# Trends in the Growth of School Education in India 

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#### Abstract

Primary education constitutes a very important part of the entire structure of education. It is at this stage, the child starts going to a formal institution and formal education starts. Primary education in India has been under the control of a number of agencies. It is still under the management of the private agencies, though, the state is increasingly taking the responsibility of providing free and compulsory elementary education to all. Article 45 of the constitution provides for free and compulsory education for all children in the age-group 6-14 years, up to a minimum level. The whole idea has been woven into the concept of Universalization of Elementary Education (UGC). The level of compulsory education as envisaged in this Article corresponds to the elementary education of eight year's duration from class I to class VIII for the children aged 6-14 years. The universalization of Elementary Education has been recognized as a constitutional obligation in India by the year 1960 but the target has not been achieved even after 54 years of the target year. Secondary education occupies a critical position in the entire educational structure and is described by many as the lintel of the entire educational edifice. It has been observed that secondary education takes place at the critical stage of adolescence; when attitudes to life and work are being shaped. In this paper we examined the growth in the enrollment of students by sex and the corresponding increase in the number of schools and also examined the trends in number of teachers by sex employed in primary, upper primary and secondary schools and to estimate the student-teacher ratio. The enrollment of girls has grown at a higher rate than that of boys during the entire period of the study. The significance of women teachers has been increasing over time and this should contribute positively to the growth and development of students. One important reason of the downfall in the quality and standard of school education during the recent decades may be the uneven growth of enrollment, number of teachers and number of schools, the enrollment growing faster than the other two.


## 1. Introduction

One of the important characteristic features of democracy is that it presupposes an educated and enlightened society. Democracy, both as a form of the government and as a way of life, cannot function when the society is uneducated and ignorant. Education and modernization are the two wheels of the same cart. Both, when combined together, lead to a rapid socio-economic development of a nation.

Primary education constitutes a very important part of the entire structure of education. It is at this stage, the child starts going to a formal institution and formal education starts. Primary education in India has been under the control of a number of agencies. It is still under the management of number of private agencies, though, the State is increasingly taking the responsibility of providing free and compulsory elementary education to all. Article 45 of the Constitution provides for free and compulsory education for all children in the age-group 6-14 years, up to a minimum level. The whole idea has been woven into the concept of Universalization of Elementary Education (UEE). The level of compulsory education as envisaged in this Article corresponds to the elementary education of eight year's duration from class I to class VIII for the children aged 6-14 years. The universalization of Elementary Education has been recognized as a constitutional obligation in India by the year 1960 but the target has not been achieved even after 54 years of the target year.

The importance of secondary education was recognized long ago in India. The Kothari Commission emphasized the importance of secondary education. Secondary education occupies a critical position in the entire educational structure and is described by many as 'the lintel of the entire educational edifice' (NIEPA, 2001: v). It critically provides links between various sub sectors of education such as elementary education, higher education, vocational and technical education besides work. It has been further observed that secondary education takes place at the critical stage of adolescence; when attitudes to life and work are being shaped.

## 2. Growth of Enrollment and Primary Schools in India

Education plays a vital role in the process of human resources development. For an overall development of the economy, development of education in general and Universalization of literacy elementary education in particular, are given very high priority in India and in other developing countries of the World. Therefore, a high priority is to be assigned to investment in education. Primary education constitutes a very important part of the entire structure of education. It is at this stage, the child starts going to a formal Institution and formal education starts. Education which he receives at this juncture provides the basic foundation for his physical, mental, emotional, intellectual and social development. Primary education deserves the highest priority, not only on grounds of social justice and democracy, but also for raising the competence of the average worker and for increasing the national productivity

Article 45 of the Indian Constitution guarantees provision of free and compulsory education to all children up to the age of 14 . Apart from being a Constitutional obligation, the provision of universal elementary education is crucial for spreading mass literacy, which is a basic requirement for economic development, modernization of the social structure and effective functioning of any democratic institution. It also represents an indispensable first step towards the provision of equity of opportunity to all citizens.

