<td>df</td>
<td>Mean Square</td>
<td>F</td>
<td>Sig.</td>
<td></td>
</tr>
<tr>
<td>Between Groups</td>
<td>999.354</td>
<td>3</td>
<td>333.118</td>
<td>13.296</td>
<td>.000</td>
<td></td>
</tr>
<tr>
<td>Within Groups</td>
<td>801.733</td>
<td>32</td>
<td>25.054</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>1801.088</td>
<td>35</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The table 3.37 illustrates the differences in enrollment among the social groups especially SC’s and ST’s in Karnataka. According to the above results, it is very clear that, the enrollment is statistically significant at 1% level with the “F” value 13.296. So, it means that there is a significant difference in enrollment among social groups especially SC’s and ST’s in Karnataka. The study has clearly examined the
exact differences in enrollments within the groups and also with various Mean differences. It has been showed in the following multiple comparison table.

**Table 3.38: Multiple comparison of the differences in Enrollment among the Social Groups in Karnataka**

<table>
<thead>
<tr>
<th>Enrollment LSD</th>
<th>(I) Sl. No</th>
<th>(J) Sl.No.</th>
<th>Mean Difference (I-J)</th>
<th>Std. Error</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary SC</td>
<td>Upper Primary SC</td>
<td>2.51111</td>
<td>2.35957</td>
<td>.295</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Primary ST</td>
<td>11.10000*</td>
<td>2.35957</td>
<td>.000</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Upper primary ST</td>
<td>12.13333*</td>
<td>2.35957</td>
<td>.000</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Primary SC</td>
<td>-2.51111</td>
<td>2.35957</td>
<td>.295</td>
<td></td>
</tr>
<tr>
<td>Upper Primary SC</td>
<td>Primary ST</td>
<td>8.58889*</td>
<td>2.35957</td>
<td>.001</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Upper primary ST</td>
<td>9.62222*</td>
<td>2.35957</td>
<td>.000</td>
<td></td>
</tr>
<tr>
<td>Primary ST</td>
<td>Primary SC</td>
<td>-11.10000*</td>
<td>2.35957</td>
<td>.000</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Upper Primary SC</td>
<td>-8.58889*</td>
<td>2.35957</td>
<td>.001</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Upper primary ST</td>
<td>1.03333</td>
<td>2.35957</td>
<td>.664</td>
<td></td>
</tr>
<tr>
<td>Upper primary ST</td>
<td>Primary SC</td>
<td>-12.13333*</td>
<td>2.35957</td>
<td>.000</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Upper Primary SC</td>
<td>-9.62222*</td>
<td>2.35957</td>
<td>.000</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Primary ST</td>
<td>-1.03333</td>
<td>2.35957</td>
<td>.664</td>
<td></td>
</tr>
</tbody>
</table>

* The mean difference is significant at the 0.05 level.

Table 3.38 illustrates that the differences in enrollment of social groups in Karnataka. As per the results of the above multiple comparison table, in the first group there is an insignificant difference in enrollment between primary SC’s and upper primary SC’s. But ST’s at primary and upper primary level are significant with SC’s of primary with the positive Mean difference. Whereas in the second group, except SC’s at primary level remaining two are statistically significant differences in enrollment with upper primary SC’s. But here also the Mean differences are 8.58 and 9.62 respectively. Similarly, in the third group, except ST’s at upper primary level remaining SC’s at both the levels are statistically significant in the differences of enrollment with primary ST’s with the negative Mean differences. Subsequently, in the last group also, the SC’s are statistically significant at primary as well as upper primary level with the upper primary ST’s with the negative Mean differences.
Table 3.39: Differences in Drop-outs in Elementary Schools of Karnataka

<table>
<thead>
<tr>
<th>ANOVA</th>
<th></th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Between Groups</td>
<td>6534.909</td>
<td>3</td>
<td>2178.303</td>
<td>21.184</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>Within Groups</td>
<td>3290.549</td>
<td>32</td>
<td>102.830</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>9825.458</td>
<td>35</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The table 3.39 demonstrates that, the differences in drop-outs of elementary schools in Karnataka. According to the table the drop-out values are statistically significant at the 1% level with the ‘F’ value of 21.184. It means that, there is a significant difference in drop-outs of elementary schools in Karnataka.

Table 3.40: Gender Wise Multiple Comparison of the Differences in Drop-outs of Primary and Elementary schools in Karnataka

<table>
<thead>
<tr>
<th>Dropouts LSD</th>
<th>(I) Sl.No.</th>
<th>(J) Sl.No.</th>
<th>Mean Difference (I-J)</th>
<th>Std. Error</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Primary Boys</td>
<td>Primary Girls</td>
<td>1.09000</td>
<td>4.78028</td>
<td>.821</td>
</tr>
<tr>
<td></td>
<td>Elementary boys</td>
<td>-28.15444*</td>
<td>4.78028</td>
<td>.000</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Elementary girls</td>
<td>-24.35778*</td>
<td>4.78028</td>
<td>.000</td>
<td></td>
</tr>
<tr>
<td>Primary Girls</td>
<td>Primary Boys</td>
<td>-1.09000</td>
<td>4.78028</td>
<td>.821</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Elementary boys</td>
<td>-29.24444*</td>
<td>4.78028</td>
<td>.000</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Elementary girls</td>
<td>-25.44778*</td>
<td>4.78028</td>
<td>.000</td>
<td></td>
</tr>
<tr>
<td>Elementary boys</td>
<td>Primary Boys</td>
<td>28.15444*</td>
<td>4.78028</td>
<td>.000</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Primary Girls</td>
<td>29.24444*</td>
<td>4.78028</td>
<td>.000</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Elementary girls</td>
<td>3.79667</td>
<td>4.78028</td>
<td>.433</td>
<td></td>
</tr>
<tr>
<td>Elementary girls</td>
<td>Primary Boys</td>
<td>24.35778*</td>
<td>4.78028</td>
<td>.000</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Primary Girls</td>
<td>25.44778*</td>
<td>4.78028</td>
<td>.000</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Elementary boys</td>
<td>-3.79667</td>
<td>4.78028</td>
<td>.433</td>
<td></td>
</tr>
</tbody>
</table>

*. The mean difference is significant at the 0.05 level.

