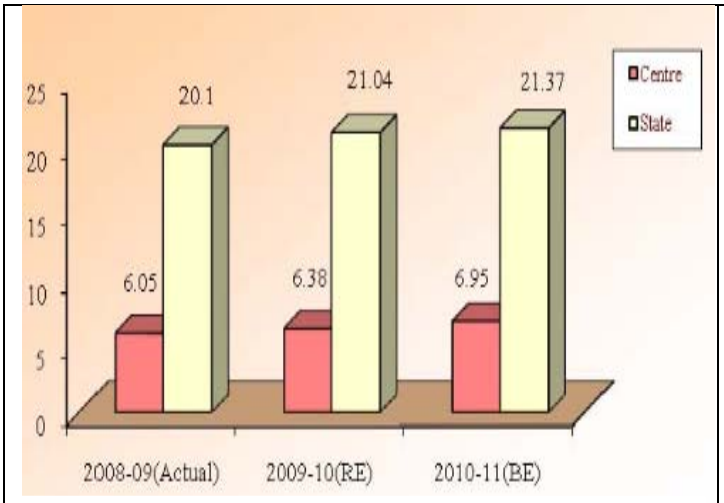
CHAPTER - 29

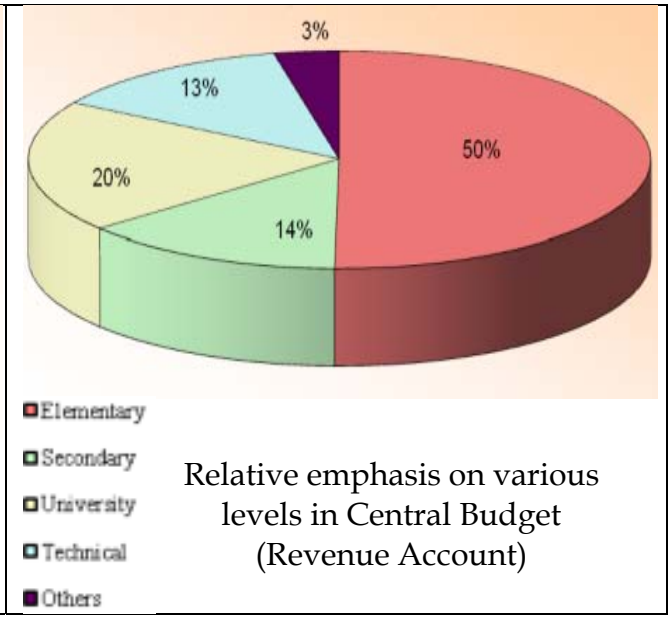
EDUCATION

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, India, with a score of 0.45, scores least in case of education. Expected years of schooling (10.3 years) and mean years of schooling (4.4 years) in India are not only less than the world average (11.3 & 7.4 years respectively) but are also lowest amongst the BRICS countries. Comparison of proportion of population with at least secondary education also gives similar result. In case of India (with 26.6 % females & 50.4 % males with secondary education) the attainment is significantly lower than the world average (with 50.8% females and 61.7 % males having secondary education) along with more gender disparity. Compared to other BRICS countries, India scores marginally better than Brazil in case of proportion of male with at least secondary education (Brazil - 46.3 %) but even there it falls much short in case of the same indicator for females (Brazil - 48.8).

29.2 **Expenditure on Education** : Considering both the revenue as well as the capital account, the total budget estimates for education for 2010-11 of the Education Departments (State as well as the Centre) works out to Rs.229425.84 crore, which is 10.13% of the total budget estimates.