The growth of the number of primary schools and the enrollment into primary education (schools), and the number of children per school for selected years during the period of our study is provided in the Table - 1. The First Five Year Plan (1951-1956) began on 1st April, 1951. At the beginning of the First Plan in 1950-51, there were 2, 09,671 primary schools in the country. By 1965-1966, when the education commission submitted its report, the number of primary schools had increased to 3 , 91,064 . When the progress was reviewed in 1985-1986, it was found that the number of primary schools had increased to $5,28,872$. The period from 1986 onwards has been the period of implementation of the NPE-1986. Therefore, it is expected that elementary education might have developed considerably, both qualitatively and quantitatively. The total number of primary schools stood at $8,19,900$ in 2009-10. Later it is decreased to 7, 90,640 by 2013-14. It is better not to over emphasize changes in growth rates over different phases because for reasons of arithmetical property, when one starts with a low base (as in 1951) the period immediately succeeding 1951 will have high rate and the subsequent periods lower rates. But comparison between the growth rates of boys and girls in any one phase assumes importance. In the analysis below, the differences in the growth rates of boys and girls receive greater attention compared to differences between periods. The index of growth of schools taking 1950-1951 as the base shows that the increase is not substantial as compared to the enrollment of children in primary schools. The annual compound growth rate of primary schools over a period of our study recorded 2.10 per cent.

The total enrollment in primary schools in the year 1950-1951 was 19.2 million children of which 13.8 million were boys and 5.4 million were girls. It constitutes 28.12 per cent of the enrollment of girls to the total enrollment. The enrollment had increased to 50.5 million children in 1965-1966. The enrollment of girls was 18.3 million, which constituted 36.24 per cent of the total enrollment. The total enrollment in primary schools had increased to 87.4 million children in 1985-1986 of which 52.2 million boys and 35.2 million girls. The girls enrolled constituted 40.27 per cent to the total enrollment. In 2009-10 the total enrollments of children increased to 133.6 million of which 69.7 million were boys and 63.9 million were girls. Here the girls enrolled constituted 46.71 per cent to the total enrollment. An interesting trend which can easily be observed is that enrollment of girls has grown at a higher rate than that of boys during the entire period of study. Ultimately the enrollment of children decreased to 130.0 million in 2013-14. Due to awareness and importance of education of children, common people also sending their
children to the English medium schools. Children enrollments in private unrecognized primary schools are not recorded in this data. So, due to this reason enrolment of children in recognized
primary schools decreased in 2013-14.
The annual compound growth rate of enrollment of total students over a period of our study recorded 3.03 per cent. The growth rate of enrollment in the case of girls is much higher than in the case of boys over the period of our study. The enrollment of students has increased at a higher rate than the number of schools and teachers.

Table -1: Enrollment and number of recognized primary schools in India: 1950-1951 to 2013-14

| Year | Prımary Schools | $\begin{gathered} \text { Inde } \\ x \end{gathered}$ |  | No of boys enrolled (6-11 years) (in millions ) | $\begin{gathered} \text { Inde } \\ \mathrm{x} \end{gathered}$ |  | No of girls enrolld (6-11 years(1 <br> n million s) | Index |  | Total enroll ment (in million 5) | $\begin{aligned} & \text { Ind } \\ & \text { ex } \end{aligned}$ |  | No of childre n per school |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1950.51 | 209671 | 100 | -- | 13.8 | 100 |  | 54 | 100 |  | 192 | 100 |  | 91 |
| 1955-56 | 278135 | 133 | 32.65 | 17.1 | 124 | 23.91 | 7.5 | 139 | 38.89 | 24.6 | 128 | 28.12 | 88 |
| 1960-61 | 330399 | 157 | 18.79 | 236 | 171 | 38.01 | 11.4 | 211 | 52.00 | 350 | 182 | 42.28 | 106 |
| 1965-66 | $39106+$ | 186 | 18.36 | 32.2 | 233 | 36.4 | 18.3 | 339 | 60.53 | 50.5 | 263 | +4.28 | 129 |
| 1970-71 | 408378 | 195 | 4.43 | 35.7 | 259 | 10.87 | 21.3 | 394 | 16.39 | 57.0 | 297 | 12.87 | 139 |
| 1975.76 | 454270 | 217 | 1124 | 406 | 294 | 13.72 | 250 | 463 | 1737 | 656 | $3+2$ | 1509 | $1+4$ |
| 1980-81 | $49+305$ | 236 | 8.81 | 453 | 328 | 11.58 | 28.5 | 528 | $1+00$ | 73.8 | $38+$ | 1250 | 149 |
| 1985-86 | 528872 | 252 | 6.99 | 52.2 | 378 | 15.23 | 352 | 652 | 2351 | 874 | 455 | 1843 | 165 |
| 1990-91 | 560935 | 267 | 6.06 | 57.0 | 413 | 9.19 | 40.4 | 748 | 14.77 | 97.4 | 507 | 11.4 | 174 |
| 1995-96 | 590421 | 281 | 5.26 | $62 .+$ | +52 | 9.4 | 47. | 878 | 17.33 | 1098 | 572 | 12.73 | 186 |
| 1999-00 | $6+1695$ | 306 | 868 | $6+1$ | 464 | 2.72 | 49.5 | 917 | $4+3$ | 1136 | 592 | 3.46 | 177 |
| 200+-05 | 767520 | 366 | 1961 | 69.7 | 505 | 8.74 | 61.1 | 1131 | $23+3$ | 1308 | 681 | 1514 | 170 |
| 2009-10 | \$19900 | 391 | 6.82 | 69.7 | 505 | 0 | 63.9 | 1183 | 4.58 | 133.6 | 696 | 2.14 | 163 |
| 2013-14 | 790640 | 377 | -357 | 672 | 487 | -3.59 | 628 | 1163 | -1.72 | 1300 | 677 | 264 | 164 |
| Annual Compound Growth Rate |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | 2.10 |  |  | 2.50 |  |  | 3.91 |  |  | 3.03 |  |  |  |

