



Growth of higher education in India in the new millennium

Swathi Priya Pasinibilli,

Research Scholar, Department of Economics, Andhra University, Visakhapatnam

Abstract : Education offers various economic benefits and contributions to the society. It provides returns to not only individual but also to the society. Education brings economic stability to any society. Higher education is the key factor in shaping the skilled human resource. Higher Education provides an opportunity to critically reflect upon the social, economic, cultural, moral and spiritual issues facing humanity. It contributes to national development through dissemination of specialized knowledge and skills. Development and progress of the citizens of the country is defined by the knowledge society and skilled manpower. The importance of higher education has been pointed out by the International Commission on Education for 21st Century. Consistent growth has been recorded in higher education in India from the last two decades which has been able to generate skilled manpower for the rapid industrialization and knowledge based economy. Institutions and students' enrollment growth in higher education in this millennium would be in normal stage. In case of number of institutions, by the year 2025-2026, the total number of institutions in higher education may be recorded 81 thousand and the total number of enrollment may be recorded 51 lakh. In case of number of institutes, highest growth rate was recorded in the year 2010-2011 i.e., 58.14% and negative growth rate was recorded in the year 2009-2010 i.e., -0.12%. In case of total enrollment, highest growth rate was recorded in the year 2010-2011 i.e., 32.59% and lowest growth rate was recorded in the year 2013-2014 i.e., 1.44%.

Key words: Enrollment of Students, Forecasting, Growth Rate, Higher Education, Percentage Share.

1. Introduction:

Traditional Indian education system consists of the Vedas, the Puranas, the Ayurveda, the Arthasashtra and etc. Gurukula was the ancient Indian education system to increase the knowledge. This system had been a residential concept wherein the students were educated under the tutorship of a guru in different areas of religion, philosophy and science.

Department of Higher Education, Ministry of Human Resource Development (MHRD), Government of India, shapes the policies related to higher education. To establish professional education in different areas, UGC has established statutory council. That are, All India Council of Technical Education (AICTE), Bar Council of India (BCI), Council of Architecture (COA), Central Council of Homeopathy (CCH), Central Council for Indian Medicine (CCIM), Dental Council of India



(DCI), Distance Education Council (DEC), Indian Council for Agricultural Research (ICAR), Indian Nursing Council (INC), Medical Council of India (MCI), National Council for Teacher Education (NCTE), Pharmacy Council of India (PCI), Rehabilitation Council, and State Councils of Higher Education.

Development and progress of the citizens of the country is defined by the knowledge society and skilled manpower. Higher education is the key factor in shaping the skilled human resource. Consistent growth has been recorded in higher education in India from the last two decades which has been able to generate skilled manpower for the rapid industrialization and knowledge based economy.

The importance of higher education has been pointed out by the International Commission on Education for 21st Century: " Higher education is at one and the same time one of the driving forces of economic development and the focal point of learning in a society. It is both repository and creator of knowledge. Moreover, it is the principal instrument for passing on the accumulated experience, cultural and scientific, of humanity."

In developing societies, higher education is considered to be a speedy vehicle for upward social mobility, especially for the socially and economically deprived sectors.

2. Historical Background:

Around 6 Before Christ (BC) at Nalanda and Takshila, the modern concept of University style education centers were established. In the middle ages up to 1200 Anno Domini (AD) the religion based higher learning centres

were established throughout the India. Starting from 1600 AD, the major change in the traditional style of higher education in India by the European rulers. In 1781, the Calcutta Madrasa was the first institution of higher learning set up by the British East India Company. Higher education in modern India began with the establishment of Hindu College at Calcutta in 1817 by Raja Ram Mohan Roy with his friend David Hare. By 1947, the British model of University system continued expand across India.

3. Objectives:

The main focus of the study here is on the trends of higher education in India.

1. To analyse the trends of number of institutes in higher education in India.
2. To identify the growth in number of institutes in higher education in India.
3. To examine the trends of students' enrollment in higher education in India.
4. To study the growth in students' enrollment in higher education in India.
5. To forecast the trends of number of institutes in higher education in India.
6. To forecast the trends in students' enrollment in higher education in India.

4. The Data:

The study is completely based on secondary data sources. Secondary data is related to enrollment of total number of students in higher education in India is



tapped from Ministry of Human Resource Development Bureau of Planning, Monitoring & Statistics New Delhi, All India Survey on Higher Education, Education Statistics at a Glance, Year book 2016-2017.