The multiple comparisons of the differences in drop-outs of boys and girls in elementary schools of Karnataka have been given in the table 3.40. According to the given table it is quite clear that, in the first group there is an insignificant difference
between primary boys and primary girls with the positive Mean differences of 1.09. But the remaining elementary level drop-outs are statistically significant with a negative Mean difference. Whereas in the second group only primary boys and girls dropout is insignificant but the drop-outs in elementary schools is having significant difference in drop-outs with primary girls’ drop-outs. So, the Mean differences are negative in nature. Subsequently, the third group between elementary boys and girls the drop-outs have insignificant difference with the negative Mean difference but the remaining are having significant differences in drop-outs with the drop-outs in elementary schools with the Mean difference of 28.15 and 29.24 respectively. Whereas in the final group, except elementary school girls and boys, remaining primary school girls and boys have statistically significant differences in drop-outs with elementary girls with the following Mean difference like 24.35, 25.44 which are also positive in nature.

So, the above results illustrate that, there is significant differences in enrollment among rural, urban, government and private schools because; the people prefer the education of their children in urban schools due to the proper infrastructure facilities which we can’t see in rural schools. Whereas, the main reason for enrollment differences in private and government schools is, the quality of education, infrastructure facilities and the individual preference given to the child these are all various reason for enrollment differences among them. Likewise in social groups also the study found out the differences. As per the results there is no significant difference among SC and ST’s in enrollment at primary level but the more differences are occurred between primary and upper primary enrollments among social groups. Similarly in drop-outs also, there is no significant differences among girls and boys at primary level but in upper primary level there is significant differences in drop-outs between girls and boys. Because, in upper primary level the boys have got more education opportunities than girls due to lot of socio-economic reasons like income, child labour, early marriage and poverty etc.

3.6 Elementary School Education Scenario of Chamarajanagara District

Universalisation of elementary education (UEE) has been accepted as a national goal since 1950. The Directive Principles of the Constitution of India envisage provision of free and compulsory elementary education to all children up to
the age of 14 years. The overall goal in this regard is to provide free and compulsory
education of satisfactory quality to all children. It is significant to note that the
National Policy on Education (1992) defines universal elementary education in a
broad framework. It made a significant emphasis from enrollment to participation
and retention. The goal of universal elementary education was enlarged to include
provision of education of a satisfactory quality to all children.

Chamarajanagara district is one of the parts of Mysore district of Karnataka
and later (1997) it was became a separated district. It has the high population of
tribals. Hence, the literacy level and status of the elementary education is very low
compared to the entire districts which are located in the southern region of the state.
And it has economically and educationally very poor district because of low income.
According to the Nanjundappa Committee Report (2002) among three classifications
of Karnataka namely; South, North and Hyderabad Karnataka, it is a district comes
under the southern region which is educationally and economically more backward
district compared to other neighbor district like Mysore, Mandya and Hassan etc.
Hence, the status of elementary education is very poor in that district.

3.7 An Evaluation of Growth pattern of Students Enrollment and Drop-outs in
Chamarajanagara District

In this section the study analyses the average growth in number of schools and
its enrollment, drop-outs and sex-wise as well as caste-wise enrollment, drop-out and
also infrastructure related factors during the period of 2002-2011 with the help of
suitable exponential growth model.

3.7.1 Average Growth of Number of Elementary Schools in Chamarajanagara
District

As of March 2011, Chamarajanagara had 964 elementary schools, in that 813
are government schools and 151 are private schools and in rural areas there are 737
government schools and 103 rural private schools in the district. Whereas in urban
areas, there are 76 government schools and 48 private schools have been working.
The level of enrollment among all the schools is also not proportionate. The
enrollment of government schools is 74.16 thousands and in private schools 29.50
thousand students are enrolled. Similarly, in rural government schools, the enrollment
is 66.97 thousand and 14.08 are already enrolled in private schools. Whereas in urban areas, there are 07.63 thousand of students are enrolled in the government schools and also 15.41 thousand of students are enrolled in private schools. Moreover, the total literacy level of the district is 61.1 and the female literacy rate is 54.3 (2011) in Chamarajanagara district.

Figure 3.15: Number of Elementary Schools in Chamarajanagara District-2002-2011

![Graph showing the number of elementary schools in Chamarajanagara district from 2002-03 to 2010-11.]