Percentage Expenditure on education by Centre & State wrt their total budget



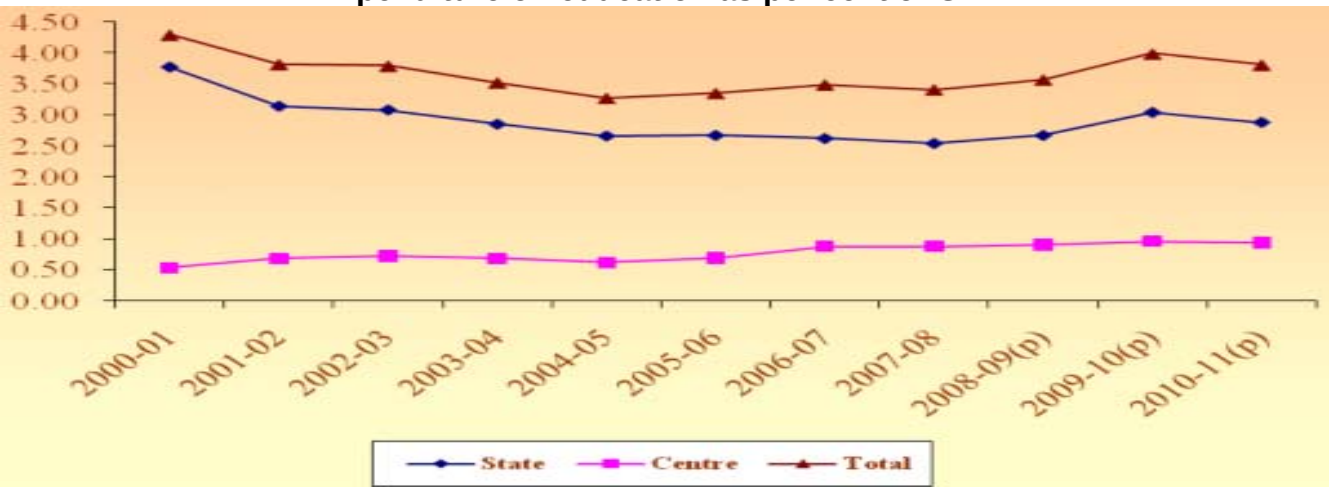
Relative emphasis on various levels in Central Budget (Revenue Account)

29.3 Mass basic education has been given priority in the country right from the time of independence. In the recent past, Sarva Siksha Abhiyan 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 , in case of secondary education is to make it universal only (not compulsory).

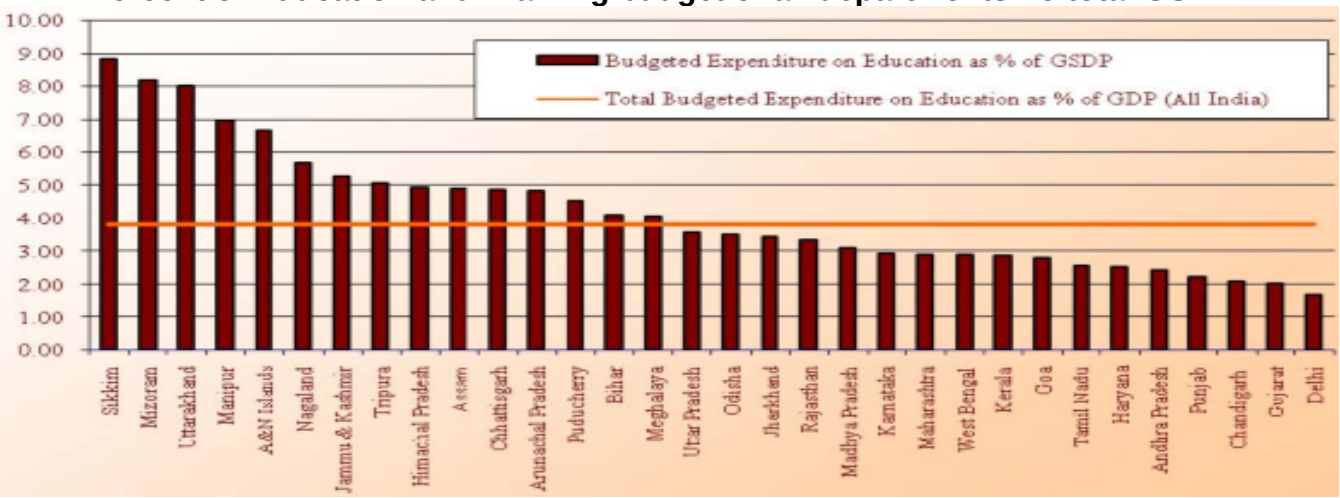
29.4 In high Income OECD countries , Brazil, South Africa etc public expenditure on education is about 6 per cent of GDP , in case of USA it is 5 per cent, while the expenditure by India (3.8) is closer to that by Japan (4 per cent)

