



Higher Education in India: An Appraisal

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Higher education is widely recognized as a public good, at least a quasi public good, as it produces a huge set of economic, social, cultural, demographic and political externalities. Higher technical education is associated, in addition, with technological and dynamic externalities. Second, education is also a merit good. Third, education is an important investment both from social and individual point of view. Investment in higher education makes a vital contribution to accelerate the process and rate of economic growth, through increasing human productivity. Higher education is, therefore, regarded crucial to the development of developing countries, and to their ability to compete in the global economy. Higher technical education is one of the most important components of human capital.

The higher education can be defined according to the context. Almost all definitions agree that higher education refers to post-secondary education (or study beyond the level of post secondary education), where a degree, diploma/certificate is awarded at the end of study. Higher education builds on the level of competence, knowledge and skills normally acquired in secondary education.

Higher education in India is coordinated by several agencies. Most of the higher education falls within jurisdiction of UGC. The All India Council for Technical Education AICTE is responsible for coordination of technical and management educational institutions. Other statutory bodies are the Medical Council of India MCI, Central Council of Indian Medicine, Indian Council of Medical research, Council for scientific and industrial research.

After independence India has started almost from a scratch and made significant progress in the field of education. It is little more than half a century ever since the Government initiated a planned Development of higher education in the country particularly with the establishment of University Grants Commission in 1953. Thus early 1950's is an important reference points from which one could look back at India's progress in higher education sector. Since the early 1950's higher education sector has diversified and extended its reach and coverage quite significantly.

At the time of independence, 1947, the size of higher education system in terms of number of educational institutions, and teachers was meager but since that time there has been an exponential increase in three indicators of higher education, namely the number of educational institutions, teachers and students. The number of universities has increased from 20 in 1947 to about 436 in 2010.

Considering the importance of higher education for the growth and development of the economy, special emphasis has been given to higher education during different five year plans. During first five year plan it was considered that opportunities should be provided to the large majority of students to find gainful employment by making pre university education

purposeful. Besides this, in order to provide higher education to rural youth, proposal was on cards for establishment of rural universities in rural areas.

Second five year plan proposed the establishment of seven new universities to [promote higher education. Besides this, higher technical educations were also proposed in western, northern and southern regions of the country. A provision of rupees 48 crores were also made for technical education in the country.

During third plan total number of universities increased to 46. Third plan emphasized on diverting students to vocational and technical education. Also there was proposal for evening colleges, correspondence courses. During this plan, for the first time, issue of women education was taken up. It was highlighted that there is shortage of educated women in the country and there is need to increase the proportion of women students in colleges and universities. Emphasis was on the courses of women interest like home science, music, drawing, painting, nursing etc.

The enrolment in arts, science, commerce and law course in universities and colleges increased by .2 million during each first and second plans and by .5 million in the third plan. During fourth plan emphasis was on correspondence courses, evening colleges and part time classes in addition to normal teaching. Main emphasis was also there on consolidation and improvement of higher education through the strengthening of staff and library and laboratory facilities. For strengthening higher education, provision was made for student study homes and hostels.

Sixth plan aimed at redesigning of undergraduate courses and their restructuring to improve employment orientation. Emphasis was made on vocational courses which lead towards employment. For improving research the plan aimed at promotion at post graduate level research on practical problems of local and regional relevance as well as on fundamental research. It was also stressed that to meet the special needs of women, who may have interruption in their studies, universities would ensure that facilities are provided to enable them to continue their education at the stage they left and complete the same for final academic awards.

The main emphasis in higher education during seventh plan was on consolidation, improvement in standards and reforms in system to make higher education more relevant to national needs. The plan stated that in the area of post graduate education and research, emphasis will be placed on promotion quality programmes, inter disciplinary studies and on few emerging frontiers.