Sources: 1.Annual reports of Ministry of Human Resource Development, Government of India
2 Selected Educational Statistics, Ministry of Human Resource Development, Government of India

### 2.1. Increase in number of students per teacher in primary schools

So far, we have examined the size and growth of primary education in the country during the period of six and a half decades. But, they do not really indicate the quality of education. One indicator of the quality is the student-teacher ratio. So we, as a first step examine the number of teachers employed in the primary schools in the country and the rate of growth of the teachers by sex during the period of the study.

Table - 2 shows that there were 5,38,000 teachers employed in primary schools in 1950-1951 of which 15.24 per cent were women. By 2013-14, the total number of teachers posted in primary schools increased to $26,84,000$ of which 46.68 per cent were female. The male teachers were decreased from 13, 19,000 in 2004-05 to 12,08,000 in 2009-10. Ultimately it is increased and stood
at $14,31,000$ in 2013-14. It is interesting that the index of female teachers increased at higher rate than that of male teachers throughout the period under study. This has borne results in that the women teachers have improved their share in the total in primary schools. This also may be due to implementation of reservation policy in some states in the country in favor of women. One should consider that increase in the number of women teachers is a healthy sign for the reasons (i) that it contributes to gender equality, and (ii) the women teachers' exhibit care and patience, their general traits, in teaching children.

The annual compound growth rate of total teachers recorded 2.54 per cent. The growth rate of female teachers was 4.35 per cent against the growth rate of 1.80 per cent for male teachers. The growth rate of female teachers was much higher than that of male teachers in the total study period

Note, however, that the number of teachers has not increased in the country in consonance with the increase in the number of students enrolled. This has resulted in an increase in student-teacher ratio over time except in 1955-1956, 1975-1976, 1995-96, 1999-2000, 2009-10 and 2013-2014. It shows that the ratio was $36: 1$ in 1950-1951 and the ratio was constant in 1955-1956. Later it increased to 54:1 in 1970-1971 then the ratio continuously increased to 60:1 in 1990-1991. Later it was constant in 1995-1996 and it reached to 60:1 in 2004-05 and the ratio was constant in 2009-10 then it is decreased to $48: 1$ in 2013-14. Though the government has been insisting on a studentteacher ratio of 40 students per teacher for aided schools, it has never been possible for the government to achieve this objective. The data presented in Table-2 indicates only the country's average, but in most of the schools, the student teacher ratio is observed to be more than 100:1. This adversely affects the quality of education at primary level, because the school teacher does not find any motive to teach such a huge number, let alone paying the much needed individual attention at the stage of primary education.

Table - 2: Number of teachers employed by sex in primary schools in India: 1950-1951 To