Source: Elementary schools in India: Where Do We Stand? District Report Cards

**Note:**

- Govt Schools
- Private Schools
- Rural Govt Schools
- Rural Private Schools
- Urban Govt Schools
- Urban Private Schools

The figure 3.15 exhibits that, the trends in total number of elementary schools in Chamarajanagara over a particular period of time (2002-03 to 2010-11). In the chart, it is obviously clear; the total number of government schools and the rural government schools are progressive and also both have similarities in growth but in the urban areas, the government schools are deprived compared to all types of schools in the district. And the total number of private schools is in the lowest place compared to the government school in rural as well as urban areas. Similarly, the private schools are very less in number compared to government schools but they have been rose radically in urban areas in recent days.
Table 3.41: Average Annual Growth of Number of Elementary Schools in Chamarajanagara

<table>
<thead>
<tr>
<th>Dependent Variables</th>
<th>Constant</th>
<th>Parameter (β₁)</th>
<th>Sig</th>
<th>R Square</th>
</tr>
</thead>
<tbody>
<tr>
<td>Government Schools</td>
<td>820.175</td>
<td>.001</td>
<td>.931</td>
<td>.001</td>
</tr>
<tr>
<td>Private Schools</td>
<td>118.874</td>
<td>.030</td>
<td>.274</td>
<td>.167</td>
</tr>
<tr>
<td>Rural Government Schools</td>
<td>757.457</td>
<td>.000</td>
<td>.990</td>
<td>.000</td>
</tr>
<tr>
<td>Rural Private Schools</td>
<td>90.236</td>
<td>.019</td>
<td>.584</td>
<td>.045</td>
</tr>
<tr>
<td>Urban Government Schools</td>
<td>62.657</td>
<td>.015</td>
<td>.013</td>
<td>.606</td>
</tr>
<tr>
<td>Urban Private Schools</td>
<td>28.318</td>
<td>.060</td>
<td>.000</td>
<td>.915</td>
</tr>
</tbody>
</table>

The results stated in the table 3.41 indicates that, the average annual growth of total government schools is 0.1, it is also has insignificant values with 0.001 R Square value. Where as in private sector, the average annual growth is 3.0 percent and also it is statistically insignificant so, R Square value is 0.167. Whereas in the rural areas, the average annual growth of rural government schools is 0.0 which is statistically insignificant and the R Square value is 0.00. Similarly, in the rural private schools, the average annual growth is 1.9 percent, it is also statistically insignificant and the R Square value is 0.045. Whereas, in the urban government schools, the average annual growth is 1.5, it is statistically significant at the 5 percent level and the R Square value is 0.606. Finally, in the urban private schools have a positive growth rate, that is 6.0 percent and it is the higher growth rate than all kinds of elementary schools in the district. It is statistically significant at the 1 percent level and the R Square value is 0.915.

Thus, the reported result illustrates that, the total number of elementary schools have less average annual growth rates compared to other types of schools because, the study has previously mentioned the elementary education level in the district is very low. Hence, the average annual growth of government schools is low. But the private schools are positive in nature in terms of its growth in Chamarajanagara district. Where as in rural area the growth of government schools is in poor condition with less average growth rates compared to rural private schools. In addition to that in urban areas, the average annual growth of government schools is very slow in nature but the private schools have positive annual growth rate. It means
that, the private schools are growing rapidly in urban areas but rural area private schools are not having an impressive growth rate in the district. On the whole, the growth of number of elementary schools in Chamarajanagara district is very poor.

### 3.7.2 Growth of Students Enrollment in Elementary Schools of Chamarajanagara

Chamarajanagara is one of the 30 districts of Karnataka with the very high population of tribal’s. So, the education level and the economic condition of the district are insufficient. Therefore, the elementary education situation is very poor in this district. Hence, the growth of number of schools in the district is deprived. Consequently, the level of enrollment is also almost similar to the growth of number of schools in the district. In this section, the study discussed the overall enrollment scenario of Chamarajanagara district.

**Figure 3.16: Elementary Schools Enrollment in Chamarajanagara District 2002-2011**

![Graph showing enrollment in Chamarajanagara district](source: Elementary schools in India: Where Do We Stand? District Report Cards)

Figure 3.16 explores that, the variations in enrollment of elementary schools of the Chamarajanagara district during the study period 2002-03 to 2010-11. In this figure, the enrollment in government schools and the rural government school is higher but it has progressive trend in the beginning of the study period later it has declined. But, in the urban government schools, the enrollment level is very deprived. Whereas in private schools, the enrollment has been rose every year in both rural as well as urban area but compared to the government schools it has been very poor in the district.
Table 3.42: Average Annual Growth of Enrollment in Elementary Schools of Chamarajanagara District

<table>
<thead>
<tr>
<th>Dependent Variables</th>
<th>Constant</th>
<th>Parameter (β1)</th>
<th>Sig</th>
<th>R Square</th>
</tr>
</thead>
<tbody>
<tr>
<td>Government Schools</td>
<td>120.237</td>
<td>-.046</td>
<td>.024</td>
<td>.542</td>
</tr>
<tr>
<td>Private Schools</td>
<td>24.960</td>
<td>.021</td>
<td>.381</td>
<td>.111</td>
</tr>
<tr>
<td>Rural Government Schools</td>
<td>108.525</td>
<td>-.046</td>
<td>.033</td>
<td>.499</td>
</tr>
<tr>
<td>Rural Private Schools</td>
<td>15.397</td>
<td>-.005</td>
<td>.904</td>
<td>.002</td>
</tr>
<tr>
<td>Urban Government Schools</td>
<td>11.599</td>
<td>-.045</td>
<td>.000</td>
<td>.956</td>
</tr>
<tr>
<td>Urban Private Schools</td>
<td>9.403</td>
<td>.052</td>
<td>.003</td>
<td>.741</td>
</tr>
</tbody>
</table>