During eighth plan it was found that higher education system suffers from several weaknesses, such as proliferation of substandard institutions, failure to maintain academic calendar, outdated curriculum, disparities in the quality of education

and lack of adequate support for research. For overcoming various problems it was held that greater cooperation among the streams should be encouraged by promoting networking, sharing of facilities and development of manpower including teachers training facilities and there should be greater coherence in policy and planning.

Ninth five year plan took up various issues like deterioration in quality, poor infrastructure due to resource crunch and the problem of governance brought about by the influence of factors and forces extraneous to educational objectives. The main objective of ninth plan was the expansion of education mainly in the unserved areas and with a focus on improving the coverage of women and the disadvantaged groups.

Eleventh plan stated that as India moves progressively towards becoming a Knowledge economy it becomes increasingly important that the plan should focus on advancement of skills and these skills have to be relevant to the emerging economic environment. In 21st century as science progresses towards a better understanding of the miniscule, knowledge domains and skill domains also multiply and become more and more complex. To cope with this level of complexity 11th plan made an initiative towards establishment of 30 new central universities, 5 new IISERs, 8IITs, 7 IIMs and 20 new IITs. Further eleventh plan aims at launching a national skill development mission which will bring about a paradigm change in handling of skill development programme and initiatives.

Table 1
Growth in Colleges for General Education, Colleges for Professional Education and Universities in India.

Year	Colleges for General Education	Colleges for Professional education	Universities/deemed Univ./Institutes of National Importance
1950-51	370	208	27
1955-56	466	218	31
1960-61	967	852	45
1965-66	1536	770	64
1970-71	2285	992	82
1975-76	3667	3276*	101
1980-81	3421	3542*	110
1985-86	4067	1533*	126
1990-91	4862	866	184
1995-96	6569	1354	226
2000-01	7929	2223	254
2004-05	10377	3201	364
2009-10	14321	4978	436

*Includes institutions for post matric course.

Source: Statistics of Higher and technical education, MHRD.

There are different types of universities and colleges in the higher education system in the country. They vary in terms of their academic, administrative and financial arrangements. Universities can either be established by an Act of Parliament or by the state legislatures. Those established by the Act of Parliament are the central universities and the ones set up by the state legislatures are state universities.

Table 1 gives an idea about growth of higher educational in-

Table 3
State wise Enrolment in Various Courses at Post Graduate Level

States	Arts	Commerce	Science	Engg/Tech/ Archt/Design	Medicine	Agr & Allied	Management/ Hotel/Travel/ Tourism	Education	Law	others
Andhra Pradesh	12650(9.9)	4501(3.5)	82660(64)	8456(6.6)	467(.37)	443(.34)	16988(13.3)	961(.7)	437(.34)	76(.05)
Arunachal Pradesh	579(24.7)	50(2.1)	60(2.5)	1475(62)	0	0	79(3.3)	100(4.2)	0	0
Assam	7587(51)	1109(7.5)	4028(27.3)	51(.3)	297(2)	1631(1.1)	465(3.1)	544(3.6)	404(2.7)	90(.6)
Bihar	406399(66)	2958(4.8)	11202(18.28)	47(.07)	186(.3)	31(.05)	833(1.3)	3063(4.9)	130(.21)	2138(3.4)
Chhattisgarh	699839(85)	2629(3.1)	4617(5.6)	199(.24)	186(.22)	239(.29)	537(.65)	3215(3.9)	247(.30)	402(.48)

stitutions in India. Number of colleges which were 370 at the beginning of five year plans increased to 14321 by the year 2009-10. Similarly a sharp rise has been witnessed in professional colleges and universities.