| 2013-14 |  |  |  |  |  |  |  |  |  | (In 000s) <br> Student- <br> Teacher <br> Ratio |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year | Male | Index | $\%$ growth rate over previous period | Female | Index | \% growth rate over previous period | Total | Index | \% growth rate over previous period |  |
| 1950-51 | 456 | 100 |  | 82 | 100 |  | 538 | 100 |  | 36 |
| 1955-56 | 574 | 126 | 25.88 | 117 | 143 | 42.68 | 691 | 128 | 28.25 | 36 |
| 1960-61 | 615 | 135 | 7.14 | 127 | 155 | 8.55 | 742 | 138 | 7.38 | 47 |
| 1965-66 | 764 | 167 | 24.23 | 180 | 219 | 41.73 | 944 | 175 | 27.22 | 53 |
| 1970-71 | 835 | 183 | 9.29 | 225 | 274 | 25.00 | 1060 | 197 | 12.29 | 54 |
| 1975-76 | 965 | 212 | 15.57 | 283 | 345 | 25.78 | 1248 | 232 | 17.73 | 53 |
| 1980-81 | 1021 | 224 | 5.80 | 342 | 417 | 20.85 | 1363 | 253 | 9.21 | 54 |
| 1985-86 | 1094 | 240 | 7.15 | 402 | 490 | 17.54 | 1496 | 278 | 9.76 | 58 |
| 1990-91 | 1143 | 251 | 4.48 | 473 | 577 | 17.66 | 1616 | 300 | 8.02 | 60 |
| 1995-96 | 1187 | 260 | 3.85 | 553 | 674 | 16.91 | 1740 | 323 | 7.67 | 60 |
| 1999-00 | 1232 | 270 | 3.80 | 687 | 838 | 24.23 | 1919 | 357 | 10.29 | 59 |
| 2004-05 | 1319 | 289 | 7.06 | 842 | 1027 | 22.55 | 2161 | 402 | 12.61 | 60 |
| 2009-10 | 1208 | 265 | -8.42 | 1009 | 1230 | 19.83 | 2217 | 412 | 02.59 | 60 |
| 2013-14 | 1431 | 314 | 18.46 | 1253 | 1528 | 24.18 | 2684 | 499 | 21.06 | 48 |
| Annual Compound Growth Rate |  |  |  |  |  |  |  |  |  |  |
|  | 1.80 |  |  | 4.35 |  |  | 2.54 |  |  |  |

Sources: 1. Annual reports of Ministry of Human Resource Development, Government of India
2. Selected Educational Statistics, Ministry of Human Resource Development, Government of India.

## 3. Development of Upper Primary (Middle) Education

From Table-3 it may be observed that there were only 13,596 upper primary schools in the country in 1950-1951 and this number continuously increased to $4,01,079$ in 2013-14. The index of upper primary schools recorded a much higher increase than that of index of primary schools. The annual compound growth rate of upper primary schools was 5.43 per cent for the entire period of study. There were 3.1 million children enrolled in upper primary schools in 1950-1951, of which 0.5 million were girls. They constituted only 16.13 per cent of total enrollment. Later the total enrollment rose to 10.5 million in 1965-1966. The enrollment of girls was 2.8 million, or 26.67 per cent of the total enrollment. The total enrollment in these schools had increased to 27.3 million in 1985-1986 in which they were 17.7 million boys and 9.6 million girls. The enrollment in upper primary schools ultimately reached to 65.7 million in 2013-14, of which 32.0 million were girls or 48.71 per cent of the total enrollment. An interesting trend which can easily be observed is that enrollment of girls has grown at a higher rate than boys during the period of study in upper primary education. It is emphasized that the index of girls' enrollment in upper primary education is much higher than that of index of girls' enrollment in primary education. It is a positive sign and shows the improvement of upper primary education in the country during the study period.

The annual compound growth rate of enrollment of total children in the study period was 4.89 per cent. It is interesting that the growth rate of enrollment in the case of girls ( 6.71 per cent) is more than that of boys ( 4.08 per cent) over the period.

Table-3: Enrollment and number of recognized Upper primary schools in India: 1950-1951 to 2013-14