The result in the table 3.42 illustrates that, the average annual growth of Enrollment in government schools is -4.6 percent and it is statistically significant at the 5 percent level and the value of the R Square is 0.542. Whereas, the enrollment in private schools was increased with an amount of 2.1 percent which is higher than government schools and it is statistically insignificant and the value of R Square is 0.111. Likewise, the average annual growth of enrollment in rural government schools is -4.6 percent and it is statistically significant at the 5 percent level with 0.499 R Square value. In the same way, enrollment of rural private schools is decreased with an amount of -0.5 percent, it is statistically insignificant and the R Square value is 0.002. Whereas, in the urban government schools the overall average annual growth of enrollment is -4.5 percent and it is statistically significant at the 1 percent level and the value of R Square is 0.956. Finally, the average annual growth of enrollment in urban private schools is 5.2 percent it has higher average annual growth in enrollment of all types of elementary schools in Chamarajanagara district. It is statistically significant at the 1 percent level and the value of R Square is 0.741.

From the observation of the above results, it is quite clear that, the elementary education in the district is completely different to the scenario of Indian as well as Karnataka elementary schools. The above result reveals that, elementary schools in both rural and urban areas are offering good education at the elementary level. Unfortunately, the growth of enrollments in government schools has negative in both rural and urban areas especially rural private schools also have negative growth rates. But compared to government schools, the private schools in urban areas have
progressive trends in average annual growth of enrollment as well as providing standard education at the elementary school level in Chamarajanagara district.

**Figure 3.17: Sex-Wise Enrollments in Elementary Schools of Chamarajanagara 2002-2011** (in Thousands)

The figure 3.17 explores the variations in sex-wise enrollments in primary and upper primary schools of Karnataka from 2002-03 to 2010-11. Here, the chart has been clearly exposed the variations of enrollment in boys and girls. The girls’ enrollment at the primary level is very high compared to the boys but in the upper primary level it has been deprived. Similarly, the boy’s enrollment at the primary level is lower compared to the girls but in the upper primary level, the enrollment has higher compared to the girls in the district.

**Table 3.43: Average Annual Growth of Sex-Wise Enrollment in Elementary Schools of Chamarajanagara**

<table>
<thead>
<tr>
<th>Dependent Variable</th>
<th>Constant</th>
<th>Parameter ($\beta$1)</th>
<th>Sig</th>
<th>R Square</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boys Primary</td>
<td>60.546</td>
<td>-.125</td>
<td>.000</td>
<td>.929</td>
</tr>
<tr>
<td>Boys Upper Primary</td>
<td>62.969</td>
<td>-.094</td>
<td>.000</td>
<td>.921</td>
</tr>
<tr>
<td>Girls Primary</td>
<td>82.408</td>
<td>-.103</td>
<td>.000</td>
<td>.922</td>
</tr>
<tr>
<td>Girls Upper Primary</td>
<td>49.097</td>
<td>-.149</td>
<td>.000</td>
<td>.903</td>
</tr>
</tbody>
</table>
The results stated in the table 3.43 evaluates that, the average annual growth of enrollment of boys at primary school level is -12.5 and it is statistically significant at 1 percent and the R Square value is 0.929. Whereas, in upper primary level the average growth of boys enrollment is -9.4. So, the R Square value is 0.921. When we observe the enrollment growth of girls at primary level is -10.3 and it is statistically significant at the 1 percent level and the R Square value is 0.922. Whereas in upper primary level, the average annual growth of enrollment of girls is -14.9 it is statistically significant at the 1 percent level. The R Square value is 0.903. From the observation of the above results, it is very clear that, the average annual growth of enrollment of both girls and boys at primary and upper primary level have negative values. It means that the enrollment participation in Chamarajanagara district is very low but they have statistically significant.

Figure 3.18: Caste-wise Enrollment in Elementary Schools of Chamarajanagara 2002-2011

Figure 3.18 reveals that, the variations in caste-wise enrollments in primary as well as upper primary schools of the Chamarajanagara district during the period of 2002-03 to 2010-11. It is very clear in the figure; the SC’s enrollment in both primary and upper primary school level is remarkable compared to ST’s. But, in the end of the period (2011) it has been declined. Whereas, the ST’s enrollment in both primary and
upper primary school level is very low compared to the SC’s in Chamarajanagara district. But, the enrollment of ST’s is steadily increased in the year of 2011.

Table 3.44: Average Annual Growth of Caste-Wise Enrollment in Elementary Schools of Chamarajanagara

<table>
<thead>
<tr>
<th>Dependent Variables</th>
<th>Constant</th>
<th>Parameter (β1)</th>
<th>Sig</th>
<th>R Square</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary Enrollment SC’s</td>
<td>27.558</td>
<td>-.003</td>
<td>.807</td>
<td>.009</td>
</tr>
<tr>
<td>U.Primary Enrollment SC’s</td>
<td>28.598</td>
<td>-.024</td>
<td>.347</td>
<td>.127</td>
</tr>
<tr>
<td>Primary Enrollment ST’s</td>
<td>12.275</td>
<td>.004</td>
<td>.798</td>
<td>.010</td>
</tr>
<tr>
<td>U.Primary Enrollment ST’s</td>
<td>9.454</td>
<td>.026</td>
<td>.174</td>
<td>.247</td>
</tr>
</tbody>
</table>

The reported result in the table 3.44 evaluates, the average annual growth of enrollment of SC’s at primary level is -0.3; it is statistically insignificant. So, the R Square value is 0.009. Whereas in upper primary level, the average growth of SC’s enrollment is -2.4 and it is also statistically insignificant. Hence, the R Square value is 0.127. Similarly, the average annual growth of ST’s’ enrollment at the primary level is 0.4 and it is statistically insignificant. So, the R Square value is 0.010. In the same way, in upper primary level also the average annual growth of ST’s enrollment is 2.6, it is also statistically insignificant with the R Square value of 0.247.