Table 2
State Wise Total Enrolment in Higher Education

	States	Boys	Girls	Total	Gross Enrolment Ratio(Boys)	Gross Enrolment Ratio (Girls)
1	Andhra Pradesh	1098741	544610	1643351	22.1	11.6
2	Arunachal Pradesh	13084	8952	22036	15.3	11.6
3	Assam	196938	97341	294279	10.7	5.7
4	Bihar	665033	279500	944533	11.1	5.4
5	Chhattisgarh	168946	152491	321437	12.1	11.5
6	Goa	15445	15858	31303	15.3	18.3
7	Gujarat	557341	366852	924193	15.9	11.8
8	Haryana	342309	230581	572890	20.8	16.4
9	Himachal Pradesh	67572	72311	139883	16.8	19.3
10	Jammu & Kashmir	135098	106550	241648	17.5	15
11	Jharkhand	264028	119413	383441	13.6	6.8
12	Karnataka	536553	396025	932578	15.1	12
13	Kerala	186696	228600	415296	11	13.5
14	Madhya Pradesh	528753	380907	909660	12.3	10.1
15	Maharashtra	2052605	1234226	3286831	30.5	20.8
16	Manipur	23701	17935	41636	14.7	11.3
17	Meghalaya	27947	29170	56117	15.4	17.0
18	Mizoram	16673	14288	30961	25	22.4
19	Nagaland	19503	15592	35095	13.9	12.1
20	Orrisa	330465	99705	430170	14.1	4.4
21	Punjab	163729	162711	326440	9.4	11
22	Rajasthan	436032	267127	703159	10.6	7.4
23	Sikkim	10239	6996	17235	25.2	19.5
24	Tamil Nadu	716045	561114	1277159	19.4	15.8
25	Tripura	28796	20448	49244	12.3	9.1
26	Uttar Pradesh	1497622	902486	2400108	12.3	8.7
27	Uttarakhand	81266	85545	166811	13.2	15.1
28	West Bengal	749415	494435	1243850	14.1	10

Source: Statistics of higher & technical education 2008-09, MHRD, Govt. of India, New Delhi.

Table 2 gives state wise enrolment of boys and girls and their gross enrolment ratio. Gross enrolment ratio is the proportion of enrolled people from the total persons in that age group. Gross enrolment ratio of boys shows that Maharashtra has maximum enrolment ratio followed by Sikkim, Mizoram and Andhra Pradesh. Minimum ratio has been witnessed in case of Punjab where only 9 percent boys have enrolled for higher education from that group. Position of Assam, Bihar, Kerala, Rajasthan, Chhattisgarh, Madhya Pradesh, Tripura, and Uttar Pradesh is also not very encouraging. Gross enrolment ratio of girls shows a grimmer picture than their counterparts. In Assam gross enrolment ratio is only 4.4 percent. As Maharashtra is ahead in gross enrolment ratio of boys, it is Mizoram which is surpassing all other states with gross enrollment ratio of 20.8 in case of girls. Position of Jharkhand, Rajasthan, Tripura, and Uttar Pradesh is far from satisfaction. Besides this, the states whose gross enrolment ratio of girls is higher than boys are Goa, Himachal Pradesh, Kerala, Meghalaya and Punjab. In all other states gross enrollment ratio of boys is higher than girls.

