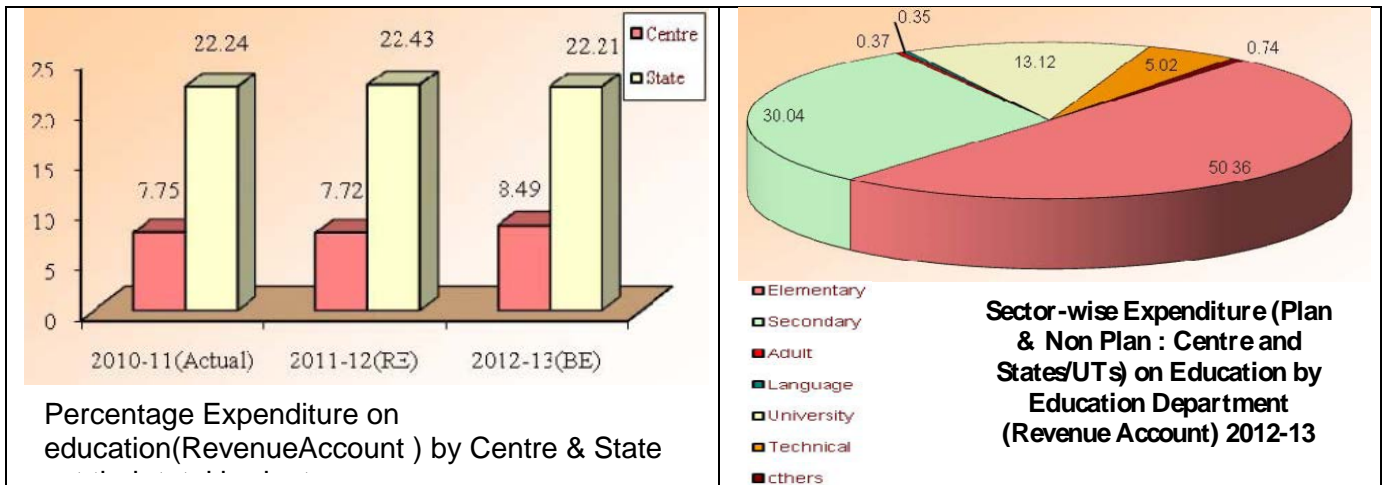


CHAPTER - 29

EDUCATION

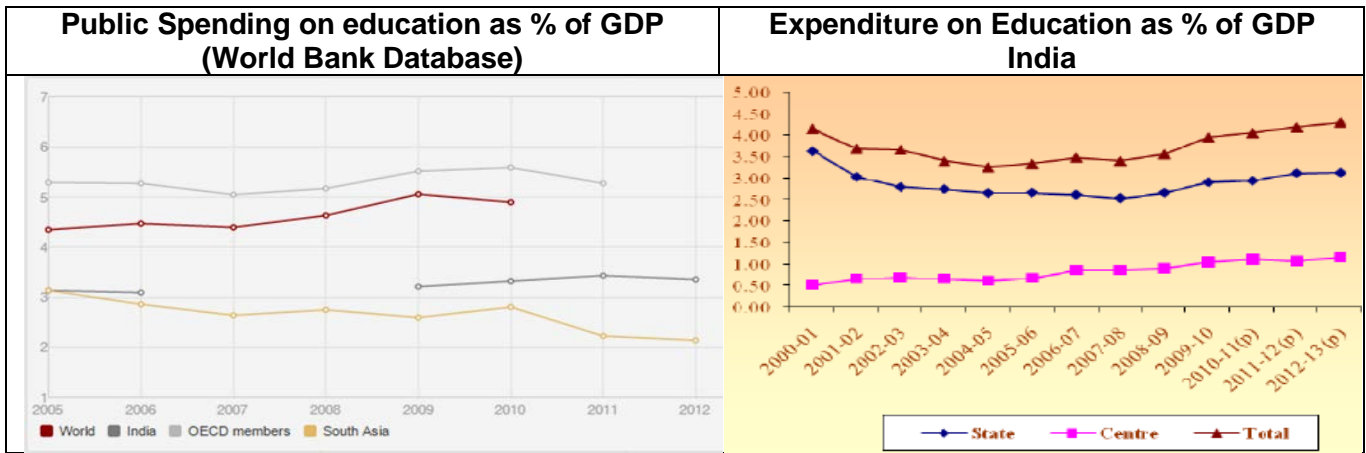
29.1 It seems ironical that the cradle of civilization, India, with its rich literary cultural tradition, finds itself in an unenviable position in aspects of educational attainment, in spite of its booming knowledge industry providing IT solutions to systems across the world. Amongst the three dimensions identified for the human development index, during 2013, India scored 0.65 in case of education, second to health which scored 0.71. The score was better than income index (with a score of 0.60) and the progress as reflected by the three constituent indicators of HDI, has been fastest in case of education. Expected and mean years of schooling in case of India at 11.7 and 4.4 years are not only less than the world average (12.2 & 7.7 years respectively) but are also lowest amongst the BRICS countries. Comparison of proportion of population with at least secondary education, gives identical results with India (26.6%–F, 50.4%–M) scoring significantly lower than the world average (54.2%–F, 64.2%–M) and the gender disparity is also quite conspicuous in case of India. Amongst BRICS countries also India's position is similar except in case of proportion of males with at least secondary education, where it scores marginally better than Brazil with the value at 49.0%. But Brazil scores significantly higher when the same indicator is applied to female population as 51.9% females in Brazil have at least secondary education.

29.2 Expenditure on Education : The budget estimates for 2012-13 (Revenue Account) for expenditure on education of the Centre and States/Union Territories amounted to Rs.403236.51 crore comprising Rs.323849.98 crore by the education departments and Rs.79386.53 crore by the other departments. The total budget for education constitutes 15.45% of the total respective budget under the Revenue Account. The Central budget provision (Revenue Account) for education and training is Rs.109223.31 crore, comprising Rs.80104.76 crore for Plan and Rs.29118.55 crore for Non-Plan. This amount constituted 8.49% (19.05% for Plan and 3.36% for Non-Plan) of the total central budget (Revenue Account) for the year 2012-13. The total budget provision (Revenue Account) of all States/Union territories for education and training is Rs.294013.20 crore (Rs.69156.71 crore for Plan and Rs.224856.49 crore for Non-Plan) constituting 22.21% of the total budget (Revenue Account) of all States and Union Territories. The total budget provision (Revenue Account) of Education Departments of the Centre and the States/Union Territories for the year 2012-13 amounted to Rs.323849.98 crore, comprising Rs.109515.98 crore for Plan and Rs.214334.00 crore for Non-Plan forming 12.41% to the total budget of all sectors. The Central budget for the Education Departments was Rs.74039.84 crore (Rs.61407.00 crore for Plan and Rs.12632.84 crore for Non-Plan) whereas the budget provision for the States/Union Territories was Rs.249810.14 crore (Rs.48108.98 crore for Plan and Rs.201701.16 crore for Non-Plan). The percentage provision of Centre plan expenditure to the total plan budget was 14.60%, while it was 1.46% for Non-Plan.