| Year | Upper Primary Schools | Index |  | No. of Boys enrolled (11-14 years) (in million) | Index |  | No. of Girls enrolled (11-14 years) (in million) | Index |  | Total enrollme nt (in millions) | Index |  | No. of children per school |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1950-51 | 13596 | 100 |  | 2.6 | 100 |  | 0.5 | 100 |  | 3.1 | 100 |  | 228 |
| 1955-56 | 21730 | 160 | 59.83 | 3.8 | 146 | 46.15 | 1 | 200 | 100.00 | 4.8 | 155 | 54.84 | 221 |
| 1960-61 | 49663 | 365 | 128.54 | 5.1 | 196 | 34.21 | 1.6 | 320 | 60.00 | 6.7 | 216 | 39.58 | 135 |
| 1965-66 | 75798 | 557 | 52.62 | 7.7 | 296 | 50.98 | 2.8 | 560 | 75.00 | 10.5 | 339 | 56.72 | 138 |
| 1970-71 | 90621 | 666 | 19.55 | 9.4 | 361 | 22.08 | 3.9 | 780 | 39.28 | 13.3 | 429 | 26.67 | 147 |
| 1975-76 | 106571 | 784 | 17.60 | 11 | 423 | 17.02 | 5 | 1000 | 28.20 | 16 | 516 | 20.30 | 150 |
| 1980-81 | 118571 | 872 | 11.26 | 13.9 | 535 | 26.36 | 6.8 | 1360 | 36.00 | 20.7 | 668 | 29.37 | 174 |
| 1985-86 | 134846 | 992 | 13.72 | 17.7 | 681 | 27.34 | 9.6 | 1920 | 41.18 | 27.3 | 881 | 31.88 | 202 |
| 1990-91 | 151456 | 1114 | 12.32 | 21.5 | 827 | 21.47 | 12.5 | 2500 | 30.21 | 34 | 1097 | 24.54 | 224 |
| 1995-96 | 171216 | 1259 | 13.05 | 25 | 961 | 16.28 | 16 | 3200 | 28.00 | 41 | 1322 | 20.59 | 239 |
| 1999-00 | 198004 | 1456 | 15.64 | 25.1 | 965 | 0.40 | 17 | 3400 | 6.25 | 42.1 | 1358 | 2.68 | 212 |
| 2004-05 | 274731 | 2021 | 38.75 | 28.5 | 1096 | 13.54 | 22.7 | 4540 | 33.53 | 51.2 | 1652 | 21.61 | 186 |
| 2009-10 | 394100 | 2899 | 43.45 | 31.7 | 1219 | 11.23 | 27.8 | 5560 | 22.47 | 59.5 | 1919 | 16.21 | 151 |
| 2013-14 | 401079 | 2950 | 01.77 | 33.7 | 1296 | 6.31 | 32.0 | 6400 | 15.11 | 65.7 | 2119 | 10.42 | 164 |
| Annual Compound Growth Rate |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Total per | riod 5.43 |  |  | 4.08 |  |  | 6.71 |  |  | 4.89 |  |  |  |

Sources: 1. Annual reports of Ministry of Human Resource Development, Government of India
2. Selected Educational Statistics, Ministry of Human Resource Development, Government of India.

### 3.1. Student-Teacher Ratio in Upper Primary Schools

As noted earlier, the student-teacher ratio shows the quality of education. Here, we examine the growth in the number of teachers employed in the upper primary schools in the country during the period under study. The data are presented in Table-4. It is observed that there were 86,000 teachers employed in upper primary schools in 1950-1951, of which 13,000 were women, or 15.12 per cent of the total. By 2013-14 the total number of teachers in upper primary schools increased to 25, 13,000 .

The number of women teachers reached on all time high in 2013-14(11, 38,000) and they constituted 45.28 per cent of the total teachers, indicating that women teaching community has been on the increase all through. One should consider this to be a healthy sign for the reasons (1) that it contributes to gender equality and (2) that women teachers exhibit care and patience, their general traits, in teaching children. The number of both in male and female teachers in upper primary schools shows an increasing trend over the period of our study. The index of female teachers recorded a much higher increase than that of the male teaches. This may be due to implementation of reservation policies in some states in the country in favour of women.

The annual compound growth rate of total teachers was 5.41 per cent in the study period. It is interesting that the recorded growth rate of female teachers at 7.24 per cent was higher than that of the male teachers at 4.69 per cent in the study period. The growth rates of female teachers have been higher than that of male teachers in the study.

During the period under study, the increase in the number of teachers was $24,27,000(25,13,000-$ 86,000 ). As the enrollment in upper primary schools showed an increasing trend, it resulted in a favorable change in student-teacher ratio. It is observed that the ratio was 36:1 in 1950-1951 and it decreased to 19:1 in 1960-1961. Later the ratio gradually increased to $35: 1$ in 1995-1996. By 201314 the ratio decreased and stood at 26:1. Anyhow this figure is less than the student-teacher ratio of 40 recommended by the government for aided schools.

Table - 4: Number of Teachers employed by sex in Upper Primary Schools in India: 1950-1951 To 2013-14