Goa	417(25.2)	367(22.25)	529(32.8)	35(2.1)	128(7.7)	0	127(7.7)	37(2.2)	0	9)
Gujarat	43697(34.5)	26204	14739	11654	6104	757	9211	325	988	1266(10.6)
Haryana	5006(37.9)	976(7.4)	3781(28.67)	420(3.18)	289(2.19)	235(1.7)	1538(11.6)	203(1.5)	161(1.22)	576(4.3)
Himachal Pradesh	2872(46.95)	80(1.3)	825(13.4)	233(3.8)	137(2.24)	270(4.41)	1202(19.65)	160(2.6)	52(.8)	285(4.6)
Jammu & Kashmir	4502(27.5)	604(3.6)	5700(34.86)	60(.36)	121(.74)	192(1.17)	1878(11.4)	2521(15.42)	570(3.4)	199(1.17)
Jharkhand	6286(37.2)	5123(30.34)	2548(15)	1479()	7()	123(.72)	418(2.4)	596(3.5)	37(.21)	272(1.6)
Karnataka	3013(16.5)	668(3.6)	2163(11.8)	3398(18.6)	6732(36.88)	987(5.4)	688(3.7)	127(.69)	72(.39)	405(2.23)
Kerala	9176(36.9)	3360(13.5)	7503(30.2)	2201(8.8)	1351(5.4)	208(.8)	126(.5)	224(.9)	373(1.5)	318(1.2)
Madhya Pradesh	44564(53)	17356(20.66)	14476(17.2)	4006(4.7)	680(.8)	623(.7)	180(.2)	1560(1.8)	534(.6)	0()
Maharashtra	86393(35.21)	55817(22.7)	51036(20.8)	6986(2.8)	1820(.7)	1675(.6)	29053(11.8)	6406(2.6)	3003(1.2)	3162(1.2)
Manipur	814(42.9)	80(4.2)	622(32.7)	0	70(3.6)	74(3.6)	62(3.2)	50(2.6)	24(1.2)	101(5.3)
Meghalaya	1140(40.3)	90()	483()	110()	0	0	53(0)	286()	612()	50()
Mizoram	490(56.1)	43(4.9)	132(15.1)	32(3.6)	0	19(2.1)	20(2.2)	40(4.5)	0	97(11.12)
Nagaland	519(69.57)	36(4.8)	135(18)	0	0	56(7.5)	0	0	0	0
Orissa	10027(30.6)	2269(6.9)	3976(12.1)	1819(5.5)	797(2.4)	161(4)	6200(18.9)	112(.3)	77(.2)	7230(22.13)
Punjab	14120(34.17)	1175(2.8)	10284(24.88)	7912(19.14)	2471(5.9)	556(1.3)	3320(8.0)	879(2.1)	223(.5)	380(.9)
Rajasthan	26393(43)	4015(6.5)	15984(26.0)	602(.9)	1926(3.1)	536(.8)	10412(16.9)	599(.9)	405(.6)	397(.6)
Sikkim	0	0	169(32.8)	13(2.5)	86	0	122(23.7)	16(3.1)	108(21.0)	0
Tamil Nadu	26749(17.16)	18524(11.8)	62344(40.4)	27115(17.4)	2484	169(.1)	15810(10.1)	620(.3)	350(.2)	1640()
Tripura	946(34)	88(3.1)	380(13.7)	41(1.4)	397(64)	6(.2)	59(2.1)	20(.7)	316(11.4)	618(22.0)
Uttar Pradesh	182881(60.40)	27109(8.9)	57651(19.0)	3018(.9)	2027(23.5)	3036(1.0)	16074(5.0)	976(.3)	1365(.4)	8597(2.8)
Uttarakhand	10304(51.6)	293(1.4)	3548(17.7)	953(4.7)	49(38.8)	85(.4)	1768(8.8)	116(.5)	68(.3)	126(.6)
West Bengal	36550(53.64)	267(.3)	14971(21.7)	5752(8.3)	728(64)	630(.9)	4996(7.2)	670(.9)	800(1.6)	1137

Source: Statistics of higher & technical education 2008-09, MHRD, Govt. of India, New Delhi.

Table 3 gives a view regarding course wise enrolment at post graduate level. In India, various courses available at post graduate level include Arts, commerce, science, engineering, medicine, agriculture and allied management, education, law and others. Course wise enrolment in postgraduate courses show that in a number of states, more than half of the total enrolled students at postgraduate level opt for arts course. In Chhattisgarh their percentage is as high as 85 percent followed by Nagaland (69.57%), Bihar (66%), Uttar Pradesh (60.4%), Mizoram (56.1%), Madhya Pradesh (53%), West Bengal (53.64%), Uttarakhand (51.6%) and Assam (51%). A quite few percentage of students have enrolled for Commerce stream except for Goa and Gujarat where 22.25 percent and 20.7 percent of the students have enrolled for this stream. A good number of students have also enrolled for science stream across the states and in Andhra Pradesh this percentage is 64 percent. Students in various states have not enrolled in large number for various professional courses like engineering, medicine, agriculture, management and law. In some states like Bihar, Chhattisgarh and Nagaland enrolment of students in these courses are even less than ten percent of total enrolment.