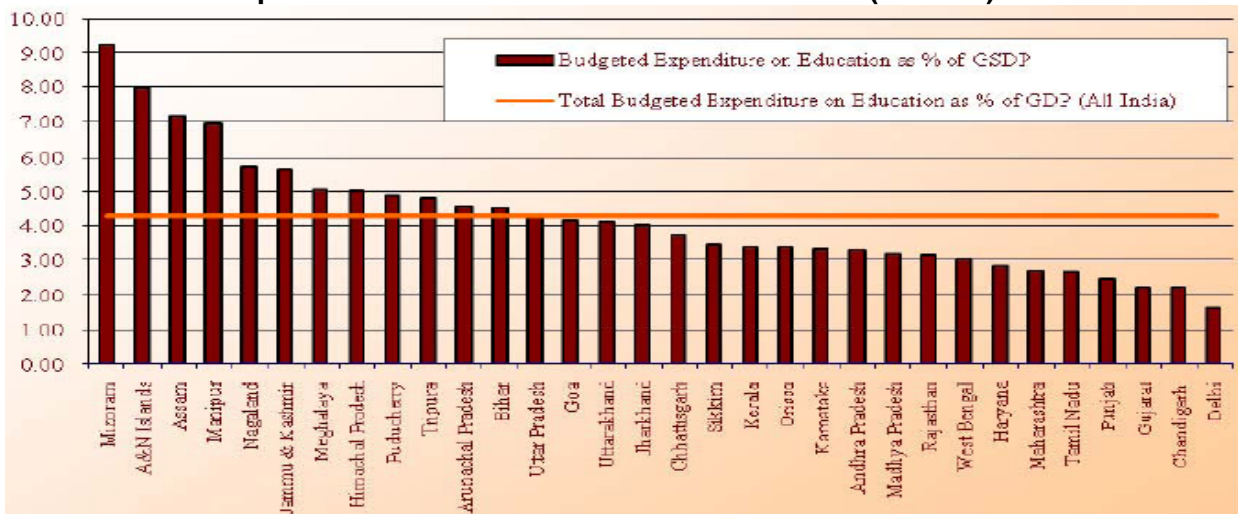
29.3 Mass basic education has been given priority in the country right from the time of independence. In the recent past, SarvaSikshaAbhiyan has been launched by Govt of India , in recognition of the need for Universal Elementary Education which accounts for largest share of the central expenditure on education. Although, India has been witnessing tremendous progress in elementary education since the early 1990s, and has also emerged as an important player in the worldwide information technology, it's secondary and higher secondary education continue to remain underdeveloped and neglected. The States generally decide on their own secondary education system and the related policies within a national framework. While there is substantial variation across States, the country's public spending on secondary education is about 1.2% of the GDP. Given the limited public resources, the private sector has largely influenced the pace of growth of secondary education during the last two decades. While the focus of the Govt. is to make the elementary education both universal and compulsory through Right to Education Act, the aim regarding secondary education is to make it universal only (not compulsory).

29.4 Expenditure on education as per cent of GDP From the second graph given below, we see that in India total expenditure on education as percentage of GDP was highest (4.14%) in 2000-01 but this level could not be sustained in the following year and came down to 3.26% in the year 2004-05. After that, it again started increasing but at a very slow rate If we look at the percentage for Centre and States separately, we find that centre's share shows an increasing trend over the years and has gone up from 0.51% in 2000-01 to 1.16% in 2012-13, while state's share has declined from 3.63% in the year 2000-01 to 3.13% in 2012-13 . The total expenditure on the Revenue Account at the all India level during 2012-13 formed 27.80% of the total Gross Domestic Product (GDP) and only 3.45% of the GDP was provided in the budgets of the education departments. When the provision for education for all departments including education departments is taken into account this percentage works out to be 4.29%. The expenditure as percent of GDP is even lower in South Asia at about 2 %.



29.5 As regards the absolute estimated public expenditure and estimated public expenditure on Education as percentage of Gross Domestic Product (GDP) sector wise as well as with the break up of States/UTs. and Centre for the year 2010-11(Actual), 2011-12(Revised Estimates) and 2012-13(Budget Estimates), we see that the expenditure on elementary education is about 1.80% of GDP which is maximum among all other sub sectors of education followed by secondary education which is hovering around 1.05% of GDP. Contribution made by adult education (0.01) as percentage of GDP is lowest among all the sub sectors followed by university & Higher Education and Technical education for which it is around 0.89% and 0.54% respectively. respectively.

Expenditure on Education as Percent of GSDP(2012-13)



