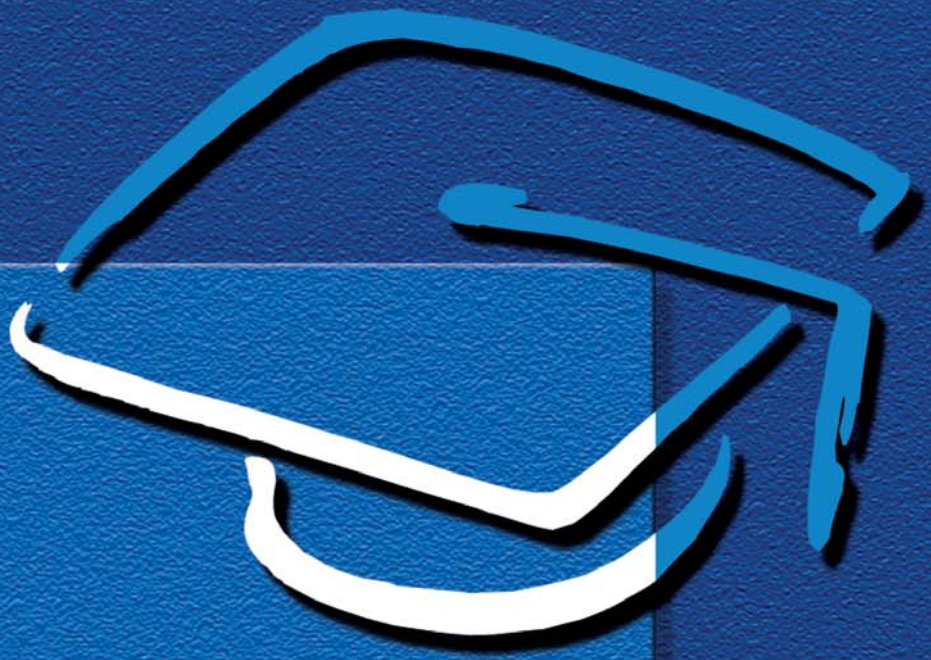
Indian Council for Research on International Economic Relations

Confederation of Indian Industry



Towards Excellence

Higher Education in India

Based on Indian Council for Research on International Economic Relations (ICRIER) Working Paper No.179, 'Higher Education on India: The Need for a Change' by Pawan Agarwal, May 2006

CONTENTS

Abstract

India has the largest number of higher education institutions in the world, with 348 universities and 17,625 colleges. At 10.5 million, the number of students enrolled is the third largest globally. However, the Gross Enrolment Ratio is low as compared to other countries, including developing countries. Critical gaps exist in the capacity and management systems of the higher education structure.

India's large and young population requires access to affordable and credible higher education in order to raise equity and promote inclusive growth. Its emerging role in the global economy, as well as its declining age dependency ratio in an environment of dwindling workforce in developed countries, afford it a key role in international industry and services sectors. India also has the capacity to transform into a global education services provider.

These objectives would require a huge increase in the expenditure on higher education, both by the government and the private sector. A climate must be built for attracting investment in education from private domestic and overseas sources. Regulatory authorities need to be set in place. Additionally, mechanisms for quality of service provision, accreditation, curriculum revision, and others need to established.

The Confederation of Indian Industry (CII) and the Indian Council for Research in International Economic Relations (ICRIER) have collaborated on preparing a paper outlining recommendations to revitalize the higher education sector in India with greater participation of the private sector in a more liberal and encouraging investment climate. The paper is based on an earlier Working Paper by Pawan Agarwal entitled 'Higher Education in India: The Need for a Change' of May 2006.

Key recommendations of the paper are:

1) Private sector entry must be facilitated.
2) A uniform ratings and accreditation system is needed.
3) Institutions should have autonomy in administration and curriculum design
4) Foreign Direct Investment in higher education must be liberalized.
5) The country must become a global education service provider.
6) Fee structure must be rationalized on the basis of user charges.
7) A vibrant credit market for financing higher education must be developed.
8) World class institutes must be developed through greater public investment.
9) Admissions should be through national level entrance exams.
10) Faculty conditions must be upgraded.

Introduction

India stands at a critical juncture in history, a period when population dynamics have the potential to catapult it onto a trajectory of high growth and inclusive development. In the next 15 years, India will be adding 150 million people to its workforce (age-group 20-59). This will set consumption, savings and investment patterns on a new trend line, affording millions of people the chance for higher incomes, better standards of living and increased quality of life. In this environment, inclusive growth, equity, and human development are major challenges facing India today.

Translating potential into actuality will require massive concerted efforts at expanding the opportunities for self-realisation. Higher education is a crucial input for access to better opportunities in life. This paper seeks to explore the dimensions of the current system of higher education in India, identify the singular opportunities arising from it for the country, and recommend strategies to restructure the existing system.

India's higher education system suffers from a yawning gap in funds, as well as from archaic regulatory mechanisms, poor quality, and low efficiency. Liberalisation of the sector to attract private domestic and overseas investments on a large scale is the key to access, affordability, and equity.

Recommendations

One of the biggest problems of social equity in India arises from the low GER for higher education, which is amongst the lowest in the world. This is perhaps due to the mistaken notion that universal literacy is adequate for the masses and higher education is only meant for the elite. However, the requirements of the modern knowledge society all over the world clearly point to the need for a much higher GER - to around 40-50% - in higher education from the current level of 11%. If this is not adequately considered, the large number of youth entering the working age group will not be able to convert themselves into Human Capital, enriching themselves and the country.

To address this issue in mission-mode, India needs to undertake major efforts with the private sector as a critical partner. Thus the time is ripe to liberalise the education sector for attracting domestic as well as overseas investment. As a corollary, education in government and private institutions should be liberalized from the plethora of controls and guidelines, thus giving them full academic and operational autonomy.

A tectonic shift in the higher education system in India has become extremely urgent. Reform, liberalisation, and de-regulation of the system are vital to ensure access, improve the quality of life, and raise incomes. Liberalisation must allow flexibility and autonomy to institutes. As the economic reforms of 1991 opened up Indian industry, enabling it to become globally competitive, 2006 can open up Indian Human Capital, or education system, thus allowing all Indians to win globally.

A strong and coherent framework for regulation must replace the current confusion and plethora of constrictive rules. There is need for consolidation of universities and colleges, allowing competitive practices to prevail in market-oriented education, and protecting non-market education streams. Regulation must ensure also that new monopolies and cartelization mechanisms are not created.