Moreover, the reported result indicates that, the average annual growth of enrollment of SC’s has negative values, it means that it has negative growth in terms of its enrollment. But compared to ST’s enrollment, the overall statistics are very good in the district. The average annual growth of ST enrollment is positive compared to the SC’s but the overall enrollment statistics are very poor in the district compared to the SC’s. However, among these categories SC’s have Loin share of enrollment in overall growth of enrollment in Chamarajanagara district.

Table 3.45: Average Growth of Single Teacher Schools in Chamarajanagara

<table>
<thead>
<tr>
<th>Dependent Variables</th>
<th>Constant</th>
<th>Parameter (β1)</th>
<th>Sig</th>
<th>R Square</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single Teacher Schools primary</td>
<td>23.649</td>
<td>-.071</td>
<td>.030</td>
<td>.512</td>
</tr>
</tbody>
</table>

The research study has followed the same exponential growth model to calculate the growth of the total number of single teacher schools at the primary and upper primary schools in the district. The results of the table 3.45 explores that, the
average annual growth of the total number of single teachers schools at primary level is -7.1 and it is statistically significant at 5 percent level. Hence, the R Square value is 0.512. Similarly, the average annual growth of single teachers’ schools at upper primary level in Chamarajanagara district is not calculated because of unavailability of the data. The data are properly available only up to primary level in the district report cards published by DISE (2002-03 to 2010-11).

From the above results, it is very clear; the annual growth of single teacher schools at primary level is higher compared to upper primary schools in the district. And also it is statistically significant at the 1 percent level. So, the average annual growth of single teacher schools in Chamarajanagara is very low.

<table>
<thead>
<tr>
<th>Dependent Variables</th>
<th>Constant</th>
<th>Parameter (β1)</th>
<th>Sig</th>
<th>R Square</th>
</tr>
</thead>
<tbody>
<tr>
<td>Schools With Common Toilets primary</td>
<td>26.268</td>
<td>.148</td>
<td>.004</td>
<td>.716</td>
</tr>
<tr>
<td>Schools With Common Toilets U.Primary</td>
<td>101.366</td>
<td>-.035</td>
<td>.373</td>
<td>.115</td>
</tr>
</tbody>
</table>

Table 3.46: Average Annual growth of Schools with Common Toilets in Chamarajanagara

The result of the table 3.46 evaluates, the average annual growth of the total number of primary and upper primary schools which having common toilet facilities in the study area. Here, the average annual growth of primary schools which having a common toilet facility in the district is 14.8, it is statistically significant at the 1 percent level. And the R Square value is 0.716. Whereas, in upper primary schools the average annual growth of such schools is -3.5, it has negative values but it is statistically insignificant. And the R Square value is 0.115.

From the observation of the stated results, the primary schools have a more number of common toilet facilities. So, the average annual growth of such schools is also very high which leads to improve the level of enrollment. Subsequently, in upper primary schools the average annual growth has negative values. It means that, compared to the primary schools, the upper primary schools are statistically more in numbers but the average annual growth is very low compared to the primary schools in Chamarajanagara district. Because, the study has previously stated that, the
common toilet facilities provided by the government have not been functioning in upper primary school level especially in the rural areas. The main reasons for that, the government has not given financial funds for its maintenance, lack of water supply in rural areas and breakage problem just because of default construction. From these reasons, these facilities are not available in rural areas.

**Table 3.47: Average Annual Growth of Schools with Drinking Water Facilities in Chamarajanagara**

<table>
<thead>
<tr>
<th>Dependent Variables</th>
<th>Constant</th>
<th>Parameter(β)</th>
<th>Sig</th>
<th>R Square</th>
</tr>
</thead>
<tbody>
<tr>
<td>Schools With Drinking Water Facilities primary</td>
<td>80.180</td>
<td>-.010</td>
<td>.664</td>
<td>.034</td>
</tr>
<tr>
<td>Schools With Drinking Water Facilities U.Primary</td>
<td>104.289</td>
<td>-.048</td>
<td>.398</td>
<td>.121</td>
</tr>
</tbody>
</table>

The government is providing infrastructure facilities like drinking water facility to improve the quality of school education in the country as well as, in district level elementary schools. The above stated results of table 3.47 illustrates that, the average annual growth of primary schools in the district which having drinking water facility is -1.0 it is statistically insignificant and the R Square value is 0.034. Likewise, the average annual growth of upper primary schools which having such facility is -4.8 and it is also statistically insignificant with the R Square value of 0.121.

As per the above results, we can see the different situation as we previously quoted in India level as well as state level. The average annual growth is negative in both primary schools and upper primary schools which having drinking water facility. It means that, in the district both types of schools are underdeveloped in terms of such type of infrastructure related facilities compared to India and Karnataka.