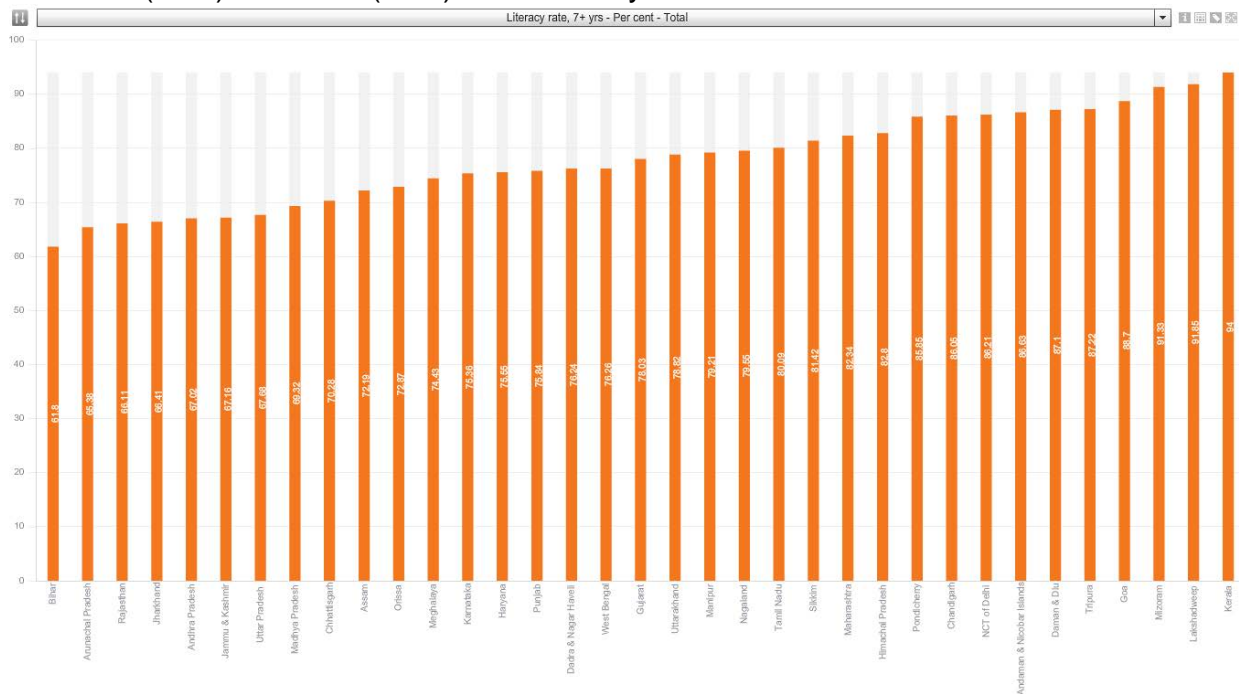
29.6 Literacy rate Comparing Region wise literacy rates (15+ years) (published by UNESCO), the literacy rate of India at 72.99 % (7+ age group) is only higher than that of African Region (64%) and is lower than the world average (84%). In fact, it is even lower than the average for Asian region (82%). The comparison, however, may not be strictly valid because the age group in case of India is 7 + years and the rate might change when applied to 15+ age group. But according to results of 2001 Census, it is expected to become even more unfavorable (for 2001 literacy rate 7+: 64.8%; 15+ : 61.0%). Half the world's children still lack access to early childhood education, and one-quarter of children under 5 are moderately or severely stunted. On current trends, one in five children under 5 will still be suffering from stunting in 2015. The first Education for All (EFA) goal, early childhood care and education, has no specific targets. Nevertheless, it is clear that great progress has been made, as the level of participation in pre-primary education programmes increased from 33% in 1999 to 50% in 2011 (UNESCO, 2014a). Progress was greater in middle income countries than in low income countries. In sub-Saharan Africa, moreover, the gross enrolment ratio in pre-primary education was only 18% in 2011. Gender parity in pre-primary education was achieved everywhere but in the Arab States region, which nonetheless made significant progress. Within countries, enrolment rates for Early Childhood Care and Education (ECCE) differ widely by location and wealth. Children in remote, underserved areas and children of poorer households have fewer opportunities to attend pre-school, even though evidence suggests that they are likely to benefit from it most. ECCE, however, is not merely about enrolment in pre-school. Young children also need equitable access to high quality health care and nutrition. Stunting (low height for age) is an appropriate measure of chronic child malnutrition; there has been progress in reducing stunting over the last two decades in all regions except sub-Saharan Africa, where the number of stunted children increased from 39 million in 1990 to 51 million in 2011. Nearly one in four children under 5 suffered from stunting in 2012. Extensive research shows that investing in ECCE yields high returns in many areas.⁴ Yet underinvestment remains a key reason for the low coverage of pre-school, which accounts for less than 10% of the education budget in most countries and whose share tends to be particularly low in poor countries.

29.7 Impressive progress towards universal primary education (UPE) has been made since 1999. Dropout remains a serious problem. Since 1999, the number of primary school-age children out of school has decreased, from 107 million to 57 million, but two-thirds of the reduction was achieved between 1999 and 2004. There are large differences in progress between regions. In 1999, both South and West Asia and sub-Saharan Africa each had around 40 million children of primary age out of school. In South and West Asia, the number fell by 28 million, while the reduction in sub-Saharan Africa was only 12 million (UNESCO, 2012c). Despite overall improvements in getting children into school, dropout remains a serious problem. The survival rate to the last grade of primary education has hardly changed since 1999, with only around 75% of those who started primary school reaching the last grade in 2010. In sub-Saharan Africa, the proportion making it to the last grade even fell slightly, from 58% to 56% (UNESCO, 2014a).

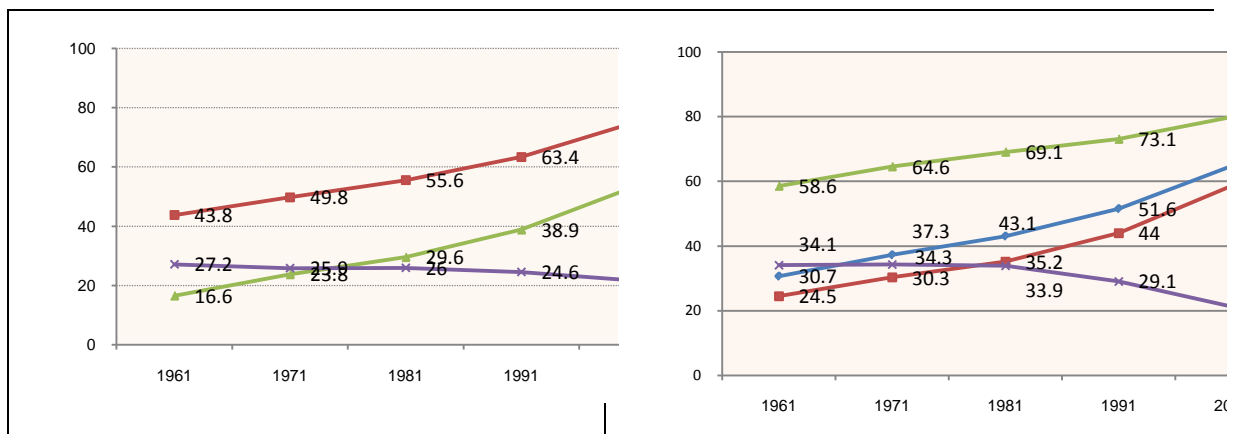
There are many obstacles to achieving UPE, but poverty and conflict remain important barriers. Half the out-of-school children live in conflict-affected countries. Insufficient attention to the marginalized is a key reason for limited progress in recent years. Looking within countries, in at least ten countries, 9 out of 10 of the poorest young women have not

completed primary school, severely limiting their chances of accessing further learning or decent work (UNESCO–UIS, 2014). In some countries, while the number of years that children and young people spend in school has increased over the decade on average, urban males from wealthy homes have improved at a faster rate than the poorest rural girls,

29.8 Amongst major states, BIMARU states (including Jharkhand & Chhattisgarh) continue to have lower literacy rate (both for male & female) compared to all India average. Literacy rate in Orissa is quite close to the national average while that of Andhra Pradesh is much lower. Kerala continues to top the list with literacy rates both for males (96.1) & female (92.1) above ninety.



