

Study of Enrolment Ratio in Indian Higher Educational Institutions

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Abstract

Education provides knowledge and leads to the development of skills which helps in realizing one's potential. Education is one of the important components of human capital. The paper studies the Gross Enrolment Ratio of higher educational Institutions for the period 2012 – 2018. The findings revealed the Gross Enrolment Ratio (GER) to be 25.8 in 2017-18 and 17 states and UTs in India have GER less than this. The results show that among the states Bihar has the lowest Gross Enrolment Ratio which is 13 percent in 2017-18.

Keywords: *Education, Gross Enrolment Ratio (GER), Higher Educational Institutions*

Introduction

The human force of any country has to be educated and trained. Better education and better health help in having good human capital. Education helps the economies in developing skilled and efficient work force. The contribution of education to development is manifold – economic growth, reduction in poverty and income inequalities, improvement in the health and nutrition, reduction in population growth and improvement in life expectancy, reduction in crime and violence, deepening of democracy and in improving civil, social and political aspects of development is well recognized. (Tilak, 2008).

As per Alfred Marshall, the most valuable of all capital is that invested in human beings. The most prosperous economies of the world today exhibit the highest rate of educational attainment (United Nations Development Programme, 2007) and the poorest countries happen to have very low rates. Not only is the provision of a high-quality education linked to economic prosperity, but also the lack thereof creates a perpetuating state of poverty (Perry et. al 2006, Hanushek and Woessmann, 2007).

Objectives

1. To examine the Gross Enrolment Ratio of Indian higher educational institutions (colleges) for 2012-2018
2. To study the trends of Average Enrolment per College state-wise for 2012-18.

Literature Review

Education helps in getting good human capital which can further help in improving the infrastructure and other physical aspects. Schultz (1961) estimated the contribution of education to economic growth with the help of the rate of return to human capital vis-a-vis the rate of return to physical capital. He concluded that education alone accounted for 21-40 percent of increase in the national income growth in USA over the period of 1929-1956. Becker (1964) talked about investment in education as human capital formation. Denison (1967) in a growth-accounting exercise for several

economies of Western Europe and the United States for the period 1950-1962, found that two thirds of all the growth of those economies was due to advances in knowledge, educational attainment, economics of scale and improved allocation of resources, with the bulk of those factors being explained by technological progress. Human capital is the basic input for innovation. Human capital being the key to technological change requires improvement. Glomm and Ravikumar (1992) made an attempt to show that education plays a key role in counteracting the decreasing returns to capital.

Hill and King (1995) reviewed some empirical research that analyzed the benefits of female education and argued that education enhanced labour productivity and income growth for both men and women. They argued that educating women also had some additional effects on social well-being (positive externalities) that are not always measured by the market. Bloom and Williamson (1998) observed that growth of labour force and educational attainment have been of significant importance in their contributions towards enhancing economic growth. Barro (2001) used panel data for 100 countries in the period 1965-1995, to test how human capital influenced economic growth, using education as a proxy for human capital. His results were conclusive in favour of formal education, measured both in terms of enrolment rates and test scores. He found that an additional year of schooling raised the growth rate by 0.44% a year. Jha Biswal and Biswal (2001), using panel data techniques with data for fourteen Indian states, found that expenditure on higher, university, technical, adult and vocational education, as opposed to elementary and secondary education was more effective. Psacharopoulos and Patrinos (2002) found that returns to education were higher in low and middle income countries, which would make the case for subsidizing the education of the poor a little weaker in developing countries, without invalidating it. Human capital is the key to technological change. Dahlin (2005) found that investment in education was very beneficial for the society, both at the micro and macro level and affects the economic growth both directly and indirectly. Simoes (2006) determined the benefits of each type of education. Secondary and higher education both contributed to economic growth in their own special way. The study found that secondary education enabled individuals to successfully perform initiation activities, that is, technological progress through absorption of imported technologies. Hanushek and Woessmann (2007) carried out a study covering 50 countries and performed regression of growth in income per capita against GDP per capita in the base year (1960), years of schooling in the base year (1960), test scores and some other control variables. The results were conclusive in favor of the importance of educational quality. Hanushek and Wobmann (2010) evaluated the role of education in promoting growth. They concluded that education increases human capital inherent in the labour force which in turn increases labour productivity and as a result of this output increases to higher equilibrium level. Ramesh (2013) highlighted the challenges of higher education in India with respect to low women enrolment, employment crisis of unskilled labour and insufficient flexibility in higher education. Gaikwad and Solunke (2013) pointed out the poor infrastructural facilities, inefficient manpower and disparities as major shortcomings of Indian higher education system. Gross Enrolment Ratio (GER) is treated as an effective indicator of educational attainment in an economy. Khan et.al (2015) empirically investigated the relationship between govt. expenditure on education and economic growth in India. The study found a positive and significant impact of govt. expenditure on education on economic growth. The result showed that a 1 percent increase in education expenditure would increase GDP by about 0.70 percent in the long run. The results confirmed the existence of long run equilibrium relationship between government expenditure on education and economic growth.