| Year | Male | Index | $\begin{array}{\|c\|} \hline \% \\ \text { growth } \\ \text { rate } \\ \text { over } \\ \text { previou } \\ \text { s period } \\ \hline \end{array}$ | Female | Index |  | Total | Index | $\begin{array}{\|c\|} \text { \% } \\ \text { growth } \\ \text { rate } \\ \text { over } \\ \text { previou } \\ \text { s period } \end{array}$ | (ingoos) <br> -teacher <br> ratio |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1950-51 | 73 | 100 |  | 13 | 100 |  | 86 | 100 |  | 36 |
| 1955-56 | 132 | 181 | 80.82 | 19 | 146 | 46.15 | 151 | 175 | 75.58 | 32 |
| 1960-61 | 262 | 359 | 98.48 | 83 | 638 | 336.84 | 345 | 401 | 128.48 | 19 |
| 1965-66 | 389 | 533 | 48.47 | 139 | 1069 | 67.47 | 528 | 614 | 53.04 | 20 |
| 1970-71 | 463 | 634 | 19.02 | 175 | 1346 | 25.90 | 638 | 742 | 20.83 | 21 |
| 1975-76 | 554 | 759 | 19.65 | 224 | 1723 | 28.00 | 778 | 905 | 21.94 | 21 |
| 1980-81 | 598 | 819 | 7.94 | 253 | 1946 | 12.95 | 851 | 989 | 9.38 | 24 |
| 1985-86 | 663 | 908 | 10.87 | 305 | 2346 | 20.55 | 968 | 1125 | 13.75 | 28 |
| 1990-91 | 717 | 982 | 8.14 | 356 | 2738 | 16.72 | 1073 | 1248 | 10.85 | 32 |
| 1995-96 | 756 | 1036 | 5.44 | 409 | 3146 | 14.89 | 1165 | 1355 | 8.57 | 35 |
| 1999-00 | 829 | 1136 | 9.66 | 469 | 3608 | 14.67 | 1298 | 1509 | 11.42 | 32 |
| 2004-05 | 992 | 1359 | 19.66 | 597 | 4592 | 27.29 | 1589 | 1848 | 22.42 | 32 |
| 2009-10 | 1014 | 1389 | 2.22 | 764 | 5877 | 27.97 | 1778 | 2067 | 11.89 | 33 |
| 2013-14 | 1375 | 1884 | 35.60 | 1138 | 8754 | 48.95 | 2513 | 2922 | 41.34 | 26 |
| Annual Compound Growth Rate |  |  |  |  |  |  |  |  |  |  |
|  | 4.69 |  |  | 7.24 |  |  | 5.41 |  |  |  |

Sources: 1. Annual reports of Ministry of Human Resource Development, Government of India
2. Selected Educational Statistics, Ministry of Human Resource Development, Government of India.

## 4. Growth of Secondary Education in India

The importance of secondary education was recognized long ago in India. The Kothari Commission emphasized the importance of secondary education. The resolution adopted by the Government of India on the Kothari Commission affirms that. Educational opportunity at the secondary (and higher) level is a major instrument of social change and transformation' (NCERT, 1970: xix). Secondary education occupies a critical position in the entire educational structure and is described by many as 'the lintel of the entire educational edifice' (NIEPA, 2001: v). It critically provides links between various sub sectors of education such as elementary education, higher education, vocational and technical education besides work. It has been further observed that secondary education takes place at the critical stage of adolescence; when attitudes to life and work are being shaped.

### 4.1. Growth of Schools and Enrolment of Students in Secondary Education

In Table-5, the growth of the number of secondary schools and the enrollment into secondary education, and the number of students per school for selected years during the period of our study is provided. The First Five Year Plan (1951-1956) began on 1st April, 1951. At the beginning of the First Plan in 1950-1951, there were 7,416 secondary schools in the country. This figure increased to $2,26,613$ in 2013-14. These figures include high schools, higher secondary schools, intermediate colleges, Junior colleges, community colleges and PUC sections wherever they exist. The index of growth taking 1950-1951 as the base shows that the increase is not substantial as compared to the enrollment of students in secondary schools. As per the percentage growth rate over previous period in the case of secondary schools, the growth of the schools in the period 1951-1961 is the highest record i.e., 133.67. The table shows that the growth rate of schools for the period from 1950-1951 to 1970-1971 are much higher than that of the remaining period of our study. The annual compound growth rate of schools is recorded 5.49 per cent.

The total enrollment in secondary stage in the year 1950-1951 was 15 lakhs students of which 13 lakhs were boys and only 2 lakhs were girls. Girls constituted only 13 per cent to the total enrollment. The total enrollment had increased gradually and reached to 591.00 lakhs in 20132014. The enrollment of girls was 279.00 lakhs which constituted 47.21 per cent of the total enrollment.

An interesting trend which can be observed is that enrollment of girls has grown at a higher rate than that of boys during the entire period of our study. The annual compound growth rate of total enrollment at secondary stage was 5.91 per cent. The growth rate was 8.02 per cent for girls and 5.09 per cent for boys during the study period. The enrollment of girls has increased at a faster rate than that of boys throughout the study period.