29.9 Literacy rate, both for male and female, has been improving continuously with last two Census recording significantly more increase (points) in female literacy rate as compared to that of males. Gender gap and the urban rural differential in literacy rate is steadily declining & the gap stands at 16.3 during 2011 in both cases. Literacy rate in 2011 was 76% an increase of 11 points over 2001.

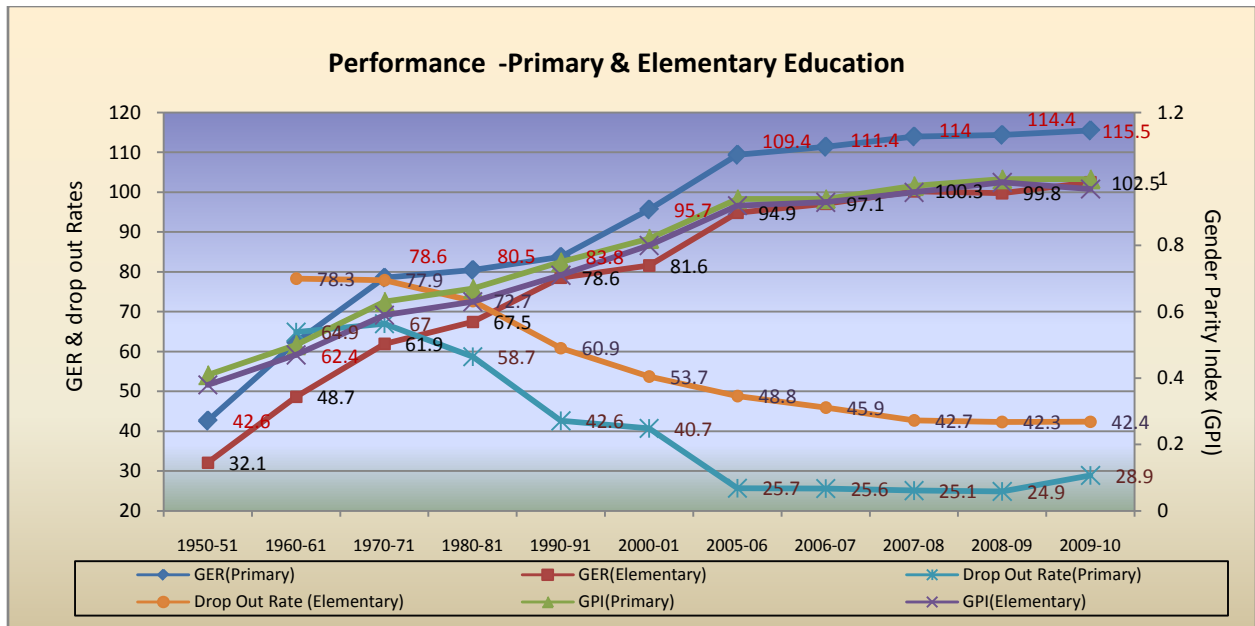


Performance over the years:

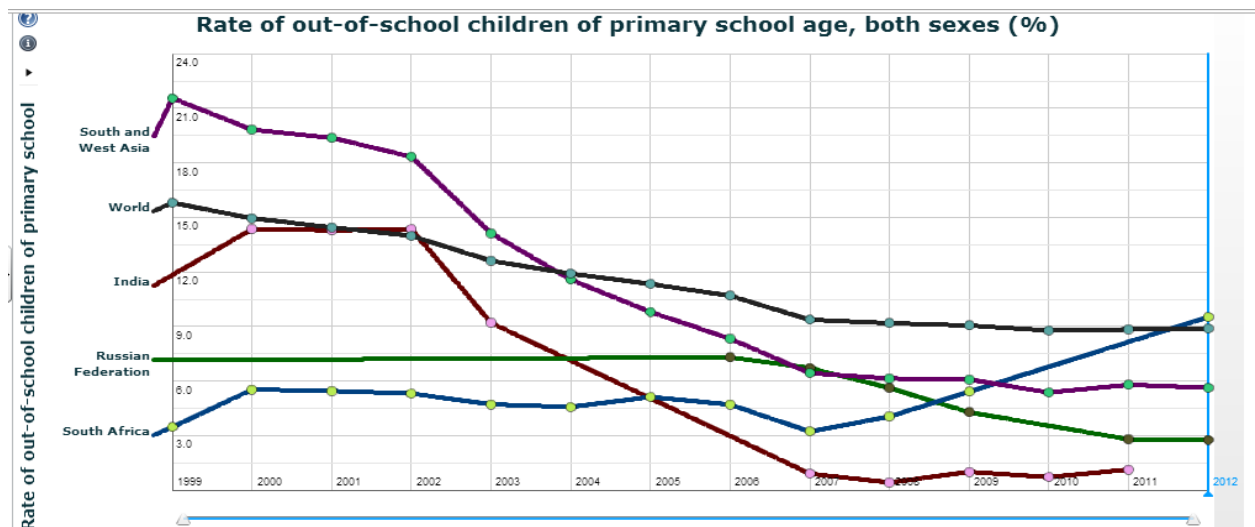
29.10 Elementary Education :Considerable progress has been made in case of Primary & Elementary education wherein government has been trying to focus on Universalization through its initiatives like SarvaSikshaAbhiyan, Mid Day Meal Scheme and Right to Education Act . Acknowledging the need of initial schooling for all , government has made elementary education not only universal but compulsory.