Recommendations are outlined below:

1. Public sector resources are inadequate by far and are not likely to meet the funding gap estimated at Rs 35305 crores in view of the pressure on fiscal deficit. The environment for private sector investment must facilitate entry. However, proposed private sector investment must be of a certain scale to avoid fragmentation and attract genuine long-term commitments. We propose establishment of a platform of private higher education providers to suggest changes in the system. Competition would play a major role in keeping fees low and maintaining standards.
2. A country-wide uniform ratings system for accreditation of private and public institutes must be put in place with established and agreed criteria, providing for multiple agencies to enter with accreditation within guidelines. This will help rectify the tardiness of the present system and other attendant malpractices. It should be mandatory for new private investment to meet minimum standards in infrastructure, technology usage, and faculty. There should be flexibility in course structure and autonomy in administrative matters. Fee range structures should be indicative, and based on ratings. Such a ratings system could be developed through stakeholder consultations to ensure greater linkages with existing and prospective employment opportunities. This would make the system transparent, help prospective admission-seekers, and keep standards high.
3. Foreign education providers must be allowed to set up joint ventures in India as is being done in China. The current draft bill under consideration for such providers is far too restrictive and is aimed at discouraging any cooperation. Entry of foreign education providers into India would reduce rates of Indian students going abroad for higher education at exorbitant fees.
4. India must be able to utilise its education system to attract overseas students. This is possible in view of the tremendous interest being generated globally for the future prospects of India. In coming days, studies on India and in Indian languages and cultures could potentially become popular among foreign students. A high degree of research capability and guidance from faculty will need to be put in place to encourage this trend. Further, students from developing countries would find it cheaper to study in India. Indian higher education institutes must be branded and expanded to attract foreign students. Educational diplomacy by Indian missions overseas and educational fairs by organisations such as CII would focus activity in this area.
5. Institutions must be allowed to charge user fees from students depending on their ratings. Keeping fees low and highly regulated actually prevents expansion of higher education, constrains continued investment into infrastructure and modernisation and reduces access. Rational charges and profits act as incentives for private investments. Government institutions would also benefit from more funds to upgrade facilities from the current state of dismal crumbling buildings and dysfunctional physical environment (apart from institutes of excellence). It would also be possible to raise salaries to attract committed quality faculty. This will require liberalization of procedures in government-funded colleges and universities.
6. A vibrant credit market must be developed for financing higher education. Currently, there is high anxiety regarding allocation of loans for education due to fear of non-repayment, especially as taking collateral and guarantees is not permitted. These deficiencies must be reconsidered as they allow students to default with impunity and become untraceable at the time of loan repayment. Banks must develop innovative credit instruments, form collaborations with employers,

and institute tracking mechanisms until loans are repaid. Scholarships and student grants may be facilitated by the government for poorer students or weaker sections of society. Research assistantships or fellowship programs must be instituted.

7. Universities must be allowed to raise funds from consultancy and research to augment fee income. Existing government institutions must aggressively look for funds to improve their infrastructure. Anecdotal evidence suggests that in smaller towns, colleges have no taps for water, poor hostel facilities, broken windows, inadequate furniture, no functioning toilets, etc.
8. A few centres of excellence must be identified and funded by state and central governments through planned expenditure in the same manner as IITs and IIMs to develop world-class institutes. Private sector should be encouraged to contribute chairs or donations to these. At the same time, mere funds cannot ensure excellence. Therefore special efforts to provide for new cultural practices will be useful.
9. Admissions in technical and professional institutes, whether private or government, could be facilitated through common entrance exams applicable across the country. The results of these exams could supplement admission procedures. Each player would have the freedom to set standards for admissions.
10. Faculty needs special consideration. Apart from salary, working conditions, academic freedom, research and study also should be modified or incentivised. Flexibility for movement of faculty should be available, including mobility to private institutions and vice versa. Similarly, students should also be able to change colleges.
11. There is a need to engage constructively with students, build confidence, and get their inputs on different aspects of higher education on a neutral CII platform.

I. Structure of higher education system in India

India has the largest number of higher education institutions in the world, standing at 17,973 institutions (348 universities and 17,625 colleges). The number of students enrolled, 10.5 million, is the third largest globally after China and USA.

As noted by Pawan Agarwal, higher education institutions in India are of different types, depending on their academic, administrative and financial systems. Universities may be established by the central or state governments. The central government may also recognize institutions as 'deemed to be universities' or set up 'institutes of national importance'. The institutions may be funded publicly, be aided by the government, or be funded privately. Foreign education providers number 131 through twinning arrangements or programmed-based collaborations, enrolling 8000 students.

In addition, it is estimated that well over 100,000 Indian students are enrolled in higher education institutions in countries other than India such as USA, UK, Australia, Singapore, and New Zealand. Many students also venture out to countries where English is not the local language, making use of facilities provided specifically for overseas students. China, Russia, and the Ukraine are some such countries. At the same time, the facilities provided for foreign students in India are poor, attracting less than 10,000 students. There is little effort to present India's knowledge and university systems abroad, and apart from institutions such as Indian Institutes of Technology and Indian Institutes of Management, few institutes have overseas students.

Typology and Growth Trends of Higher Education Institutions

Type	Ownership	Financing	Number of institutions*	Number of students*	Growth trends
Universities under the Government	Public	Public	240	1,000,000	Not growing
Private Universities	Private	Private	7	10,000	Emerging on the scene
Deemed Universities (Aided)	Private or Public	Public	38	40,000	Growing slowly
Deemed Universities (Unaided)	Private	Private	63	60,000	Growing rapidly
Colleges under the Government	Public	Public	4,225	2,750,000	Not growing
Private Colleges (Aided)	Private	Public	5,750	3,450,000	Not growing
Private Colleges (Unaided)	Private	Private	7,650	3,150,000	Growing rapidly
Foreign Institutions	Private	Private	150	8,000	Emerging on the scene
Total			**18,123**	**10,468,000**	

[1]***Source:*** *Author [*these are approximate figures based on analysis of primary data for the year 2005/06]*

As may be observed, the number of private higher education providers has increased to 7 universities, 63 unaided deemed universities, 5750 aided colleges and 7650 unaided colleges. The private institutions are recording the fastest growth both in terms of numbers and in terms of students enrolled. Globally, the proportion of private higher education institutes differs across countries, with over three-quarters of students in Japan and Philippines, but less than one-tenth in Germany and China. However, in many developing countries, private higher education is playing an increasing role, making access to higher education easier.