Table-5: Number of Recognized Schools and Enrollment by Sex in Secondary Schools in India, 1950-1951 to 2013-2014

| Year | Second- <br> ary <br> Schools <br> (units) | Index | $\%$ growth rate over previou speriod | No. of boys enrolle d (lakhs) | Index | $\%$ growth rate over previou s period | No. of girls enrolle d (lakhs) | Index | $\%$ growth rate over previou s period | Total enrollment (lakhs) | Index | $\%$ growth rate over previou s period | No. of childre n per school |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1950-51 | 7416 | 100 | - | 13 | 100 | - | 2 | 100 | - | 15 | 100 | - | 202 |
| 1960-61 | 17329 | 234 | 133.67 | 27 | 208 | 107.69 | 7 | 350 | 250.00 | 34 | 227 | 126.67 | 196 |
| 1970-71 | 37051 | 500 | 113.81 | 49 | 377 | 81.48 | 17 | 850 | 142.86 | 66 | 440 | 94.12 | 178 |
| 1980-81 | 51624 | 696 | 39.33 | 76 | 585 | 55.10 | 32 | 1600 | 88.23 | 108 | 720 | 63.64 | 209 |
| 1990-91 | 78619 | 1060 | 52.29 | 140 | 1077 | 84.21 | 69 | 3450 | 115.62 | 209 | 1393 | 93.52 | 266 |
| 1992-93 | 84086 | 1134 | 6.95 | 150 | 1154 | 7.14 | 77 | 3850 | 11.59 | 227 | 1513 | 8.61 | 270 |
| 1995-96 | 98134 | 1323 | 16.71 | 161 | 1238 | 7.33 | 88 | 4400 | 14.28 | 249 | 1660 | 9.69 | 254 |
| 1999-00 | 116820 | 1575 | 19.04 | 172 | 1323 | 6.83 | 110 | 5500 | 25.00 | 282 | 1880 | 13.25 | 241 |
| 2004-05 | 152049 | 2050 | 30.16 | 217 | 1669 | 26.16 | 154 | 7700 | 40.00 | 371 | 2473 | 31.56 | 244 |
| 2009-10 | 193880 | 2614 | 27.51 | 268 | 2062 | 23.50 | 217 | 10850 | 40.91 | 485 | 3233 | 30.73 | 250 |
| 2013-14 | 226613 | 3056 | 16.88 | 312 | 2400 | 16.42 | 279 | 13950 | 28.57 | 591 | 3940 | 21.86 | 260 |
| Annual compoun d growth rate | 5.49 |  |  | 5.09 |  |  | 8.02 |  |  | 5.91 |  |  |  |

Sources: 1.Annual reports of Ministry of Human Resource Development, Government of India
2. Selected Educational Statistics, Ministry of Human Resource Development, Government of India.

### 4.2. Student-Teacher Ratio in Secondary Schools

So far, we have examined the size and growth of secondary education in the country for a period of 64 years. But, they do not really indicate the quality of education. One indicator of the quality is the student-teacher ratio. So, as a first step we examine the number of teachers employed in the secondary schools in the country and the rate of growth of the teachers by sex during the period of the study.

Table- 6 shows that there were 1, 27,000 teachers in secondary schools in 1950-1951 of which only 20,000 were women, and they constituted only 16 per cent to total. The total teachers increased gradually over a period of time and reached to $30,72,000$ in 2013-2014 of which $14,24,000$ were women and they constituted 46.35 per cent to total teachers. The index of female teachers increased at higher rate than male teachers throughout the period under study. The annual compound growth rate of total teachers between 1950-51 and 2013-14 was 5.10 per cent. The growth rate was 6.89 per cent for female teachers and 4.37 per cent in the case of male teachers. Reservation policies in some states in the country must have favored women to form increasing part of the total teachers.

The number of teachers has not been increasing in the country in consonance with the increase in the number of students enrolled. This has resulted in the increase in the student-teacher ratio over time except in 1960-1961, 1970-1971, 19992000 and 2013-2014. The ratio was $12: 1$ in 1950-1951, 11:1 in 1960-1961 and 10:1 in 1970-1971. Later it increased
gradually and reached 17:1 in 1995-1996. It is increased and stood at 21:1 in 2013-2014 and then decreased to 19.1 in 2013-14. This figure is less than the student-teacher ratio recommended by the government. One should consider this to be a healthy sign.