**Table 3.48: Average Annual Growth of Pupil Teacher Ratio in Chamarajanagara**

<table>
<thead>
<tr>
<th>Dependent Variables</th>
<th>Constant</th>
<th>Parameter(β)</th>
<th>Sig</th>
<th>R Square</th>
</tr>
</thead>
<tbody>
<tr>
<td>PTR primary</td>
<td>29.307</td>
<td>-.062</td>
<td>.065</td>
<td>.405</td>
</tr>
<tr>
<td>PTR U.Primary</td>
<td>32.160</td>
<td>-.035</td>
<td>.444</td>
<td>.086</td>
</tr>
</tbody>
</table>
To achieve the successful goal of individual concentration and to empower the knowledge of the child, we required an optimum teacher to student ratio. The results of table 3.48 evaluates that, the average annual growth of the PTR ratio of primary schools in the state is -6.2 it is statistically significant at the 5 percent level and the R Square value is 0.405. Whereas, in upper primary schools, the average annual growth of the PTR ratio is -3.5, it is statistically insignificant with the R Square value of 0.086.

From the observation of the reported results, the average annual growth of the PTR ratio is negative in both primary and upper primary schools. It means that, the situation is quite similar compared to the state level in terms of the PTR ratio. Here, both primary and upper primary schools are having almost the same number of students there is no much difference in between primary and upper primary schools in Chamarajanagara district.

3.7.3 Average Annual Growth of Drop-outs in Elementary Schools of Chamarajanagara District.

The dropout problem is pervasive in education system of a country. Many children, who enter school, are unable to complete education and multiple factors are responsible for children dropping out of school. Risk factors begin to add up even before students enroll in school that include; poverty, low educational level of parents, the weak family structure, pattern of schooling of sibling, and lack of preschool experiences. Family background and domestic problems create an environment which negatively affects the value of education (Chug, 2011). Further, students could drop out as a result of a multitude of school factors such as un congenial atmosphere, poor comprehension, absenteeism, attitude and behavior of the teachers, and failure or repetition in the same grade, etc. Subsequently, at present study area i.e. Chamarajanagara district also having such a problem like drop-out of children which is an important obstacle to achieve Universalisation of Elementary Education in the country as well as in the district.
The figure 3.19 demonstrates that, the total elementary school children drop-outs in Chamarajanagara district during the period of 2004-2012. In the above chart, it has been found that, the variations in drop-out over a period of time. The drop-out is similarly fluctuated among boys and girls at elementary school level but compared to the boys drop-out, but the girl drop-out has been declined in Chamarajanagara district.

Table 3.49: Average Annual Growth of Elementary School Children Drop-outs in Chamarajanagara

<table>
<thead>
<tr>
<th>Dependent Variables</th>
<th>Constant</th>
<th>Parameter ($\beta_1$)</th>
<th>Sig</th>
<th>R Square</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drop-out in Elementary Schools (Boys)</td>
<td>6.559</td>
<td>.015</td>
<td>.816</td>
<td>.010</td>
</tr>
<tr>
<td>Drop-out in Elementary Schools (Girls)</td>
<td>6.534</td>
<td>-.035</td>
<td>.611</td>
<td>.046</td>
</tr>
</tbody>
</table>

The result in the table 3.49 evaluates that, the average of boy’s drop-outs at the elementary school level is 1.5 which is statistically insignificant with the R Square value of 0.010. Whereas in girls at the elementary school level, the average of drop-out is -3.5 which is statistically insignificant and the R Square value is 0.046. It is very clear in the above results, the boys growth rate is higher compared to the girls in terms of drop-out in the district.
Figure 3.20: Caste-wise Drop-outs in Elementary Schools of Chamarajanagara 2006-2012

The chart 3.20 shows that, the variations in caste-wise (SC and ST) drop-outs in elementary schools of Chamarajanagara during the period of 2005-06 to 2011-12. It is very clear in the chart; the SC girls drop-out is higher compared to the SC boys. Likewise, in the ST category also, the girls drop-out is higher compared to the boys belong to the ST category in Chamarajanagara district. Finally, compared to the overall drop-outs of both the categories, the ST’s drop-outs are very high compared to the SC’s in the district.

Table 3.50: Average Annual Growth of Elementary School Children Drop-outs of SC Category in Chamarajanagara

<table>
<thead>
<tr>
<th>Dependent Variables</th>
<th>Constant</th>
<th>Parameter (β1)</th>
<th>Sig</th>
<th>R Square</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drop-outs in Elementary Schools of SC’s (Boys)</td>
<td>5.256</td>
<td>-.051</td>
<td>.636</td>
<td>.061</td>
</tr>
<tr>
<td>Drop-outs in Elementary Schools of SC’s (Girls)</td>
<td>5.009</td>
<td>-.086</td>
<td>.449</td>
<td>.149</td>
</tr>
</tbody>
</table>

The results of the table 3.50 have indicated that, the average annual growth of drop-outs of SC boys at the elementary schools is -5.1 which is statistically insignificant and the R Square value is 0.061. Similarly, in girls belongs to SC caste,
the average of drop-out is more than the boys that is -8.6. It is statistically insignificant with the R Square value of 0.149.

Table 3.51: Average Annual Growth of Drop-outs of ST Category in Elementary School Children in Chamarajanagara

<table>
<thead>
<tr>
<th>Dependent Variables</th>
<th>Constant</th>
<th>Parameter (β1)</th>
<th>Sig</th>
<th>R Square</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drop-out of ST’s in Elementary Schools (Boys)</td>
<td>5.115</td>
<td>.006</td>
<td>.963</td>
<td>.001</td>
</tr>
<tr>
<td>Drop-out of ST’s in Elementary Schools (Girls)</td>
<td>4.692</td>
<td>.042</td>
<td>.753</td>
<td>.028</td>
</tr>
</tbody>
</table>

The table 3.51 has evaluated that, the average of drop-outs in ST children at the elementary school level is higher in Chamarajanagara district. The average of drop-out of ST boys’ students is 6.0 which are statistically not significant with 0.001 R Square value. Whereas, in girls belong to ST caste, the average annual growth of drop-out is 4.2 and it is also statistically insignificant. So, the R Square value is 0.028.