Gross Enrolment Ratio (GER) is the statistic used to measure access to education in countries. It is the ratio of students enrolled at each level of education, in this case, higher education, as a proportion of the population of relevant age group. In India, the proportion of students enrolled in higher education to total population of relevant age-group is 11%. This is the lowest in a list of select countries including the top ten economies, as is revealed by the following table in Pawan Agarwal's paper.

India lags not only in the GER but also in provision of private higher education institutions as compared to other countries. Private higher education institutions as a proportion of all higher education institutions in different countries varies from 29.5% in Germany to 88.9% in Brazil. Japan has 77% enrolments in private institutions. In Malaysia, 92% of educational institutions were private, enrolling 39% of all students, and even China has close to 9% such enrolments. Indonesia with a GNP of $ 690 had 15% GER or over 3 million students, while Russia had a GER of 70% with more than 8 million students.

[1]Unless otherwise mentioned all data is from Indian Council for Research on International Economic Relations (ICRIER) Working Paper No. 179, 'Higher Education in India: The Need for a Change' by Pawan Agarwal, May 2006

Growth in Higher Education Enrolment, Enrolment Ratio GNP per capita

(Select countries including ten top economies)

Country	Enrolment (in million)		Increase %	GER 2001 %	GNP per Capita (In US $)
	1990/91	2001/02			
USA	13.71	15.93	16.2	81	34,280
China	3.82	12.14	217.7	13	890
Japan	2.90	3.97	36.8	49	35,610
India	4.95	10.58	113.6	11	460
UK	1.26	2.24	78.1	64	25.120
France	1.70	2.03	19.4	54	22,730
Italy	1.45	1.85	27.7	53	19,390
Brazil	1.54	3.13	103.0	18	3,070
Russia	5.10	8.02	57.3	70	1,750
Canada	0.84	1.19	41.7	58	21,980
Indonesia	1.59	3.18	99.7	15	690
Philippines	1.71	2.47	44.3	31	1,030
Australia	0.49	0.87	79.1	65	19,900
Malaysia	0.12	0.56	358.9	27	3,330

Source: *For 1990/91 (or nearest year) – UNESCO Statistical Yearbook (1998); for 2001/02 (or nearest year) – UNESCO Institute of Statistics (2005); and for GNP per capital – UNESCO EFA Global monitoring report (2004)*

Provision of Private Higher Education

(Select countries / various years)

	All higher education institutions				Universities			
	No. of institutions		Enrolment		No. of Universities		Enrolment	
	Private % of Total	Year	Private % of Total	Year	Private % of Total	Year	Private % of Year	Year
Argentina	42.9	2000	25.7	2001	55.0	2005	14.4	2003
Brazil	88.9	2003	70.8	2003	51.5	2003	56.7	2003
Chile	93.3	2000	71.0	2000	75.0	2000	58.9	2000
China	39.1	2002	8.9	2002	0.6	2002	–	–
Germany	29.5	2003	3.7	2003	24.8	2003	1.0	2003
Hungary	54.4	2004	14.2	2004	–	–	–	–
Japan	86.3	2000	77.1	2000	73.7	2000	73.3	2000
Kenya	34.2	2000	9.1	2000	70.0	2000	19.3	2000
Malaysia	92.2	2000	39.1	2000	41.7	2000	7.5	2000
Mexico	69.1	2002	33.1	2003	72.7	2002	41.8	2003
Moldova	44.5	2003	20.0	2003	–	–	–	–
Mongolia	64.2	2003	26.0	2003	27.2	2003	8.3	2003
Philippines	81.0	1999	76.0	1999	–	–	–	–
Poland	66.8	2003	29.4	2003	6.3	2000	3.5	2000
Portugal	64.2	2001	28.5	2001	37.0	2001	19.4	2001
Romania	56.0	2003	23.3	2003	–	–	–	–
Russia	37.0	2003	12.1	2003	–	–	–	–
Thailand	68.0	2001	19.0	2001	48.9	2001	16.8	2001
Uruguay	42.9	2000	10.0	2000	88.9	2000	12.0	2002
USA	59.4	2000	23.2	2000	74.6	2000	35.3	2000
Venezuela	56.6	2004	41.3	2005	54.2	2004	21.2	2005

Source: *PROPHE [www.albany.edu/dept/eaps/prophe/data/international.html] - as in June 2005*

There are large variations in number, quality, and enrolment ratios at the federal level in India as well. In Chandigarh, the GER in 2002-03 was over 28%, while in Nagaland, it was 4.33%. The average GER at 11-12% compares poorly to developed countries such as UK (64%) and USA (83%), the positive co-relation between per capita income and GER being significant. As higher education is crucial for effective participation in the Knowledge Economy/Society, and to benefit from it, in the current environment, India's low GER has adverse implications for social equity.

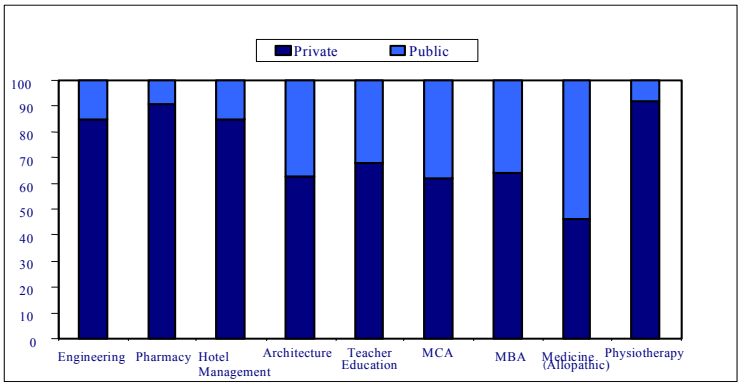
II. Expenditure on higher education in India

Currently public sector, or government, investment in education is less than 3% of GDP, including a share of higher education at 0.4 per cent, or around 12% of the aggregate education budget. The central government spends slightly more than 25% of total public expenditure and the state governments spend the remaining three-quarters. About 50 per cent of the central government's technical education budget went to the Indian Institutes of Technology and Indian Institutes of Management in 2001-02. Real public expenditure per student has declined drastically since 1990-91 from Rs. 7676 to Rs. 5500 in 2002-03, coming down by nearly 28 percentage points. This would be even lower if the 50% expenditure on national institutes of excellence is left out. As a result, quality of education and educational infrastructure has suffered.