29.11 Since independence , when much less than half and one third of the eligible children were enrolled at primary(I-V) and elementary education (I-VIII) levels respectively, thrust on providing basic education has yielded results with the gross enrollment ratio (GER)at both the levels presently exceeding hundred. The progress is visible across the social categories and gender with present GER for SC, ST & girls shooting above hundred.(GER is the total student enrollment in a given level of education, regardless of age expressed as percentage of corresponding eligible official age group population in a given school year). World average GER for primary level is also over hundred (106).The enrolment in primary classes increased from 101.16 million in 2002-03 to 131.85 million in 2006-07 and further to 133.41 million in 2009-10, 135.21 million in 2010-11 and 139.87 million in 2011-12 and thereafter it is showing a decreasing trend. It decreased to 134.78 million in 2012-13 and to 132.43 million in 2013-14. The GER & Net Enrollment Ratio(NER) are 101.36 & 88.08 and 89.33 & 70.20 respectively at Primary and Upper Primary levels of education. GER of SC at primary level and upper primary level are 113.03 & 98.27 respectively. The same for ST are 113.18 & 91.33 respectively. At the primary level, the share of SC and ST enrolment with respect to total enrolment in 2013-14 works out to 19.88 and 10.05 percent respectively. At the upper primary level, it was 19.41 percent and 9.73 percent respectively. Notably, at all levels, government schools are the main providers of educational needs of both SC and ST children. SC and ST enrolment together had a share of 37.36 and 35.36 percent respectively of the total enrolment in government run primary and upper primary schools. The share of OBC enrolment in the primary and upper primary classes in schools across the country was 44.4 and 44.70 percent respectively. The ratio of Grade V to Grade I improved to 95 percent in 2014-15 compared to 93 percent in 2013-14. This is also reflected in the retention rate at primary level which is estimated to be 83.7 percent for 2014-15 as compared to 82 percent for 2013-14. Retention rate of SC, ST and Muslim were 80.68, 67.68 and 78.06 percentage respectively for 2013-14.As regards transition from primary level to upper primary level of education in respect of Universal Elementary Education (UEE), this has improved significantly from 64.48 percent in 2002-03 to 89.58 percent in 2012-13. Both Boys and Girls have a transition rate of about 89 and 90 percent respectively.

29.12 Gender Parity Index which is ratio of girls GER to boys GER in a given level of education) also shows narrowing down of gender gap in educational attainment since the days of independence when educating a girl child wasn't given the same importance as boys. The index has risen from less than half (about 0.4) during 1950-51 for both the levels (primary & elementary) to about 1 presently. However, the average of 680 districts in 2014-15 indicates a ratio of girls to boys enrolment of 0.93 which was 0.94 in 2012-13 in primary classes and 0.95 in upper primary classes.Percentage girl's enrolment shows a decrease from 2013-14 to 2014-15. At primary level, it decreased from 48.36 (2013-14) to 48.20 in 2014-15 which was 48.22 percent in 2007-08. At upper primary level, it decreased from 48.77 in 2012-13 to 48.66 in 2014-15.



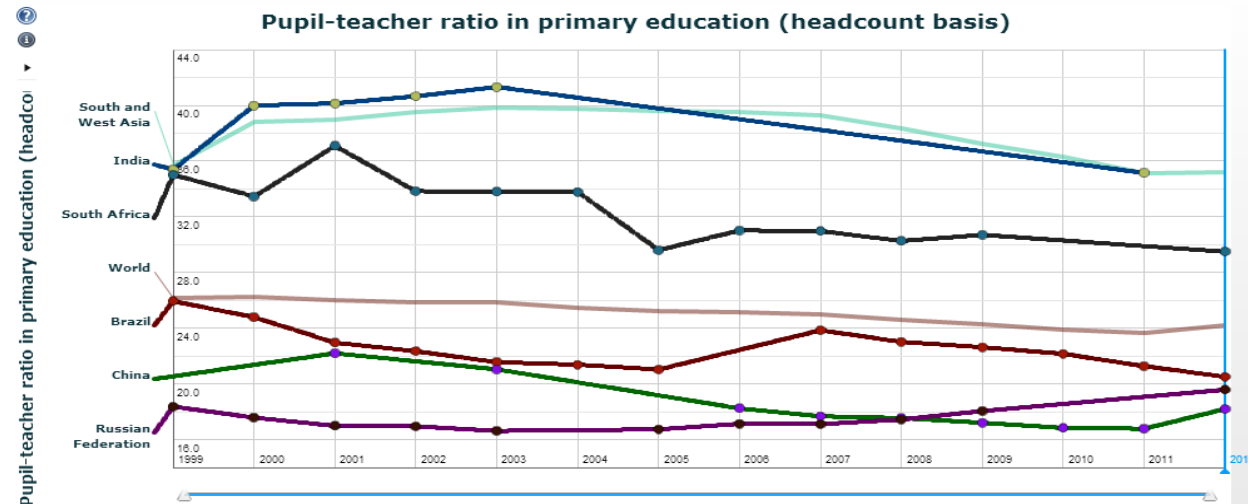
29.13 Dropout Rates (in %) happened to reduced significantly, almost by half to about 30 & 42 (for primary & elementary levels respectively) during 2009-10 . With improvement in the number of schools, facilities in schools and enrolment, the annual dropout rate for 2013-14 tended to be 4.7 compared to 5.6 percent during the previous year in primary grades. Dropout rate at upper primary level increased from 2.65 in 2011-12 to 3.13 in 2012-13. A few States have almost achieved the goal of universal retention at primary level. Along with drop out rates , out of school rate also indicates deprivation of education. As per UNESCO database, out of school rate in case of India has decreased significantly during the recent years and India is better placed not only compared to world average and that of South Asia but also vis a vis BRICS countries like Russia and South Africa.