An analysis has also been made to study the gender parity index in higher education across various states. Gender parity index in higher education describes as the proportion of male and female in enrolment. Index value of more than 1 shows enrolment of more female than male counterparts and index value of less than 1 show that enrolled female is less than the males. Table 4 gives an idea regarding gender parity index in various states. For analysis of gender parity index among various states, the total states have been divided into three categories. Under category 1 those states have been included whose gender parity index is more than 1, category II covers the states with gender parity between 0.75 to 1 and category III covers those states who have gender parity index less than 0.75.

Table 4(a)

Gender parity Index (States with more than 1)

Sr. No.	States	Index
1	Goa	1.20
2	Himachal Pradesh	1.15
3	Kerala	1.23

4	Meghalaya	1.10
5	Punjab	1.17
6	Uttarakhand	1.14

Source: Statistics of higher & technical education 2008-09, MHRD, Govt. of India, New Delhi.

Table 4(a) shows that among all the states in India, there are only six states whose gender parity index is more than 1. Here Kerala tops all the states with the index of 1.23. In this order Goa stands at number two with an index of 1.20, followed by Punjab 1.17, Himachal Pradesh 1.15, Uttarakhand 1.14 and Meghalaya 1.10.

Table 4(b)

Gender parity Index (States Between .75 to 1)

Sr. No.	States	Index
1	Arunachal Pradesh	0.76
2	Chhattisgarh	0.95
3	Haryana	0.79
4	Jammu & Kashmir	0.86
5	Karnataka	0.79
6	Madhya Pradesh	0.82
7	Manipur	0.77
8	Mizoram	0.90
9	Nagaland	0.87
10	Sikkim	0.77
11	Tamil Nadu	0.81

Source: Statistics of higher & technical education 2008-09, MHRD, Govt. of India, New Delhi.

Table 4(b) shows states with category II, under which 11 states fall. Here only one state i.e. Chhattisgarh has index near to 1, whereas Mizoram has the index of 0.90, followed by Jammu and Kashmir 0.82, Tamil Nadu 0.81. States with parity index of near 0.75 are Arunachal Pradesh 0.76, Manipur 0.77, Haryana 0.79, Karnataka 0.79 and Manipur 0.77.

Table 4(c)

Gender parity Index (States Between 0.50 to 0.75)

Sr. No.	State	Index
1	Andhra Pradesh	0.52
2	Assam	0.53
3	Bihar	0.49
4	Gujarat	0.74

5	Jharkhand	0.50
6	Maharashtra	0.68
7	Orissa	0.31

Source: Statistics of higher & technical education 2008-09, MHRD, Govt. of India, New Delhi.

Table 4(c) highlights those states whose gender parity index is less than 0.75. A good number of states fall in this category with 11 in number. Orissa is that such state whose index is 0.31 which is least among all states in India. This show only 31 female have enrolment against 100 male enrolments. Plight of Bihar state is also in same state with gender parity index of 0.49. Jharkhand has parity index of 0.50. Andhra Pradesh 0.52 and Assam 0.53 have a gender parity index a little bit higher then 0.50. States whose gender parity index is near to 0.75 are Tripura (0.74), Gujarat (0.74), Uttar Pradesh (71), West Bengal (0.71) and Maharashtra (0.68).

Conclusion:

Higher education is regarded as crucial element for growth and development of an economy. In case of India, it started from scratch after independence and made a special emphasis on higher education in its various five year plans. Despite its continuous efforts, a high amount of disparity is very much visible across states for enrolment in higher education. Similarly course wise variation in enrolment in higher education is also a cause of concern. Besides this, there are large numbers of states where female persons enrolled for higher education are much less then the male persons.

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