Expenditure on education as per cent of GDP



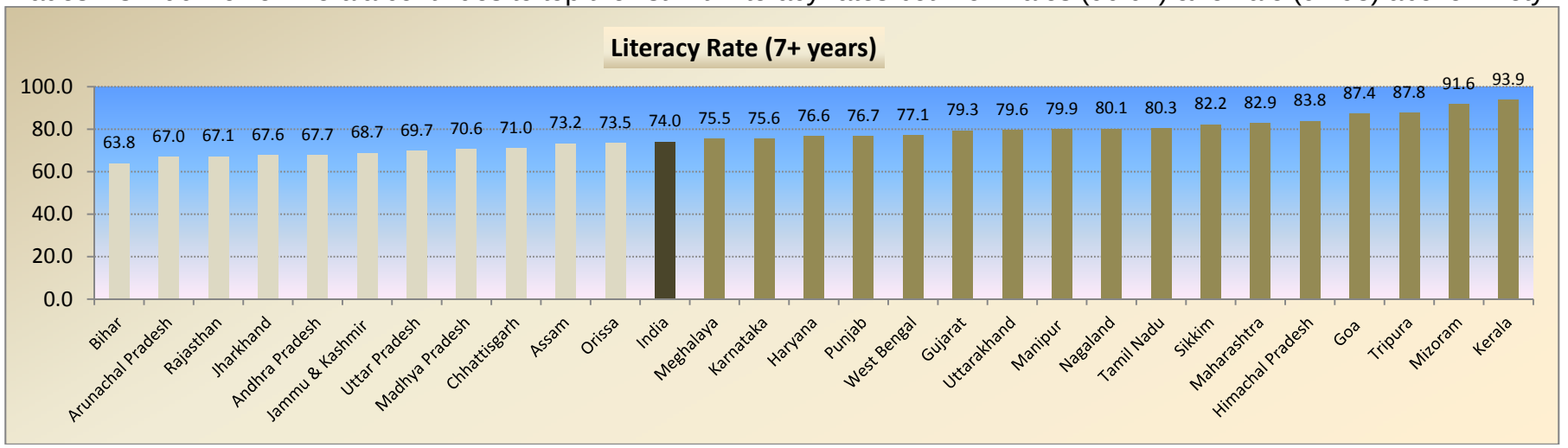
29.5 Considering the estimated public expenditure as per cent of GDP, the expenditure on elementary education is about 1.57**%** of GDP, which is maximum among all other sub sectors of education , followed by secondary education where it hovers around 0.98% of GDP. Contribution made by adult education (0.03) 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 0.33**%** respectively.

Percent of Education and Training budget of all departments To total GSDP

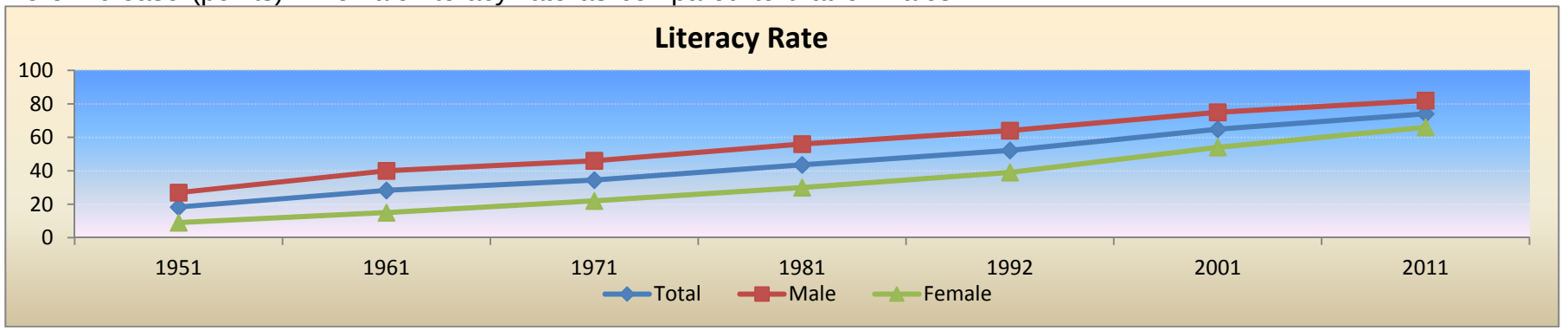


29.6 **Literacy rate** Comparing Region wise literacy rates (15+ years) (published by **UNESCO**), the literacy rate of India is only higher than that of African Region (64) and is lower than the world average (84). In fact, it is even lower than the average for Asian region (82). The comparison, however, 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)

29.7 Amongst major states, BIMARU states (including Jharkhand & Chhatisgarh) 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 (96.02) & female (91.98) above ninety.



29.8 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 .