Table-6: Number of Teachers Employed by Sex in Secondary Schools in India, 1950-1951 to 2013-2014

| Year | Male <br> $(000$ s $)$ | Index | \% growth <br> rate <br> over <br> previous <br> period | Female <br> $(000$ s) | Index | \% growth <br> rate <br> over <br> previous <br> period | Total <br> $(000 \mathrm{~s})$ | Index | \% growth <br> rate <br> over <br> previous <br> period | Student- <br> Teacher <br> Ratio |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $1950-51$ | 107 | 100 |  | 20 | 100 |  | 127 | 100 |  | 12 |
| $1960-61$ | 234 | 219 | 118.69 | 62 | 310 | 210.00 | 296 | 233 | 133.07 | 11 |
| $1970-71$ | 474 | 443 | 102.56 | 155 | 775 | 150.00 | 629 | 495 | 112.50 | 10 |
| $1980-81$ | 658 | 615 | 38.82 | 254 | 1270 | 63.87 | 912 | 718 | 44.99 | 12 |
| $1990-91$ | 857 | 801 | 30.24 | 416 | 2080 | 63.78 | 1273 | 1002 | 39.58 | 16 |
| $1992-93$ | 908 | 848 | 5.95 | 445 | 2225 | 6.97 | 1353 | 1065 | 6.28 | 17 |
| $1995-96$ | 982 | 918 | 8.15 | 511 | 2555 | 14.83 | 1493 | 1175 | 10.35 | 17 |
| $1999-00$ | 1142 | 1067 | 16.29 | 578 | 2890 | 13.11 | 1720 | 1354 | 15.20 | 16 |
| $2004-05$ | 1282 | 1198 | 12.26 | 801 | 4005 | 38.58 | 2083 | 1640 | 21.10 | 18 |
| $2009-10$ | 1432 | 1338 | 11.70 | 898 | 4490 | 12.11 | 2330 | 1835 | 11.86 | 21 |
| $2013-14$ | 1648 | 1540 | 15.08 | 1424 | 7120 | 58.57 | 3072 | 2419 | 31.85 | 19 |
| Annual <br> compound <br> growth <br> rate | 4.37 |  |  | 6.89 |  |  | 5.10 |  |  |  |

Sources: 1.Annual reports of Ministry of Human Resource Development, Government of India.
2. Selected Educational Statistics, Ministry of Human Resource Development, Government of India

## 5. Conclusions

Our data on the trends in the enrollment of children at the primary level showed that it was not commensurate with the growth of population in the relevant age group, notwithstanding the fact that universalization of primary education has been the avowed objective of the government. The quantitative growth of enrollment has been faster in the case of girls than in the case of boys throughout the period of six and a half decades in both primary and upper primary and secondary education. Besides, the enrollment of students has increased at a higher rate than the number of schools and teachers.

As regards upper primary education the situation has been relatively better as compared to primary education. Even the student-teacher ratio on an average for the latest year of the survey is $26: 1$.

This no doubt augurs well for upper primary education. There is, however a further need to effect improvements in upper primary education.

In the case of secondary education our data on the trends in the enrollment shows that enrollment in the case of girls is progressing faster than in the case of boys throughout the period of the study. The enrollment of students has increased at higher rate than the number of schools and teachers. To reflect upon the quality of education we arrived at student-teacher ratios. Let it be told that the significance of women teachers has been increasing over time and this should contribute positively to the growth and development of students.

### 5.1. Suggestions

## (A) Suggestions for improving Elementary Education

The following steps may improve enrollment and retention and reducing the dropout rate.

1) Government should start or extend pre-primary schools and / or Nursery schools like Anganwadi or Balwadi centers wherever necessary especially in backward areas.
2) Mid-day meal or school nutrition programme should be started on a large-scale again and maintained by specially chosen persons. It can be an effective instrument in universalisation of elementary education.
3) Sanction of scholarships and providing fee concession to those scheduled caste and scheduled tribes children who got admitted in un-aided private schools or convents goes a long way and brings back these poorer strata into the fold.
4) Free supplying and distribution of textbooks and notebooks and school uniforms for all children as being done should be carried out more vigorously, plugging the loopholes.
5) Making community mobility which educates parents to understand need for education of their children.
(B) Suggestions for improving Secondary Education
1. Construct public schools;
2. Pilot innovative public-private partnership models;
3. Introduce double-shift teaching;
4. Expand use of open learning and new technologies;
5. Invest in curriculum revision
6. Invest in ICTs;
7. Develop and apply clear teacher performance standards, and decentralise teacher recruitment to district or school level;
8. Increase schools' autonomy and parental involvement;
9. Reform Grant-in-Aid;
10. Provide financial and in-kind assistance for poor and disadvantaged students; and
11. Provide financial incentives and technical support for states.

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