29.14 Overall Pupil Teacher Ratio, (PTR) has been around 30. It has reduced significantly from 36 in 2005-06. During 2013-14, at the primary level, it was 25 students per teacher while at the upper primary level it was 17. In 219 districts, the PTR was above 30 as per DISE database. These districts were concentrated mostly in Bihar, Gujarat, Jharkhand, Madhya Pradesh, Maharashtra, Uttar Pradesh and West Bengal. Percentage of schools with PTR greater than 30 at the primary level has shown significant improvement, from 37.02% in 2012-13 to 29.90% in 2013-14. States like Bihar (69.62%), Delhi (45.08%),

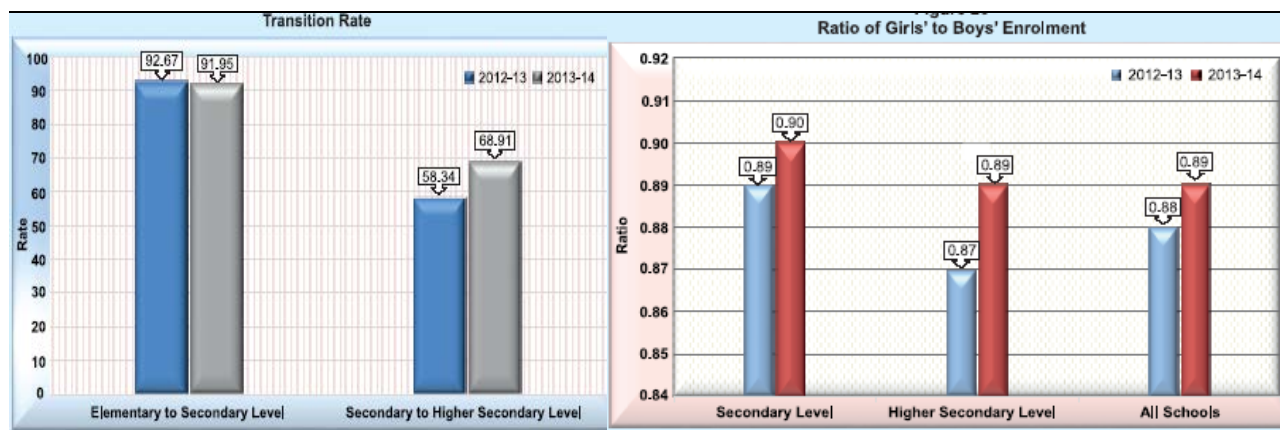
and Jharkhand (47.21%) show that more than 40 percent of Primary schools have PTR above 30. At the upper primary level, percentage of schools having PTR above 35 has decreased to 15.35, compared to 27.46 for the previous year. In Bihar, not only is pupil-teacher ratio high but also the student-classroom ratio, was 57% in 2013-14, It was 65% in 2012-13 and 79% in 2011-12.

Comparison of PTR in primary education across BRICS countries as per UNESCO database is as follows:

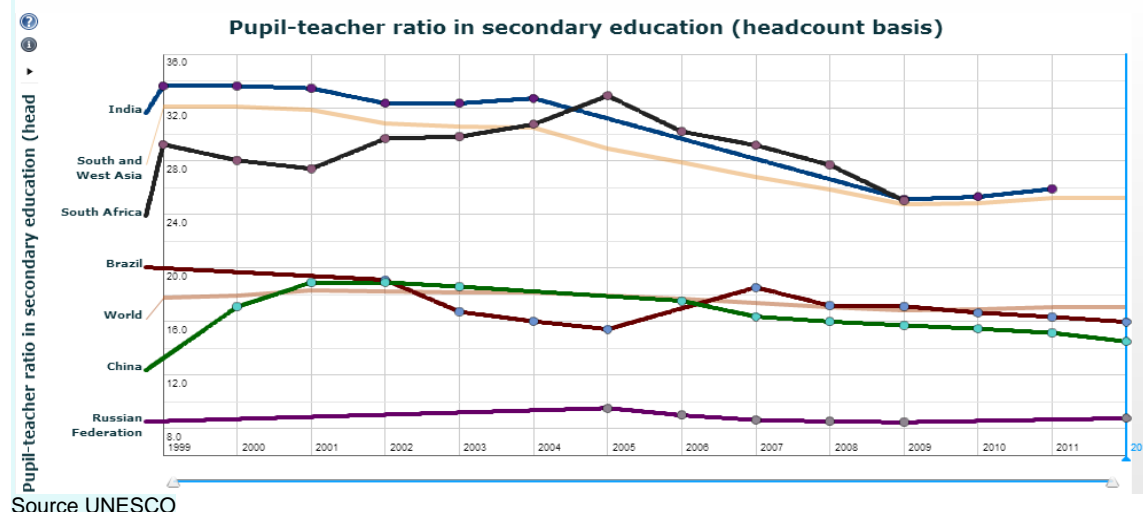


Source : UNESCO

29.15 Secondary & Sr Secondary Education : Despite the increasing trend in GER during the last decade (Sec & Sr Sec GER increased from about 33 per cent during 2001-02 to 49 per cent 2009-10 i.e. from about one third to half of the population being enrolled in eligible age group), enrollment & subsequent retention of the students remains a concern from secondary level onwards. It is noticed that the differential due to gender also starts to widen at this stage compared to the primary level. World average GER for secondary level is about 70 per cent. GER in case of India for secondary school & Sr secondary schools increased from about 68% & 44 % respectively during 2012-13 to about 74 % & 49 % respectively during 2013-14. Girls accounted for 53 & 55 % of enrolment at secondary and Sr. secondary levels as on 30th September 2013. Significant proportion of the population does not make the transition from elementary to secondary/senior secondary level.

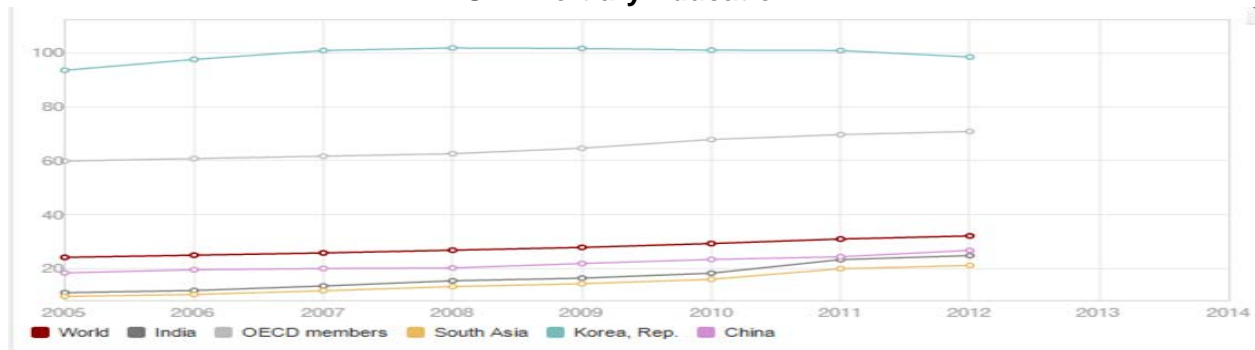


Comparison of PTR in secondary education , across BRICS countries as per UNESCO database is as follows :