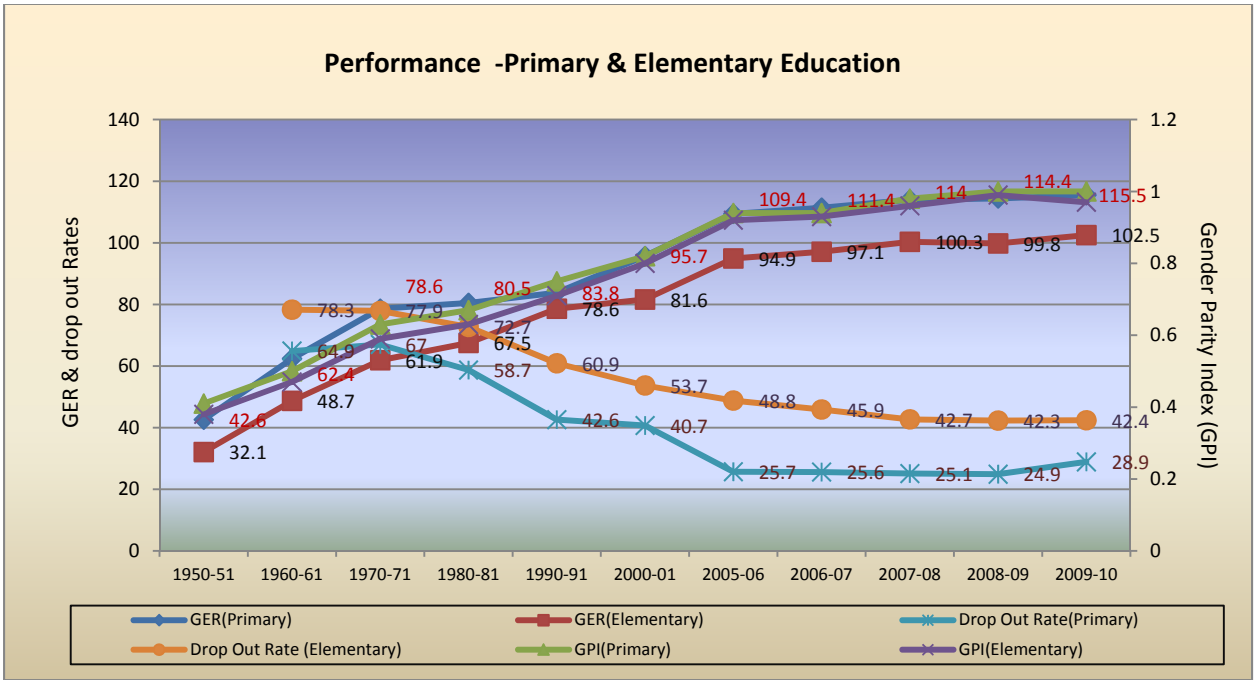


Performance over the years:

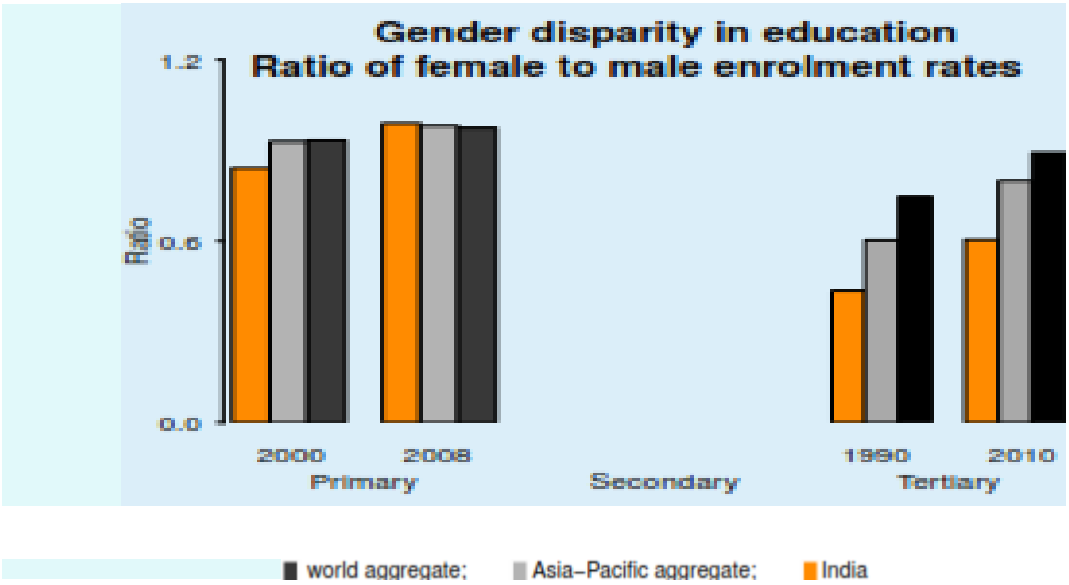
29.9 **Elementary Education :** Considerable progress has been made in case of Primary & Elementary education wherein government has been trying to focus on Universalization through its initiatives like Sarva Siksha Abhiyan, Mid Day Meal Scheme and Right to Education Act . Acknowledging the need of initial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

29.10 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).