5. Techniques of Analysis:

Tabular analysis technique is employed to analyse the time series data. And forecasting method is applied to estimate the existing trends and also to forecast the changes in the selected variables.

(a) Percentage:

$$\text{Percentage} = \frac{\text{Relative Number}}{\text{Whole Number}} \times 100$$

(b) Annual Growth Rate:

$$\text{Annual Growth Rate} = \frac{\text{Present Value} - \text{Past Value}}{\text{Past Value}} \times 100$$

(c) Compound Annual Growth Rate (CAGR):

$$\text{CAGR} = \left(\left(\frac{\text{Ending Value}}{\text{Starting Value}} \right)^{\frac{1}{\text{Number of Years}-1}} \right) - 1$$

6. Structure of Education in India:

India, being a union of states, has accepted a uniform structure of school and college education popularly known as 10+2+3 pattern of school and college education. This pattern visualized 10 years of general education including 8 years of elementary and 2 years of lower secondary then 2 years of higher secondary and then 3 years of college education leading to the award of the first degree. Thus, after 12 years of

school education, higher education will begin.

7. Progress of Higher Education in New Millennium:

7.1.a. Trends in Number of Universities, Colleges, and Standalone Institutions in India:

The yearly status of number of universities, colleges, and standalone institutions in India from 2000-2001 to 2014-2015 are examined here. The data are obtained from the Government of India official website. The status of number of institutions in higher education is examined in Table I.1.

It may be observed from the Table I.1., in the year 2000-2001, the total number of higher education institutes were recorded 10,406 with 254 universities and 10,152 colleges. In the year 2014-2015, the total number of higher education institutes were recorded 51,534 with 760 universities, 38,498 colleges, and 12,276 standalone institutes. In the study period, highest number of universities, colleges, standalone institutes were recorded in the year 2014-2015.

7.1.b. Growth in Number of Universities, Colleges, and Standalone Institutions in India:

The yearly status of growth of universities, colleges, and standalone institutions in India from 2001-2002 to 2014-2015 is examined in Table I.2.



Table I.1.

Trends in Number of Universities, Colleges, and Standalone Institutions in India

Year	Universities	Colleges	Standalone Institutions	Total of Higher Education Institutes
(1)	(2)	(3)	(4)	(5)
2000-2001	254	10152	-	10406
2001-2002	272	11146	-	11418
2002-2003	304	11776	-	12080
2003-2004	304	12178	-	12482
2004-2005	343	13578	-	13921
2005-2006	350	16982	-	17332
2006-2007	371	19812	-	20183
2007-2008	406	23099	-	23505
2008-2009	440	27882	-	28322
2009-2010	436	27852	-	28288
2010-2011	621	32974	11139	44734
2011-2012	642	34852	11157	46651
2012-2013	665	35829	11443	47937
2013-2014	723	36634	11664	49021
2014-2015*	760	38498	12276	51534

Source: Department of Higher Education, Ministry of Human Resource Development & DISE, NUEPA (School Education since 2012-2013)

No. of Colleges (2000-2001 to 2009-2010) includes standalone Institutions like Polytechnics.

Standalone institutions includes: Polytechnics, PGDM, Nursing, Teacher Training and Institutes under Ministries.

*Date for 2014-2015 for various types of schools not add up to the total as the total includes no response cases also as on 30.09.2014.



Table I.2.

Growth in Number of Universities, Colleges, and Standalone Institutions in India

Year	Universities	Colleges	Standalone Institutions	Total of Higher Education Institutes
(1)	(2)	(3)	(4)	(5)
2000-2001	--	--	--	--
2001-2002	7.09%	9.79%	-	9.73%
2002-2003	11.76%	5.65%	-	5.80%
2003-2004	0.00%	3.41%	-	3.33%
2004-2005	12.83%	11.50%	-	11.53%
2005-2006	2.04%	25.07%	-	24.50%
2006-2007	6.00%	16.66%	-	16.45%
2007-2008	9.43%	16.59%	-	16.46%
2008-2009	8.37%	20.71%	-	20.49%
2009-2010	-0.91%	-0.11%	-	-0.12%
2010-2011	42.43%	18.39%	-	58.14%
2011-2012	3.38%	5.70%	0.16%	4.29%
2012-2013	3.58%	2.80%	2.56%	2.76%
2013-2014	8.72%	2.25%	1.93%	2.26%
2014-2015*	5.12%	5.09%	5.25%	5.13%
CAGR	0.08%	0.10%	0.02%	0.12%

It may be observed from the Table I.2., in the case of number of universities, highest and lowest growth rates were recorded 42.43 per cent in the year 2010-2011 and -0.91 per cent were recorded in the year 2009-2010 respectively. In the case of number of colleges, highest and lowest growth rates were recorded 25.07 per cent in the year 2005-2006 and -0.11 per cent were recorded in the year 2009-2010 respectively. In the case of standalone institutes, highest and lowest growth rates were recorded 5.25 per cent in the

year 2014-2015 and 0.16 per cent in the year 2011-2012 respectively.