According to the above results, the average of drop-out in the district has been declining compared to the previous academic years. And also it has the negative value which means that the growth of drop-out in the district has been gradually declining. Similarly, the average of drop-outs in SC category is low compared to the total drop-out as well as the growth of ST’s drop-outs. But in the ST category, the average of drop-outs is very massive compared to the overall drop-out of the district as well as the growth of SC students drop-out in Chamarajanagara district.

Finally, we may conclude that, Chamarajanagara is educationally and economically backward district which has a high population of tribal’s. Hence, the level of school education is very poor in the district compared to other district. Even though there are a lot of obstacles, the district has been trying to achieve a remarkable progress in elementary education during the last two decades. The level of enrollment has also increased slowly. The private management schools are contributing more in terms of number of schools as well as enrollment in the district. The enrollment performance of government schools is very poor compared to private management institutions in both rural as well as urban areas. The percentage of girls’ and boys’ enrollment in elementary education in the district still shows marked differentials.
Subsequently, the SC category is very dominant in contribution of enrollment than ST caste. Likewise, in drop-outs also there is a significant difference in elementary schools in the state. The growth of drop-outs is higher at the elementary school level compared to the primary schools. In addition to that, there is a massive growth in drop-outs among SC & ST’s at the elementary schools.

Moreover, it is very clear; Chamarajanagara is a backward district in both economical and educational aspects. Especially in education, it is very poor in terms of enrollment and education attainment. The main obstacle is drop-out to achieve the educational achievements in the district. But now, the level of drop-out in elementary school in the district is declining steadily from the last decade due to the government participation through the various policies and programmes.

3.8 Differences in Enrollment and Drop-outs of Elementary Schools in Chamarajanagara District

Chamarajanagara is one of the districts which is educationally and economically very deprived compared to other districts of Karnataka, because of its low income, savings and less expenses on education and also there is a large inequality in land holdings among different castes which leads to the main cause for the huge differences in enrollment and drop-outs in elementary school of Chamarajanagara. Hence, the study also conducted the ANOVA tool to analyse the differences in enrollments and drop-outs. So, the following tables have coherently illustrated the difference in enrollment and drop-outs as gender-wise as well as caste-wise in that district.

Table 3.52: Differences in Enrollment of Elementary Schools in Chamarajanagara District

<table>
<thead>
<tr>
<th></th>
<th>ANOVA</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Enrollment</strong></td>
<td><strong>Sum of Squares</strong></td>
</tr>
<tr>
<td>Between Groups</td>
<td>51166.306</td>
</tr>
<tr>
<td>Within Groups</td>
<td>6158.190</td>
</tr>
<tr>
<td>Total</td>
<td>57324.496</td>
</tr>
<tr>
<td><strong>df</strong></td>
<td><strong>Mean Square</strong></td>
</tr>
<tr>
<td>3</td>
<td>17055.435</td>
</tr>
<tr>
<td>32</td>
<td>192.443</td>
</tr>
<tr>
<td>35</td>
<td>88.626</td>
</tr>
<tr>
<td><strong>Sig.</strong></td>
<td>.000</td>
</tr>
</tbody>
</table>

The table 3.52 has represented that the result of the ANOVA tool to examine the Mean differences in enrollment of elementary schools in Chamarajanagara
district. The results of the above table proved that the enrollment value is statistically significant at the 1% level which is also means that, there is a significant difference in enrollment of elementary schools in Chamarajanagara with the ‘F’ value of 88.626. The Multiple Comparison table of the Post Hoc test has also been used to analyse the Mean differences in enrollments within the groups.

**Table 3.53: Region and Management-wise Multiple Comparisons of the Differences in Enrollment of Elementary Schools of Chamarajanagara District**

<table>
<thead>
<tr>
<th>Enrollment LSD</th>
<th>(I) SlNo</th>
<th>(J) SlNo</th>
<th>Mean Difference (I-J)</th>
<th>Std. Error</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Government School</td>
<td>Government School</td>
<td>Private Schools</td>
<td>68.78444*</td>
<td>6.53951</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>Rural Schools</td>
<td>-6.34444</td>
<td>6.53951</td>
<td>.339</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Urban Schools</td>
<td>75.13556*</td>
<td>6.53951</td>
<td>.000</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Government School</td>
<td>-68.78444*</td>
<td>6.53951</td>
<td>.000</td>
<td></td>
</tr>
<tr>
<td>Private Schools</td>
<td>Rural Schools</td>
<td>-75.12889*</td>
<td>6.53951</td>
<td>.000</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Urban Schools</td>
<td>6.35111</td>
<td>6.53951</td>
<td>.339</td>
<td></td>
</tr>
<tr>
<td>Rural Schools</td>
<td>Private Schools</td>
<td>75.12889*</td>
<td>6.53951</td>
<td>.000</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Urban Schools</td>
<td>81.48000*</td>
<td>6.53951</td>
<td>.000</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Government School</td>
<td>-75.13556*</td>
<td>6.53951</td>
<td>.000</td>
<td></td>
</tr>
<tr>
<td>Urban Schools</td>
<td>Private Schools</td>
<td>-6.35111</td>
<td>6.53951</td>
<td>.339</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Rural Schools</td>
<td>-81.48000*</td>
<td>6.53951</td>
<td>.000</td>
<td></td>
</tr>
</tbody>
</table>

* The mean difference is significant at the 0.05 level.