29.11 Gender Parity Index (GPI: 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. Drop out Rates have also reduced significantly, almost by half to about 30 & 42 for primary & elementary levels respectively during 2009-10 .



29.12 **Secondary & Sr Secondary Education** : Significant proportion of the population does not make the transition from elementary to secondary/senior secondary level. 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. about one third to half of the population being enrolled in eligible age group), enrollment & subsequent retention of the students (GER falling by 50 % from above 100 % for elementary during 2009-10) remains a concern from secondary level onwards. World average GER for secondary level is about 70 per cent. It is noticed that the differential due to gender also starts to widen (about 0.9 GPI for IX-XII & 0.7 GPI for Higher education).



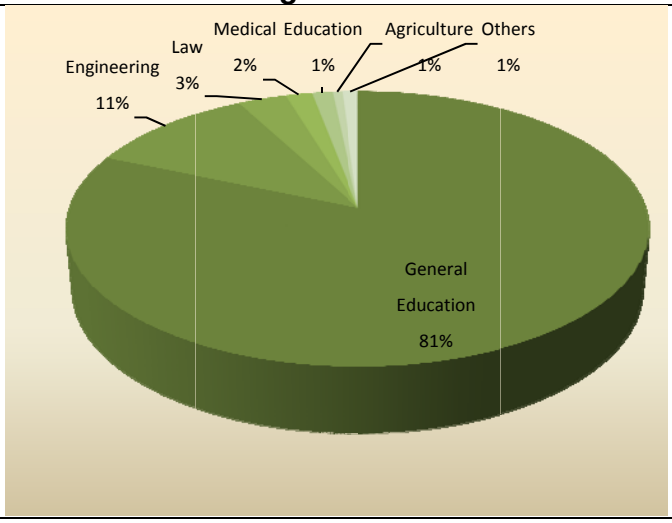
29.13 Until now, the role of the Central Government in the development of secondary education was relatively limited. It was financing the national level bodies like NCERT, NIOS, KVS, NVS, etc. and assisting States through select centrally-sponsored schemes. Now, the Ministry of Human Resource Development is envisaging playing a larger role in the development and universalization of secondary education in the country. It has proposed to introduce a centrally-assisted programme called the "Scheme for Universal Access and Quality at the Secondary Stage (SUCCESS).

29.14 **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 15 in 2009-10. GER for tertiary education is above 100 in case of Korea. US(95) Australia (80), Russian federation (75), Japan(60) also have significantly higher GER whereas the GER of China (26) is closer to that of India, though it is still higher.

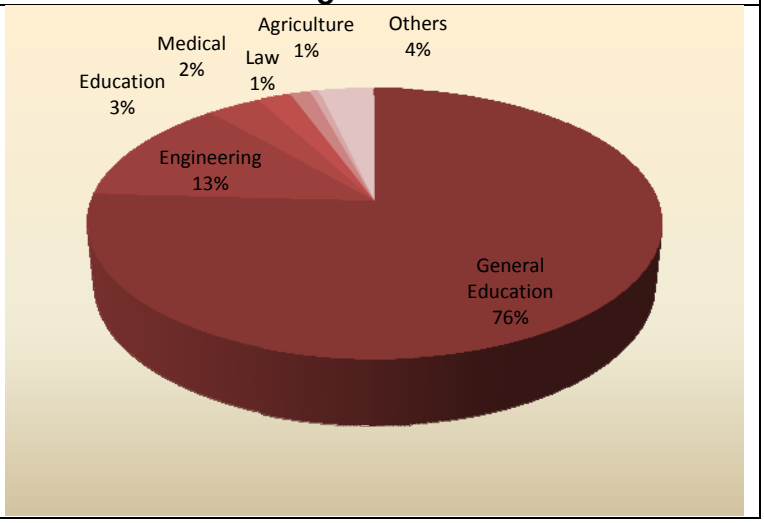
29.15 A heartening trend of the tertiary education is more and more students are turning towards professional courses. Share of the general education (Arts, science &

commerce has gone down). Increase in the category “others” others may be on account of management courses.