7.2.a. Trends in Enrollment in Universities, Colleges, and Standalone Institutions in India:

The yearly status of number of students enrolled in universities, colleges, and standalone institutions in India from 2000-2001 to 2014-2015 are examined here. The data are obtained from the Government of India official website. The status of number of students enrolled in higher education is examined in Table I.3.



Table I.3.

Trends in Enrollment in Universities, Colleges, and Standalone Institutions in India

Year	Universities			Colleges			Standalone Institutions			Total of Higher Education Enrolments		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
2000-2001	-	-	-	-	-	-	-	-	-	5443829	3182503	8626332
2001-2002	-	-	-	-	-	-	-	-	-	5795417	3746409	9541826
2002-2003	-	-	-	-	-	-	-	-	-	6681558	4035000	10716558
2003-2004	-	-	-	-	-	-	-	-	-	7044205	4156379	11200584
2004-2005	-	-	-	-	-	-	-	-	-	8191957	4840229	13032186
2005-2006	-	-	-	-	-	-	-	-	-	8831748	5491818	14323566
2006-2007	-	-	-	-	-	-	-	-	-	9593315	5959204	15552519
2007-2008	-	-	-	-	-	-	-	-	-	10573890	6637326	17211216
2008-2009	-	-	-	-	-	-	-	-	-	11227810	7272515	18500325
2009-2010	-	-	-	-	-	-	-	-	-	12444600	8296140	20740740
2010-2011	3178494	2014247	5192741	6308961	5242555	11551516	1132223	502057	1634280	15466559	12033190	27499749
2011-2012	3322465	2193825	5516290	8685180	7620190	16305370	1222689	591532	1814221	16173473	13010858	29184331
2012-2013	3400698	2298510	5699208	8908573	7944090	16852663	1257952	581724	1839676	16328303	13300719	29629022
2013-2014	3663647	2715951	6379598	11418657	10344709	21763366	1342507	570249	1912756	16424811	13630909	30055720
2014-2015*	3668840	2718415	6387255	13104589	12072692	25177281	1431638	602513	2034151	18205067	15393620	33598687

Source: Department of Higher Education, Ministry of Human Resource Development & DISE, NUEPA (School Education since 2012-2013)

No. of Colleges (2000-2001 to 2009-2010) includes standalone Institutions like Polytechnics.

Standalone institutions includes: Polytechnics, PGDM, Nursing, Teacher Training and Institutes under Ministries.

*Date for 2014-2015 for various types of schools not add up to the total as the total includes no response cases also as on 30.09.2014.



It may be identified from the Table I.3., in the year 2000-2001, 86.26 lakh people were enrolled in the total higher education. It was increased up to 335.99 lakh for the year 2014-2015. Male enrollment was recorded 54.44 lakh and female enrollment was recorded 31.83 lakh for the year 2000-2001. In the year 2014-2015, male enrollment was increased up to 182.05 lakh and female enrollment was increased up to 153.94 lakh.

In the case of universities' enrollment, in the year 2010-2011, 51.93 lakh people enrolled with 31.78 lakh male and 20.14 lakh female. It was increased up to 36.69 lakh male enrollment, 27.18 lakh female enrollment, and 63.87 lakh total enrollment. In the case of colleges' enrollment, in the year 2010-2011, 115.52 lakh people enrolled with 63.09 lakh male and 52.43 lakh female. It was increased up to 131.05 lakh male enrollment, 120.73 lakh female enrollment, and 251.77 lakh total enrollment. In the case of standalone institutes' enrollment, in the year 2010-2011, 16.34 lakh people enrolled with 11.32 lakh male and 5.02 lakh female. It was increased up to 14.32 lakh male enrollment, 6.03 lakh female enrollment, and 20.34 lakh total enrollment.

7.2.b. Percentage share of Enrollment in Universities, Colleges, and Standalone Institutions in India:

The yearly status of percentage share of universities, colleges, and standalone institutions enrollment in India from 2001-2002 to 2014-2015 is examined in Table I.4.