According to the results of the Post Hoc Test given in the table 3.53, almost all the groups have been statistically significant with the various Mean differences. Whereas in the first group, except rural schools there is a significant difference in enrollment between government and private schools with the highest Mean difference of 68.78 and the urban schools are in the next place in Mean differences followed by 75.13 which is also statistically significant with the enrollment in government school.
Similarly, in the next group, the government schools and rural schools are having significant differences in enrollment between private school and the urban schools are not significant with private schools but all the schools have negative Mean differences except urban schools. Whereas in the third group, only government schools are not significant in enrollment differences with rural schools but remaining all the schools are statistically significant and the Mean difference of private schools is 75.12 and for urban schools the value is 81.48. Finally in the last group, almost all have negative Mean differences with urban schools in enrollments but they have statistically significant except the private schools in the differences in enrollments.

Table 3.54: Differences in Enrollments among Social Groups in Chamarajanagara District

<table>
<thead>
<tr>
<th>Enrollment</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>1978.461</td>
<td>3</td>
<td>659.487</td>
<td>86.589</td>
<td>.000</td>
</tr>
<tr>
<td>Within Groups</td>
<td>243.722</td>
<td>32</td>
<td>7.616</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>2222.183</td>
<td>35</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The table 3.54 indicates that, the differences in enrollment among the social groups especially SC’s and ST’s in Chamarajanagara District. From the above results, it is quite clear that, the enrollment values are statistically significant at the 1% level with the ‘F’ value 13.296. So, it means that there is a significant difference in enrollment among SC’s and ST’s in Chamarajanagara. The study has clearly examined the exact differences in enrollment within the groups. It has been showed in the following multiple comparison table.
### Table 3.55: Multiple Comparisons of the Differences in Enrollment among the Social Groups in Chamarajanagara District

<table>
<thead>
<tr>
<th>(I) Sl.No.</th>
<th>(J) Sl.No.</th>
<th>Mean Difference (I-J)</th>
<th>Std. Error</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary SC</td>
<td>Upper Primary SC</td>
<td>1.47778</td>
<td>1.30097</td>
<td>.264</td>
</tr>
<tr>
<td>Primary ST</td>
<td>Primary SC</td>
<td>-1.47778</td>
<td>1.30097</td>
<td>.264</td>
</tr>
<tr>
<td>Upper primary ST</td>
<td>Primary SC</td>
<td>-16.34444*</td>
<td>1.30097</td>
<td>.000</td>
</tr>
<tr>
<td>Primary ST</td>
<td>Primary ST</td>
<td>13.13333*</td>
<td>1.30097</td>
<td>.000</td>
</tr>
<tr>
<td>Upper primary ST</td>
<td>Upper Primary SC</td>
<td>14.86667*</td>
<td>1.30097</td>
<td>.000</td>
</tr>
<tr>
<td>Primary ST</td>
<td>Upper Primary SC</td>
<td>-13.13333*</td>
<td>1.30097</td>
<td>.000</td>
</tr>
<tr>
<td>Upper primary ST</td>
<td>Primary ST</td>
<td>-1.73333</td>
<td>1.30097</td>
<td>.192</td>
</tr>
</tbody>
</table>

* The mean difference is significant at the 0.05 level.

The table 3.55 indicates the differences in enrollments of social groups in Chamarajanagara district. According to the above multiple comparison table, in the first group there is an insignificant difference in enrollments between primary SC’s and upper primary SC’s. But ST’s at the primary and upper primary level are significant with SC’s at the primary level with the positive Mean differences. Whereas in the second group, except SC’s at primary level remaining two are statistically significant differences in enrollment with upper primary SC’s. But here also, the Mean differences are 13.13 and 14.86 respectively. Similarly, in the third group, except ST’s at the upper primary level remaining SC’s at both the levels are statistically significant in the differences of enrollment with primary ST’s. Subsequently in the last group also, the SC’s are statistically significant at primary as well as upper primary level with the Upper primary ST’s with the negative Mean differences. But ST’s at primary level has been statistically insignificant with the ST’s at upper primary level.
Table 3.56: Differences in drop-outs of Elementary School Children in Chamarajanagara District

<table>
<thead>
<tr>
<th>Dropouts</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>117992.250</td>
<td>1</td>
<td>117992.250</td>
<td>1.440</td>
<td>.250</td>
</tr>
<tr>
<td>Within Groups</td>
<td>1147439.500</td>
<td>14</td>
<td>81959.964</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>1265431.750</td>
<td>15</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The table 3.56 clearly exhibits the differences in drop-outs of the elementary schools in Chamarajanagara district. The result of the ANOVA tool in the above table says that, the drop-out values are statistically not significant. So, the ‘F’ value is 1.440. It means that, there is no significant difference between drop-outs of elementary schools in Chamarajanagara district.

Thus, the study analyzed the differences in enrollment and drop-outs in Chamarajanagara district. It has found from the above results, there is a significant difference in enrollments in rural, urban, government and private schools in the district and the reason is same as mentioned in India and Karnataka level. Similarly, in caste-wise enrollments also, there is a significant difference at the primary and upper primary levels in both the castes. Whereas, in drop-outs there are no significant differences in the district.