Enrollment in Higher Education 2001-02



Enrollment in Higher Education 2009-10



29.16 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 witnesses unprecedented growth with more & more professional Institutes coming up in Ghaziabad, Noida etc. At the national level, the number of University/university level Institutes more than doubled during the last twenty years and colleges for general education increased to about three times the number twenty years earlier in 1990—91.In the same period, number of colleges imparting professional education increased to more than eight times the number in 1990-91. The spurt , both in demand (reflected by GER) and supply for professional courses followed India’s integration to the global economy and increased demand of its professionals specially in the fields of IT and Management.

(Figures in ‘000)

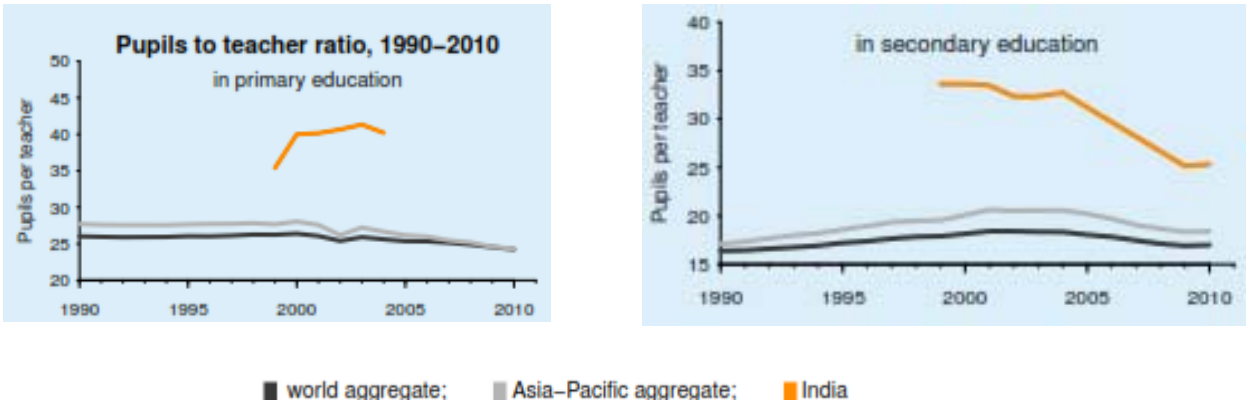
Year	General Education Colleges	Professional Education Colleges	University/University level Instt.s
1990-91	4.9	0.9	0.18
2000-01	7.9	2.2	0.25
2009-10	14.4	8.3	0.44

29.17 As per recent All India Survey on Higher Education 2010-11 conducted by NUEPA , there are about 621 university with 27,468 colleges and 11643 stand alone colleges . Estimated GER for 2010-11 (18.8) shows improvement over that for 2009-10 (15 %).

29.18 During the last decade, number of students enrolled in PhD/MPhil dropped during 2005-07 to 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 0.784 lakh in 2008-09 , increasing marginally thereafter to 0.92 lakh in 2009-10.The spurt during 2007-08 seems to be on the account of global financial crisis when more people went for doctorate in view of constrained job market.

29.19 **Pupil Teacher Ratio :** Pupil teacher ratio , for the primary education, has worsened from 24 in 1950-51 to about 42 in 2009-10 . During the same period it changed from 21 to 34 for secondary/Sr secondary level .It still hovers around 20-24 for higher education. Amongst BRICS, Brazil (22), China(17), Russian Federation (18) & South Africa (31), all sport better pupil teacher ratio for primary level compared to India as do US, UK & Japan with the ratio lying between 14 to 18.



29.20 **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.

29.21 **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 proformae 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 - *Sarva Siksha Abhiyan* 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.

29.22 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

29.23 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.

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

References :

- Statistical Year Book For Asia & Pacific 2012 , ESCAP Statistics Division.
- Analysis Of Budgeted Expenditure On Education 2008-09 To 2010-11, Ministry Of Human Resource Development.
- All India Survey On Higher Education 2010-11(Provisional Report) Department Of Higher Education, Ministry Of Human Resource Development.
- Education Statistics At A Glance 2011,Bureau Of Planning Monitoring & Statistics, Ministry Of Human Resource Development.
- Databases maintained on Websites Of UNESCO & World Bank