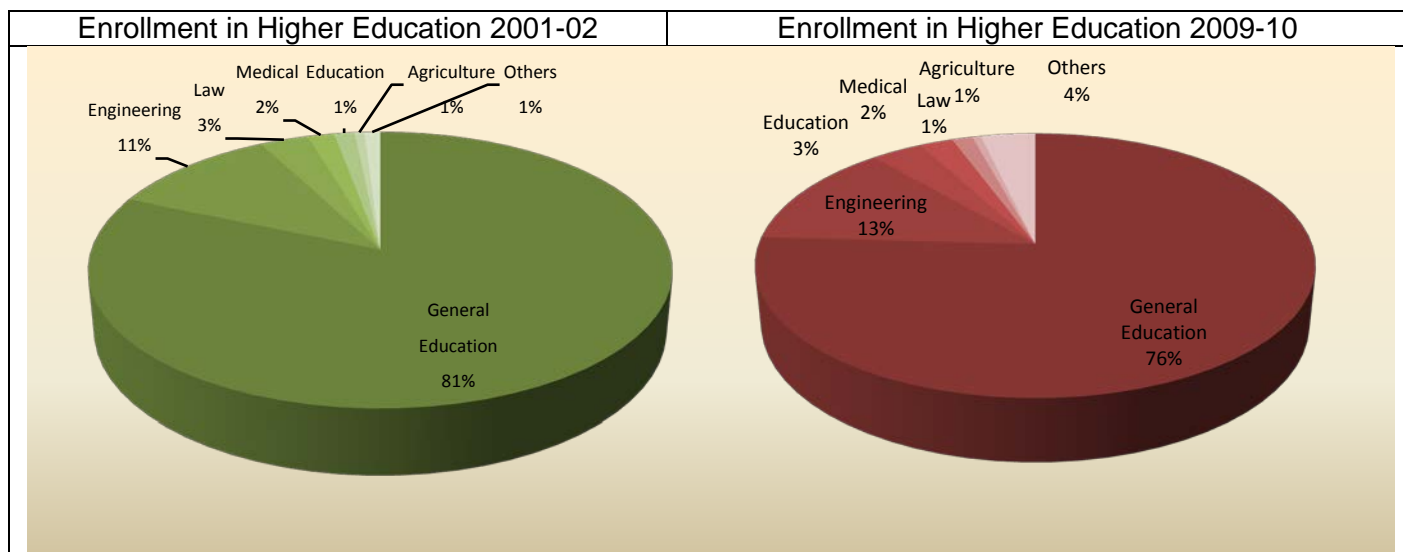


29.16 Tertiary Education: The attrition of school going population continues as we move up the levels with even lesser number making the transition to higher education (tertiary level). Some improvement has been observed during the decade with GER almost doubling from 8 in 2001-02 to about 23 in 2012-13 though it is still quite low, and is below the world average of over 30 and only a shade better than GER of South Asia. GER for tertiary education is about 100 in case of Korea. US(95) Australia (80), Russian federation (75), Japan(60) also have significantly higher GER whereas the GER of China (27) is closer to that of India, though it is still higher as shown below.

GER Tertiary Education



29.17 One of the trend of the tertiary education more and more students are turning towards professional courses. Share of the general education (Arts, science & commerce etc) has gone down. Increase in the category “others” may be on account of management courses.



29.18 Increased demand for professional courses has resulted in a large number of such colleges coming up all over the country, specially in educational hubs of southern states like Tamil Nadu, Karnataka, Andhra Pradesh and in the state of Maharashtra. NCT of Delhi has also witnessed unprecedented growth with more & more professional Institutes coming up in Ghaziabad, Noida etc. As per the table given below, no of College and Universities has increased significantly since 1990-91. The spurt, both in demand (reflected by GER) and supply for professional courses happened mainly due to India's integration to the global economy and increased demand of professionals specially in the fields of IT and Management.

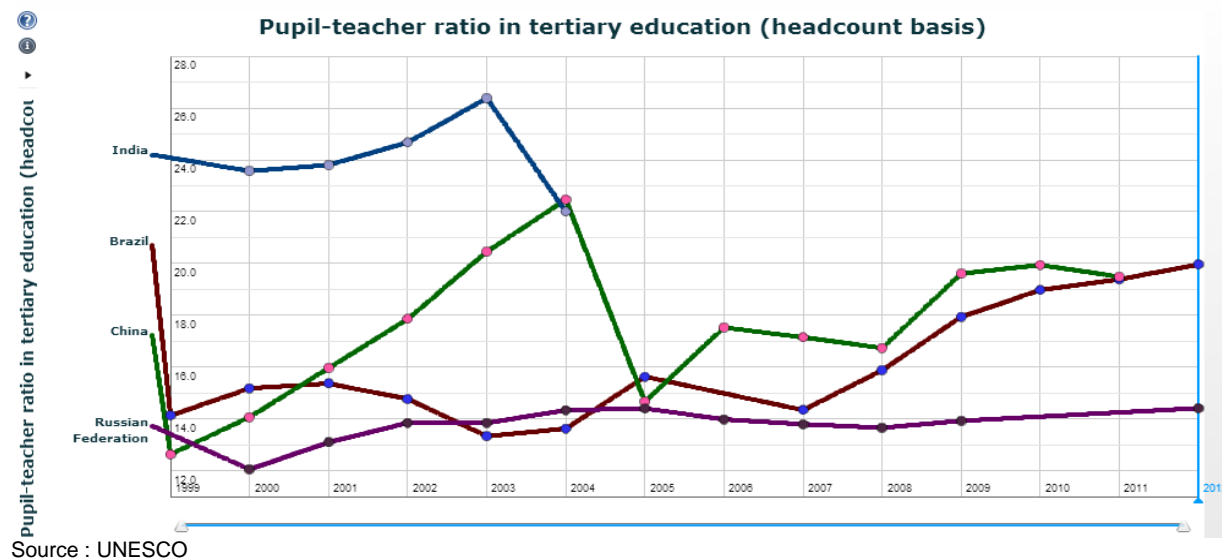
(Figures in '000)

Year	General Colleges	Education	Professional Education Colleges	University/University level Instts
1990-91	4.9		0.9	0.18
2000-01	10.1		2.2	0.25
2009-10	27.8		8.3	0.44
2012-13	35.8		11.04	0.66
2013-14	36.81		NA	0.72
2014-15	NA		NA	NA

29.19 As per recent All India Survey on Higher Education 2012-13, total enrolment in higher education has been estimated to be 29.6 million with 16.3 million boys and 13.3 million girls. Girls constitute 45% of the total enrolment. Gross Enrolment Ratio (GER) in Higher education in India is 22.6, which is calculated for 18-23 years of age group. GER for male population is 22.3 and for females it is 19.8. For Scheduled Castes, it is 15.1 and for Scheduled Tribes, it is 12.0% as compared to the national GER of 22.6. College density, i.e. the number of colleges per lakh eligible population (population in the age-group 18-23 years) varies from 6 in Bihar and Daman & Diu to 61 in Puducherry as compared to All India average of 25. 73% Colleges are privately managed; 58% Private-unaided and 14% Private-aided. Andhra Pradesh has more than 80% Private-unaided colleges, whereas, Bihar has only 6.3% and Assam 9.5% Private-unaided colleges. Gender Parity Index for all categories in higher education was 0.89.