The National Policy on Education 1986 has set a goal of 6 per cent of GDP as total expenditure on education. This would include 1.5 per cent for higher and technical education.

As public funding for higher education declined in the 1990s, private sector institutions burgeoned in India. A 1992 judgment by the Supreme Court banned 'capitation fees', and a later judgement allowed self-financing institutions. The household sector, or parents, contributes Rs 18,675 crores of the estimated aggregate spending of Rs 37,675 crores (0.4% of GDP) annually. Other sources of funding such as education loans, or philanthropy, are limited. Educational loans by public sector banks are given at concessional rates of interest and terms, and aggregated 0.6 million with an outstanding of Rs 9420 crores as at Dec 2005. A significant part of this expenditure would be for students going overseas for higher studies. Agarwal estimates the gap in higher education funding at approximately Rs 35305 crores.

Relative Share of Private and Public Institutions



According to Pawan Agarwal, the main funding agency of the central government, the University Grants Commission, spends Rs 600 crores for about 5500 institutions, an insignificant amount. A large number of institutions do not receive any public funds and full funding is available only to certain central universities and institutes of excellence. In those institutions which receive full funds, 85% of the amount goes towards salaries and hardly any on capital investment or academic activities.

The Draft Approach Paper for the 11th Plan suggests major effort to expand capacity while improving quality. It has proposed a complete revamp of systems in many respects to tackle the problems of increasing enrolment, varying standards, outdated syllabi, inadequate facilities and attracting top class faculty, along with upgradation of 20 universities during the 11th plan.

Expanding expenditure on higher education is a major challenge. The magnitude of the required expenditure will necessitate involvement of both public and private funds. Innovative mechanisms in user-based charges combined with systems of grants, aid, loans, other sources of funds, and encouraging private investment will need to be developed.

At the same time, expenditure is not the sole cause of concern in the education sector. There is also a need for setting in place effective mechanisms to elevate the efficiency of the education delivery systems. Higher productivity and efficiency would help raise GER with lower unit investment.

III. Policy environment

A multiplicity of institutions and rules govern the higher education system in India. Universities may be created through legislation by central and state governments. The University Grants Commission is the apex regulatory authority. States bear concurrent responsibility for providing and managing higher education, but there are thirteen professional councils at the national level, five at the state level, state councils, and affiliating universities that regulate the system. The central government has taken the lead role in regulation through the Ministry of Human Resource Development, other ministries such as health for medical education, and different regulatory bodies.

The UGC is a recommendatory body and has jurisdiction over university education over all disciplines for maintaining standards. The professional councils also fund and maintain standards as well as grant recognition to institutions. There is thus overlap and confusion in different sectors of education in the country. At the same time, the state governments regulate the sector through the concerned department or directorate, while affiliated colleges are regulated by universities. Thus the regulatory mechanism for Indian higher education system is highly fragmented, dispersed and dysfunctional.

17625 colleges are affiliated to 131 universities and follow the syllabi and examination systems of the universities. There are also 214 autonomous colleges with their own systems. Many colleges have temporary affiliation due to lack of standard infrastructure, but continue to award degrees from the university of affiliation, even though they may not be recognised by the UGC. There is a lack of standardization across states, arising from the varied authority exercised. A system of national benchmarking is missing, making it difficult for end-users such as the corporate sector to grade graduates. Students from colleges in smaller towns often suffer from a handicap in respect of employability due to the uncertain nature of teaching.

Regarding fees, there is high variation in the structures of different universities and colleges across the country. In many public colleges, monthly tuition fees, as distinct from other charges, may be less than the price of a bottle of soft drink. In other public colleges, full fees covering the entire cost of education provision may be charged. Additionally, the entry of private players in higher education has led to commercialization of the sector. This has impacted access and equity of higher education. The Indian judicial system has taken up various cases and brought out judgements on fees which are not based on systemic policy and are often confusing. The inelasticity of demand for higher education, especially employment-oriented courses, has led to regulation of fees. However, private institutions continue to charge high fees or other compulsory fees.

In admissions, there are no compulsory centralised entrance exams for professional courses. School-leaving exams conducted by the Central and state boards of secondary education are meant to measure completion of the school level of education. However, they are misused as

benchmarks for admission to higher education, thus placing a huge burden of competition on school students, and allowing institutions to resort to unethical practices in admissions without regulation.

UGC also sets in place standards for academic work of universities, regulating working hours, nature of evaluation, term papers, work-load of teachers, infrastructure, etc. Micro-management to attempt uniformity over several hundred universities and thousands of colleges, as well as establishing standards by professional councils leads to a high degree of confusion. The regulations are not transparent, and are time-consuming and complex. They are often changed, causing instability in operations of colleges and universities. As many of these standards are not enforced strictly, and are often too restrictive, non-compliance and rent-seeking become common, leading to loss of credibility for both public and private institutions. Institutions, including government-funded institutions, must be able to have creative flexibility if they are to perform according to expectations.

Thus existing regulations seek to control and micro-manage systems of admissions, fees, standards, salaries of staff, infrastructure and autonomy, and limit choice and supply of higher education. Regulations are also formulated and enforced with a lackadaisical approach, leading in effect to manipulation by some private players, inertia by government funded institutions, and suffocation and frustration in higher education. Lack of innovation and flexibility hampers adjustment to changing environments, an aspect that has gained in force since liberalisation in 1991.