Analysis and Discussion

Education is pre-requisite for the acquisition of knowledge, increasing skills, developing attitudes and values etc. and creates the human capital for the benefits of the society or for the country

as a whole. (Bordoloi, 2011). To assess the growth of education, Gross Enrolment Ratio is a key indicator of human development and is included in the commonly used Human Development Index. Education not only provides knowledge and skill but also plays an important role in developing social, cultural and moral values in an individual. It is evident from Table 1 that there is gradual increase in gross enrolment ratio (GER) from 19.4 percent to 25.8 percent from 2010-11 to 2017-18.

Table 1: Indian Gross Enrolment Ratio in Colleges

Source: AISHE Report 2017- 2018, Ministry of Human Resource Management, Govt. of India

Year	Male	Female	Total
2017-18	26.3	25.4	25.8
2016-17	26	25	25.5
2015-16	25.4	23.5	24.5
2014-15	25.3	23.2	24.3
2013-14	23.9	22.0	23.0
2012-13	22.7	20.1	21.5
2011-12	22.1	19.4	20.8
2010-11	20.8	17.9	19.4

As shown in Table 2, average enrolment in Chandigarh is highest (2052). It is significantly increasing as compared to average enrolment per college (1530) in 2012-13. Number of colleges and average enrolment per college has increased in some of the states. In some states such as Assam, Haryana, Himachal Pradesh, Jammu and Kashmir, Madhya Pradesh, Maharashtra, Odisha, Rajasthan, Telangana decline in the number of colleges was found. The average enrolment per college significantly declined in Arunachal Pradesh, Bihar, Gujarat, Haryana, Mizoram Punjab, Rajasthan, Uttarakhand, West Bengal

Table 2: Number of College (18-23 YEARS) and Average Enrolment per College

S. No.	STATES/UTs	2012-13		2015-16		2017-18	
		No. of College	Average Enrolment per College	No. of College	Average Enrolment per College	No. of College	Average Enrolment per College
1	Andaman & Nicobar	6	659	7	888	7	928
2	Andhra Pradesh	2527	473	2532	494	2624	493
3	Arunachal Pradesh	26	1041	28	1356	30	810
4	Assam	529	908	539	942	512	983
5	Bihar	675	2018	744	2142	770	1686
6	Chandigarh	27	1530	25	1871	25	2052

7	<u>Chhatisgarh</u>	602	509	706	527	741	550
8	Dadra & Nagar Haveli	5	633	8	747	8	690
9	Daman & Diu	3	367	8	382	9	336
10	Delhi	187	1311	191	1527	178	1531
11	Goa	53	582	55	560	56	640
12	Gujarat	1880	604	2019	585	2196	519
13	Haryana	1072	730	1113	646	964	611
14	Himachal Pradesh	293	484	348	520	327	553
15	Jammu and Kashmir	329	947	329	644	297	720
16	Jharkhand	267	1934	328	1716	309	1786
17	Karnataka	3205	436	3555	438	3593	416
18	Kerala	1064	555	1302	521	1306	554
19	Lakshadweep	0	0	0	0	0	0
20	Madhya Pradesh	2280	568	2260	589	2124	646
21	Maharashtra	4369	489	4569	628	4314	678
22	Manipur	79	1069	87	1070	87	1156
23	Meghalaya	62	944	63	1087	60	1087
24	Mizoram	29	678	29	653	30	612
25	Nagaland	59	433	65	416	66	484
26	<u>Odisha</u>	1096	616	1076	661	1024	685
27	<u>Puducherry</u>	84	544	84	542	76	569
28	Punjab	973	763	1050	633	1053	576
29	Rajasthan	2669	661	3050	551	2957	526
30	Sikkim	12	461	16	580	17	737
31	Tamil Nadu	2372	816	2368	895	2472	919
32	<u>Telangana</u>	2252	561	2454	574	2045	558
33	Tripura	46	1003	51	1097	52	1156
34	Uttar Pradesh	5048	1119	6491	920	6922	816
35	<u>Uttrakhand</u>	390	1029	439	684	440	621
36	West Bengal	955	1498	1082	1427	1341	1170
All India		35525	715	39071	721	39050	698

Source: AISHE Report 2012 – 2013, 2015 - 2016, 2017 - 18 Ministry of Human Resource Management, Govt. of India

The Indian higher education system is one of the largest systems in terms of enrolment and higher education institutions in the world. In 1950 there were 30 universities and 695 colleges in India. After almost six decades of planning the number increased to 634 universities and 33023 colleges and now it is 39050. Also there is a rise in gross enrolment ratio (GER) from 0.4 percent to about 15 percent over the period 1950-2011.