29.20 During the decade, number of students enrolled in PhD/MPhil dropped during 2005-06 & 2006-07 to below 50,000 mark (36,000-37,500) after the initial higher enrollment of about 50,000-65,000 during 2001-2004. The enrollment crossed one lakh mark during 2007-08 & it slid down again to about 0.8 lakh in 2008-09, increasing thereafter to 0.92 lakh in 2009-10 to cross 1 lakh mark during 2010-11 and reach present levels of about 1.19 lakh (2012-13). During the year 2013-14, 1.40 lakh registered under the programme.

29.21 Pupil Teacher Ratio for higher education, in case of Universities and colleges in India, was 23 as per All India Survey on Higher Education 2012-13 . Comparison among PTR of BRIC countries as per UNESCO database is given below.



29.22 Genesis of Education Statistics : The Educational Statistics System in India dates back to the pre-independence period. Annual Educational Statistics began to be collected from 1913-14 followed by elaborate quinquennial reviews. Prior to 1947, the Directorate of Commercial Intelligence collected Educational Statistics. The activity was taken over by the Ministry of Education (MOE) after independence when the Government was required to plan for Universalisation of Elementary Education (UEE). To assess the status and to prepare a plan to this effect, the MOE conducted the first All-India Educational Survey (AIES) in 1957. Since then, five more AIESs have been conducted by NCERT from time to time, the last one in 1993. These surveys have become an integral part of the system of Educational Statistics in India.

29.23 Sources of Education Statistics: The two main sources of educational data are the educational institutions and households. The educational institutions provide the data on enrolment and number of teachers, which is collected annually from all recognized institutions whereas information on aspects like literacy, educational level of population , private expenditure on education etc is available only from households. Agencies compiling statistics based on information collected from educational institutions are :

(i) Ministry of Human Resource Development (MHRD): Planning Monitoring and Statistics Division , in the Department of Secondary and Higher education (DS&HE) brings out reports - Expenditure on Education, Select Educational Statistics, Statistics of School Education, Statistics of Technical and Higher Education etc, based on the information provided by State Governments. In the States, there are divisions or units in the Department of Education, which collect data from schools, through their district and block offices and compile the same in the ES proforma prescribed by the PMSD for onward transmission to MHRD. In general, the data collected from schools are first compiled manually at the block level, then the block level figures are aggregated to prepare district tables and finally, State level tables are prepared by aggregating the district level tables.

(ii) National University of Educational Planning & Administration (NUEPA) :The University is involved in educational statistics at all levels i.e. elementary (DISE), Secondary (SEMIS)

& Higher education (All India Survey of Higher Education). The University has also conducted All India Educational Administration Surveys in the past.

- **District Information System for Education (DISE):** Project of DISE has been taken up by NUEPA to assist in monitoring the goal of Universal Elementary Education - *SarvaSikshaAbhiyan* whereby free and compulsory elementary education for children between 6-14 years of age is being targeted through *Right to Education Act*.
- **Secondary Education Management Information System (SEMIS)** Project of SEMIS has been undertaken by NUEPA for assessment of performance at secondary level where participation rate is far below that at elementary level. Database created through SEMIS is expected to help in the centrally assisted programme called the “*Scheme for Universal Access & Quality at The Secondary Stage*” (*SUCCESS*)
- **All India Survey of Higher Education** was conducted by NUEPA at the behest of Ministry of HRD.

(iii) National Council of Educational Research & Training (NCERT): Detailed statistics on students, teachers and physical facilities in schools up to higher secondary level are collected in 5 to 7 years through **All India educational Surveys (AIES)** conducted by the NCERT.

29.24 Important sources of household data on education are:

(i) **Population Census** : The decennial census is an important source of data on literacy, persons attending/not attending school and level of education of the population of the country. In the 1991, 2001 & 2011 Census, the literacy data has been collected and compiled for the population in the age group 7+. While the literacy rate for the age group 7+ is made available just after the census, the tables on literacy for different age groups become available after 5 to 6 years of the census. Internationally, the age groups for which literacy data is reported is 15+.

(ii) **National Sample Surveys (NSS)** conducted by the National Sample Survey Office. The last survey in which the NSSO collected data on social consumption was the 52nd Round (1995-96). In this survey, data on literacy, school attendance, dropouts and educational expenditure from the sample households was collected and the findings brought out in a report published in October 1998.

There are various agencies involved in the collection of data on technical and higher education in the country. This area comprises higher (general education), technical education, medical education, agricultural education and teacher education.

- The **University Grants Commission (UGC)** is responsible for collection and reporting of data on higher education obtained directly from colleges and universities. Prior to 1982, the Department of Education in MHEd as well as UGC collected data on higher education but in order to avoid duplication, it was decided that UGC alone should collect data on higher education. However, the UGC faces problems of time lag and non-response from the reporting institutions, but some basic statistics are published every year in UGC's Annual Report. The MHRD has again stated collecting data on higher education from the States for the year 1994-95 onwards.
- **Indian Council of Medical Research** collects data for the medical education in India
- **Indian Council of Agricultural Research** collects data on agricultural education in India.
- **Institute of Applied Manpower Research(IAMR)** conducts national surveys on area manpower profiles, vocational & technical education for National Technical Manpower Information System

29.25 Besides the above ,some information is also available with **Directorate of Employment & Training** (data on the educational level of the job seekers through Employment Exchanges),State Governments etc. National Family & Health Welfare Survey, 1992-93 & 1998-99 also collected data on literacy and children attending school, based on a sample survey of households.

29.26 Internationally, UNESCO, World Bank and some other agencies maintain information on education related indicators for various countries.

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