Regulatory and Statutory Bodies for Higher Education in India

S. No.	Name, Statute & Year, Ministry & Website	Statutory Mandate	Primary Function	Other Functions	Overlaps with Functions of*
1.	University Grants Commission (UGC) The UGC Act, 1956 Ministry of HRD www.ugc.ac.in	Co-ordination and determination of standards in higher education and research in the country	Release of grants to universities and colleges	Recognition of universities and college (including eligibility for central grants): specification of degrees; Minimum standards of instruction; common pay scales; common facilities, and institutional accreditation through NAAC	Other professional councils and DEC
2.	Distance Education Council (DEC) under Section 25 of the IGNOU Act, 1985 Ministry of HRD www.ignou.ac.in/dec/	Promotion, coordination and determination of standards of the open universities and distance education systems in the country	Release of grants to open universities and correspondence course institutes	Initiated assessment and accreditation activities	Other professional councils and the UGC
3.	All India Council for Technical Education (AICTE) AICTE Act, 1987 Ministry of HRD www.aicte.ernet.in	Planning and coordinated development of technical education in the country	Approval of degree & diploma programs in engineering, architecture. pharmacy and hotel management	Funding for institutional and faculty development; Pay scales and qualifications of teachers; accreditation through NBA	UGC, DEC, Pharmacy Council of India, Council of Architecture and the State Councils for Technical Education
4.	Medical Council of India (MCI) MCI Act, 1953 Ministry of Health www.mciindia.org	To establish standards in medical education and to define medical qualifications in India and abroad	Registration of medical practioners and recognition of medical institutions	Eligibility criteria for admissions; Exam for recognition of foreign qualifications for practice in India	State Medical Councils and the State Governments; UGC and DEC to a limited extent
5.	The Council of Architecture (COA) The Architects Act, 1972 Ministry of Urban Development www.coa-india.org	Regulate profession and practice of architects and town planners in India	Registration of architects, maintaining standards of education, recognized qualifications and standards of practice	Maintaining the register of architects and make recommendations with regard to recognition and de-recognition of a qualification	AICTE
6.	Pharmacy Council of India (PCI) The Pharmacy Act 1948 Ministry of Health www.pci.nic.in	Regulate profession and practice of pharmacy in India	Registration of pharmacists and approval of pharmacy institutions	Prescribe curriculum and requirement of practical training	AICTE and State Pharmacy Councils

7.	Indian Nursing Council INC Act, 1947 Ministry of Health www.mohfw.nic.in/inc/	Uniform standards of training for Nurses	Accepts qualifications awarded by universities withing and outside India	Collection and compilation of data relating to nurses, mid wives, health visitors	22 State Nursing Councils with different Acts having meaning and registering powers
8.	Dental Council of India (DCI) The Dentists Act, 1948 Ministry of Health www.dciindia.org	To regulate dental education and profession of dentistry in the country	Recommend to the central government to accord permission to start a dental college, starts courses and on increase of seats.	Lay down course curriculum for various courses in dentistry	Ministry of Health
9.	Central Council of Homeo-pathy (CCH) HCC Act, 1973 Ministry of Health www.cchindia.com	Prescribe and recognize qualifications in homeo-pathy	Maintain Central Register of Homoeopaths	Prescribe curriculum and courses; code of ethics, requirement of recognition	State Council
10.	Central Council of Indian Medicine (CCIM) IMCC Act, 1970 Ministry of Health www.ccimindia.org	Proscribe and recognise qualifications in homeopathy	Prescribes minimum standards of education in Indian Systems of Medicine Viz. Ayurved, Siddha, Unani Tibb. and maintains a Central Register for the same	Prescribe curriculum and courses; standards of professional conduct, etiquette and code of ethics to be observed by the practitioners	State Councils
11.	Rehabilitation Council of India (RCI) RCI Act, 1992 Ministry of Social Justice www.rehabcouncil.nic.in	Standardize and regulate the training of personnel and professionals in the field of rehabilitation and special education	Recognition of institutions for physiotherapy and related fields	Registration of professionals, assessment and accreditations; promotion of barrier free environment	–
12.	National Council for Teacher Education (NCTE) NCTE Act, 1993 www.ncte-in.org	Planned and coordinated development of the teacher education in the country	Recognition of teacher education institutions	Lay down norms and standards	DEC
13.	Indian Council for Agricultural Research (ICAR) Not a statutory body Ministry of Agriculture www.icar.org.in	Coordinate agricultural research and education	Coordinate and fund agricultural education and research in 30 state and 1 central and several deemed universities for agriculture	Accredit agriculture universities; hold joint admission tests	UGC
14.	Bar Council of India (BCI) The Advocates Act, 1962 Ministry of Law http://barcouncilofindia.nic.in	Lay down standards of professional conduct and standards of legal education	Lay down standards of professional conduct and standards of legal education	Listing of members of bar; listing of foreign universities whose qualifications are approved in India	State Bar Council

Professional Associations

	Institute of Chartered Accountants of India (ICAI) ICAI Act, 1949 Ministry of Company Affairs www.icai.org	Regulate profession of chartered accountants in India	Conduct professional courses, coordinate practical training and hold examination	Final Exam is equivalent to masters program if a bachelor's degree is obtained before	-
	Institute of Company Secretaries of India (ICSI) ICSI Act, 1980 Ministry of Company Affairs www.icsi.org	Regulate profession of company secretaries in India	Conduct professional courses, coordinate practical training and hold examination	Final Exam is equivalent to masters program if a bachelor's degree is obtained before	-
	Institute of Costs and Works Accountants of India (ICWAI) ICWAI Act, 1994 Ministry of Company Affairs www.icwai.org	Regulate and develop profession of cost accountants in India	Conduct professional courses, coordinate practical training and hold examination	Final Exam is equivalent to masters program if a bachelor's degree is obtained before	-

Other professional associations are – Institution of Engineers, India (IEI), Institute of Electronics and Communication Engineers (IETE), Institution of Mechanical Engineers (IME) etc.

	Association of Indian Universities (AIU) Set up in 1925 as a membership-based organisation - a Registered Society www.aiuweb.org	Promote inter-university activities and cooperation in the field of education, culture, sports and allied areas.	Publish University News and Handbook of Indian Universities and various other publications	Organize academic, sports and cultural events, equivalence of Degree/Certificates awarded by the accredited foreign Universities / educational Institutions.	UGC

In addition, there is a National Council of Rural Institutes (NCRI) set up in 1995 as a nodal organisation for development of rural institutions in the country. This has been a non-starter.

In most cases, there is some overlap in functions of professional councils and academic functions of the university concerned.

Source: *Compiled by the author with information from the respective website and also interaction with officials of various bodies.*

IV. Foreign participation

Foreign cooperation in the Indian higher education system is through Indian students studying overseas, overseas institutions with operations in India, foreign students in India or Indian institutions operating overseas.

India accounts for 4% of the world's overseas students and is the second largest exporter of students after China, which accounts for 10%. About 1.5-2 lakh students apply for GRE tests of USA for post-graduate studies and more for GMAT, and TOEFL, spending $100-250 for each. Students are willing to pay large amounts for tuition for these exams, applications to universities abroad, consultancy services, and finally tuition fees, travel and lodging and boarding costs.