STATES/UTs	2012-13			2015-16			2017-18		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Andaman & Nicobar	17.8	22.7	20.2	22.3	24.7	23.5	21.2	22.4	21.8
Andhra Pradesh	31.0	23.6	27.3	34.7	26.9	30.8	34.7	27.1	30.9
Arunachal Pradesh	18.3	19.8	19.0	28.8	28.5	28.7	31.5	27.8	29.7
Assam	14.0	13.7	13.8	16.2	14.7	15.4	18.6	17.8	18.2
Bihar	14.4	11.6	13.1	15.8	12.6	14.3	14.5	11.5	13
Chandigarh	51.8	58.3	54.6	48.4	70.4	57.6	48.6	67.7	56.4
Chhatisgarh	13.2	11.7	12.4	15.7	14.6	15.1	18.5	18.3	18.4
Dadra & Nagar Haveli	5.7	7.1	6.2	7.8	11.3	9.1	7.2	12.4	9.1
Daman & Diu	3.3	6.9	4.3	4.6	9.2	5.7	4	8.9	5.2
Delhi	38.7	40.8	39.6	43.0	48.2	45.4	44.9	48	46.3
Goa	19.8	31.0	24.9	25.0	30.9	27.6	24.9	31.9	28
Gujarat	20.2	16.2	18.3	22.9	18.3	20.7	21.9	18.2	20.1
Haryana	28.8	26.6	27.8	25.9	26.4	26.1	27	30.7	28.7
Himachal Pradesh	25.3	26.3	25.8	29.6	35.5	32.5	34	42.2	37.9
Jammu and Kashmir	24.2	27.1	25.6	23.5	26.2	24.8	26.4	29	27.7
Jharkhand	12.2	12.0	12.1	16.2	14.8	15.5	18.4	17.6	18
Karnataka	26.1	24.5	25.4	26.3	25.9	26.1	27.2	28.5	27.8
Kerala	18.5	25.8	22.1	26.6	35.0	30.8	32	40.4	36.2
Lakshadweep	6.3	17.7	11.8	4.1	10.2	7.1	3.2	12	7.6
Madhya Pradesh	22.7	15.2	19.2	21.1	17.9	19.6	21.8	20.5	21.2
Maharashtra	25.0	20.6	22.9	31.9	27.6	29.9	32.6	29.5	31.1
Manipur	30.9	29.0	29.9	35.3	33.1	34.2	31.3	32.2	31.8
Meghalaya	18.6	19.7	19.2	20.4	21.1	20.8	24.2	25.1	24.7
Mizoram	22.4	22.0	22.2	25.2	23.0	24.1	24.8	21	22.9
Nagaland	16.6	12.8	14.7	14.2	15.6	14.9	17.8	17.9	17.8
Odisha	18.6	14.1	16.3	21.5	17.8	19.6	23.8	20.1	22
Puducherry	46.6	41.8	44.1	44.2	42.1	43.2	42.9	48.1	45.4
Punjab	22.5	25.6	23.9	25.8	28.5	27.0	27.6	33.6	30.3
Rajasthan	21.4	14.8	18.3	21.8	18.5	20.2	22.7	21.6	21.7
Sikkim	21.8	26.9	24.3	36.7	38.5	37.6	33.9	41.1	37.4
Tamil Nadu	45.4	38.7	42.0	46.3	42.4	44.3	49.1	48.2	48.6
Telangana	36.9	29.3	33.1	39.3	33.4	36.3	37.1	34.2	35.7
Tripura	16.6	11.7	14.1	19.9	14.0	16.9	23.7	18.8	21.2
Uttar Pradesh	18.8	20.4	19.5	24.2	24.9	24.5	25.2	26.7	25.9
Uttarakhand	32.6	34.0	33.3	33.6	32.9	33.3	36.3	36.3	36.3
West Bengal	17.1	13.2	15.1	19.1	16.2	17.7	19.9	17.6	18.7
All India	22.7	20.1	21.5	25.4	23.5	24.5	26.3	25.4	25.8

Source: AISHE Report 2012 – 2013, 2015- 2016, 2017 - 18 Ministry of Human Resource Management, Govt. of India

Table 3 shows an increase in the GER in India but decrease in GER in the state of Andaman and Nicobar, Chandigarh, Daman & Diu, Gujarat, Manipur, Mizoram, Telangana, in 2017-18 as compared to 2015-16. Human capital is an essential input for sustained economic growth. Development of human resources is essential to achieve higher growth rate. Importance of human capital thus leads to an increase in the importance of higher education. Education is a major concern these days as human capital is considered a crucial production factor. Human capital includes male and females both. Amongst the states of India, Tamil Nadu has the highest GER as regards females i.e. 48.2 percent whereas in case of Union Territories, Chandigarh has the highest GER which is 67.7 percent.

Conclusion

Education is one of the main factors which contribute to human development and in turn the economic development of the country. Education gives the person access to knowledge which opens sources of wisdom for the person. As the resources are limited, the efficiency of the resources devoted to education in promoting the cause of social and economic development, must be enhanced. A complete structural reform is needed in order to improve the quality of education in developing countries. Indian Constitution provides for free and compulsory education for all children up to the age of 14. The goal seems to be elusive even now. Different developments have taken place during all these years. Education has been made free for children for 6 to 14 years of age or up to class VIII under the Right of children to free and compulsory Education Act 2009. The data studied shows that there has been significant increase in Gross enrolment ratio specially an increase in participation of female students in all the states. Still there is a need to develop a concrete policy to help the higher educational institutions in spreading education.

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