The table below shows that USA is the most preferred destination for Indian students who want to go abroad for higher studies from India followed by UK, Australia, Canada and France. In academic year 2004/05, there were 80,466 students from India studying in the United States (up 1% from the previous year). India is the leading place of origin for students in the United States. The majority of the Indian students study at the graduate level. In 2004/05, their breakdown was as follows*:

72%	graduate students	57,976
20%	undergraduate	16,443
7.5%	other	6,047

Country Wise Number of Students Studying in Foreign Universities

Name of the Country	Number of Indian Students Studying in		
	1999-2000	2000-01	2001-02
Australia	4578	6195	9539
Belgium	113	129	137
Canada	867	M	M
France	185	239	309
Germany	1282	1412	2196
Italy	67	115	138
Japan	195	202	199
Malaysia	91	714	497
New Zealand	201	355	952
Norway	102	103	114
Philippines	83	66	80
Sweden	85	97	122
Switzerland	93	120	162
Thailand	M	56	104
United Kingdom	3962	4302	6016
United States	39084	47411	66836
Total	43046	55192	77725
Grand Total of all those 49 Countries where Indian students are studying	51414	61977	87987

N=Negligible, M=mission/not available
Source: Organisation of Economic Co-operation and Development - UNESCO Institute of Statistics

Countries like US, UK, and Australia are actively wooing international students as it is a lucrative business. Expenditures by foreign students contribute $13 billion to the US economy and $ 5 billion

*http://opendoors.iienetwork.org/?p=69691

to UK's economy. They also charge higher fees from foreign students to subsidise their own education system.

Although the proportion of Indian students going overseas to total enrolment in Indian institutions of higher education may be below 1%, a substantial amount of expenditure is involved. Scholarships cover some of the expenditure, but a significant amount would be coming from loans and household expenditure. It is estimated that spending on higher education overseas is $ 3 billion annually.

Regarding foreign education providers in India, a research study conducted by NIEPA brings out some salient features of their operation. There were 131 Indian institutions collaborating with foreign institutions. Across states, the foreign education providers were concentrated in metropolitan cities and some other cities where the prospects of vocational courses exist on a large scale. At present, only USA and UK have shown interest in collaboration with Indian partners. Out of the total sample of 131 institutions, 107 were providing vocational courses, 19 technical courses and only 5 provided general education.

The delivery of foreign programmes in India is through Branch/Offshore Campus, Franchise, Twinning, and Programme Collaboration.

Some Indian Deemed Universities have set up campuses in Middle East, Malaysia, East Africa etc. IGNOU is currently offering its programme in 22 countries extending the Indian open learning opportunities to the international community, including Indian Diaspora. University of Delhi has collaborative arrangements with 35 Universities throughout the world for students and faculty exchange, besides running cultural immersion and language programmes.

Other instances of Indian institutions venturing abroad include deemed universities like Birla Institute of Technology (BITs) Pillani, and Manipal Academy for Higher Education (MAHE), Manipal and private institutions such as NIIT India, as well as public institutions like Shreemati Nathibhai Damodar Thackersey (SNDT) college, Mysore university and Madras university. There are good prospects of popularizing Indian education abroad by enlarging the participation of Indian universities by taking pro-active policy measures.

India is very far behind in the international education market. Our foreign student enrollment has dropped in 2002-3. In contrast, that of China has swelled from around 43,000 in 1998 to 1,11,000 last year (although a significant number may be language students). Whereas most of those foreign students come from North America and Europe, students coming to India are mainly from low-income countries in South Asia, West Asia and Africa.

The number of foreign students in India shows a constant growth from 1999 to 2002. In the year 1999-2000 the number of foreign students was 6988 and in 2000-2001 and 2001-2002 it was 7783 and 8137 respectively. Majority of students coming to India belong to developing countries.

The fees charged from foreign students in Delhi University is $3500 per year more than that charged from Indian students. The difference in fees charged is more obvious when purchasing power parity of the dollar, one-fourth in the USA as compared to India, is taken into account. This indicates the low income from education export as compared to the figure in USA, UK, Australia and other countries. To encourage overseas students, a differential fee structure, with higher fees for technical and professional courses and lower fees for general education, could be considered.

V. Emerging opportunities

i. India's new role on the global stage

Developing countries with large populations, including India, are bringing an expanding consumer base and huge workforce to the world trading arena. As a vibrant democracy, India's relationships within its neighbourhood, the larger Asian environment, and across the globe assume significance for peace and prosperity. As a growing economy, its stable democratic environment, consumer propensities and workforce profile impart balance to the global growth process.

The next five years will prove crucial to India's economic experience as manufacturing and service environments restructure to meet the demands of a globalizing economy and growing workforce. India also needs to tackle intractable problems of sustainability and inclusiveness of its growth process in order to provide its citizens access to opportunities for development and prosperity.

54% of the population is below the age of 25, making India one of the youngest countries in the world. Declining age-dependency ratios in the next few decades enable India to fill gaps due to dwindling workforce in other countries, particularly developed countries. However, this will work to India's advantage only if we can leverage the benefits of an emerging knowledge society through education. Of the proportion of 54% under the age of 25, present GER in higher education at 11% is too low to convert India's large population into effective human resources.

ii. Imperatives of inclusive growth

The discrepancies between income growth of states have widened, with richer states having grown faster than poorer states. There are differences in incomes within states as well, between urban and rural areas, between genders, and in individual incomes. Education is a major component of bridging such gaps, particularly primary education.

The World Bank Development Policy Review finds high corelation between literacy rate and rank in GDP per capita. The 4 lowest ranked states in terms of GDP per capita also ranked lowest in HDI, with Bihar and Uttar Pradesh ranking lowest in literacy rates as well. Seven poor states have over 40% of India's population, including nearly 50% of India's poor. They could garner only 13% of FDI and contributed just 17% to manufacturing output and 25% to overall GDP.

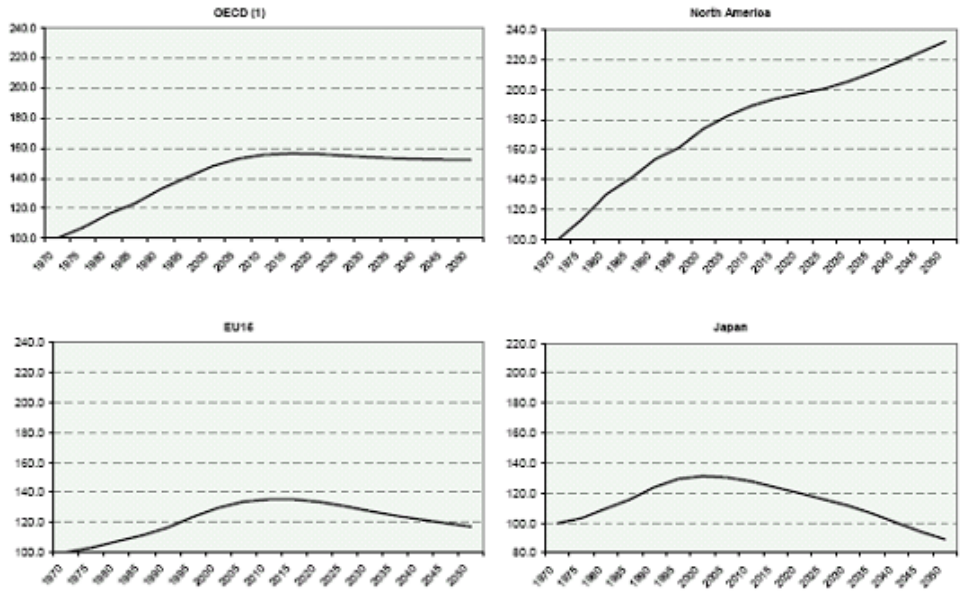
The pressures on the higher education system are bound to multiply as incomes inequalities between different sections of society are reduced, literacy rates increase, and better health and social security systems come into place. The higher education system must anticipate the coming boom in demand and gear up to face emerging challenges.

In fact, this is an area where 'cause and effect' intertwine: increased GER in higher educations would create greater opportunities for higher income for beneficiaries and greater income leads to more demands in higher education (for lifelong learning). This is a virtuous cycle which can cover all Indians centrally.

iii. The demographic dividend

OECD countries are expected to face decline in labour force as populations age, with a negative impact of 0.2-0.3% on per capita GDP growth in Japan, Germany, France and other countries (in USA, demographics is expected to continue to contribute to growth).

Figure 5.1 Impact of ageing on labour supply
(Labour supply, 1970=100)



1. Excluding Czech Republic, Hungary, Mexico, Poland, Slovak Republic.
Source: OECD Labour Force Statistics and OECD/DELSA Population Database.

At the same time, India is expected to experience declining age-dependency ratios till 2035.

The age distribution of the population of India is projected to change by 2016. The population below 15 years of age (currently 35 percent) is projected to decline to 28 percent by 2016. The population in the age group 15 - 59 years (currently 58 percent) is projected to increase to nearly 64 percent by 2016. The age group of 60 plus years is projected to increase from the current levels of 7 percent to nearly 9 percent by 2016.

Age Composition as Percentage of the Total Population

Year	Below 5 years	Between 0-15	Between >15 - 59 years	+ 60 years
1991	12.80	37.76	55.58	6.67
2001	10.70	34.33	58.70	6.97
2011	10.10	28.48	63.38	8.14
2016	9.7	27.73	63.33	8.94

Source: Population Commission

Aging countries will make up for decline in workforce through rise in productivity and redesignating retirement age. However, some activities can be expected to shift to countries with more labour force participation such as India. The trend is already visible in the outsourcing of services and manufacturing, the global IT offshoring market itself being in the order of $300 billion of which India may be able to garner $60 billion by 2010.

Sectoral industry reports point to expanding demand for skilled and professional personnel as India becomes a services outsourcing center and a hub for manufacture of goods. Some indicative figures for expected job creation are given below:

- India could achieve $165 billion in merchandise trade by 2009-10, creating an additional 21 million new jobs (Press Release, Ministry of Commerce and Industry, April 7, 2006)

- The IT and BPO sector could employ 9 million persons directly and indirectly by 2010 (NASSCOM McKinsey Report 2006)
- The National Manufacturing Competitiveness Council in its recommendations has said that raising the rate of growth of manufacturing to 12 per cent could create 1.6 to 2.9 million direct jobs annually, and another 2-3 times that number indirectly (Presentation made by NMCC to National Advisory Council, February 18, 2006)
- In his Budget speech in February 2005, the Finance Minister stated that 10 million additional jobs could be generated through assured irrigation, 2.5 lakh jobs are being created annually in the food processing sector, the textile sector could create employment for 12 million people in the next five years, while lakhs more jobs could emerge from the construction industry.

The above estimates cut across sectors and overlap; however, they do point to a need for ensuring a large and growing qualified workforce. While not all of these employment opportunities will require higher education skills, there will be a much larger need for persons with higher education qualifications to meet these demands. Some demand would also arise from retraining of existing workforce and 'uptraining' to enable people to move to higher knowledge base and consequently, higher standards of living.

iv. New Technology and Infrastructure

India's recent prowess in the IT and IT enabled services sector indicates the potential of higher and professional education coupled with demographic advantages. India already accounts for 65% of global offshore IT industry and 46% of global BPO industry, exporting $17 billion worth of services in 2005-06. This has the potential to cross $60 billion by 2010, employing 2.3 million people directly. In the technology-driven world, research and innovation will be key drivers of future growth.

Innovation regimes need to be strengthened, corporate-academia cooperation enhanced, and intellectual property rights made credible. India has the potential to become a global supplier of R&D with 125 of the Fortune 500 companies having set up research bases.

v. Education as a services sector

The share of the services sector in GDP of India has increased from 50 per cent in 2000-01 to over 56 per cent in 2005-06, while service exports touched $ 46 billion in 2004-05. Explosive growth in business service exports, including professional services, has been registered, reaching $ 15.4 billion in the first half of 2005-06 and surpassing software service exports. Training and education has become an invaluable aspect of the services sector. Community, social and personal services sector grew by 9.2% in 2004-05 and 7.8% in 2005-06.

Apart from the many private higher education providers qualified to give out degrees and diplomas under the formal university and technical education system, a huge number of training institutes have proliferated with no allegiance to the formal system. The worth of training at these institutes is determined solely by the employability of the participants. Besides, there are a number of coaching institutes providing tuition for competitive exams. By one estimate, the number of students enrolled in such institutes for IIT entrance exams is close to 200,000. A similar number would exist for medical entrance exams as well as exams for administrative and banking jobs. The cost of tuition at these institutes is substantial, going up to Rs 500 per hour. As these institutes are not bound by any regulations or registration, the exact figure of expenditure is not calculable; however, anecdotal evidence suggests that parents are prepared to spend high amounts for such informal coaching, indicating that employability is the main reason for seeking higher education.

Therefore, higher education with its conditions of rivalness and excludability is increasingly being viewed as a private rather than public good, whose price is determined by market forces. Given

the inelasticity of demand and the willingness of buyers to pay large amounts, higher education needs to be viewed as a service provision that should be regulated.

India has the opportunity to also develop its higher education sector into a global service provider by attracting students from developing countries. The low-cost advantage together with the India brand as a knowledge source and English-language advantage can prove to be a magnet for students in search of higher education outside their own countries. Singapore, New Zealand, Australia and other countries are taking advantage of the global education market which is currently dominated by USA and UK. Even China has restructured its education system to cater to non-Chinese students despite lack of English-language capabilities.

To plug into the global education market, India would need to systematically set in place the necessary prerequisites such as high-tech infrastructure, world class campuses, globally recognised courses and degrees, and well-paid faculty for teaching and research.

VI. Demand supply mismatch in research

Higher education is also necessary to meet demands that are not in the domain of the market, such as pure research in sciences, social sciences, and humanities. Such research adds to the knowledge base of society, contributing to sustained growth momentum. Research is the basis of technological advance, but requires considerable investment and a close linkage between universities, educational institutions, and industry.

Expenditure on R&D in India is 0.81% of GDP compared to 2.6% in the US and almost 3% in South Korea. Of this the government of India accounts for 67.5% and the private sector 21.6% in contrast to other countries where the private sector funds the bulk of research activity. India has 119 researchers per million of population as compared to Japan with 5287 and 4484 in the US. Annually about 6000 doctoral degrees are awarded in India.

Expenditure on research and development

Top 10 economies

Countries	Expenditure on R&D (% of GDP 1996-2003)	Expenditure on R&D (US$ M at PPP)	% performed by HEIs	Expenditure on R&D performed at HEIs (US$M at PPP)
US	2.60	284.584	16.8	47,810
China	1.31	72,014	16.1	7,273
Japan	3.15	106,854	13.9	14,853
Germany	2.50	54,449	17.1	9,311
UK	1.89	31,163	22.6	7,043
France	2.19	37,967	18.9	7,176
India*	0.81	19,200	2.9	557
Italy	1.16	16,367	32.6	5,336
Brazil	0.98	–	–	–
Russia	1.28	16,838	6.1	1,027
Other select countries				
Canada	1.94	18,596	34.9	6,490
Korea	2.64	24,869	10.1	2.512
Australia	1.63	7,815	26.8	2,094

PPP GDP – purchasing power parity gross domestic product; HEI - higher education institute

Source: Data on expenditure on R&D % of GDP from WDI (2006) and others from OECD Science and Technology Indicators 2004.

**Data on India is for the year 2000-2001 quoted from National Innovation System in the Asia-Pacific Region, UNESCAP*

Academic institutes in India have few interlinkages amongst themselves or with industry. Research institutes funded by the government are segregated from universities rather than following the more accepted system of teaching and research. The quality and fields of interest of researchers is also dubious, with reported incidences of plagiarism and lack of standards.

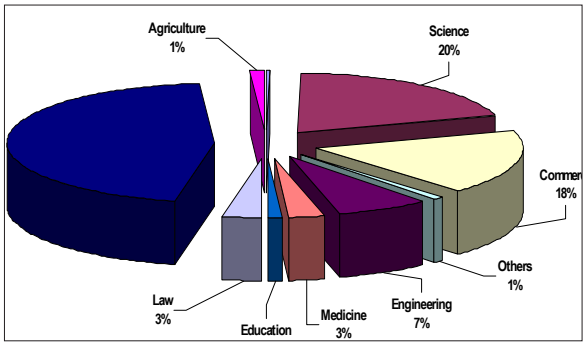
As research activities and technological advance are central to the growth of an economy, private expenditure on R&D must be boosted through greater participation incentive. Recent government announcements to invest Rs 100 crores in 4 universities 150 years old and to create more institutes such as the Indian Institute of Science are insufficient. China has pledged $150 million in 10 universities and proposes to upgrade 100 institutes to become part of the top 500 global educational institutes.

Regarding subject-wise enrolments, 45% of students are in the arts stream, 20% in science, 18% in commerce and the remaining in professional courses. The low enrolment in science implies that students could not gain admission in these courses due to supply restraint and lack of competitiveness.

Indian's Graduate Pool in the financial year 2003-04

	Engineering Degree Holders	Engineering Diploma Holders	Arts Degree Holders	Science Degree Holders	Commerce Degree Holders	Total Graduates
Stock (on 2003)	1,200,000	1,750,000	11,500,000	4,985,000	5,933,000	21,986,000
Out-turn (in 2004, estimate)	155,000	130,000	1,150,000	540,000	480,000	2,460,000

Source: *Institute of Applied Manpower Research and Ministry of Human Resources Development*



Source: *University Grants Commission*

Figure: *Subject-wise enrolments in 2004-2005*

VII. Role of the private sector in higher education

Higher education, with its conditions of rivalness, excludability and rejection, as well as near complete appropriation of returns by private individuals has been viewed by some economists as characteristic of a private rather than a public good, and therefore subject to market forces. However, due to the presence of externalities and information asymmetries, there are divergent views on whether the provision of higher education should be in the public domain or in the private domain. It is necessary to view both sectors as complementary providers, with the public sector meeting merit demands and education in non-employment oriented courses or pure research.

Enrolment pressure, rising unit costs of higher education, and competing pressures on public finances have encouraged growth of the private sector in filling gaps in India. Declining public sector expenditures, poor facilities, and a lack of capacity also build a strong case for a greater role for the private sector. Moreover, the public sector higher education system displays a lack of flexibility in supply response for meeting the rapidly-changing needs of a fast-growing Indian economy.

According to a document of the International Finance Corporation on investing in private education, the private sector can be a partner in the provision and financing of education due to the following reasons:

- Helping alleviate financial constraints by expanding the capacity of the sector
- Improving equity by freeing government expenditure for primary and secondary education
- Enhancing social mobility by contributing to the growth and strengthening of the middle class
- Promoting efficiency and effectiveness
- Promoting diversity and encouraging innovation

Private support can thus help governments overcome financial, administrative and technical constraints. While the private sector can only supplement and not supplant public expenditure on higher education, its role has been increasing in all parts of the world. This is especially true of courses with sharper economic linkages and therefore greater interest from students, making the willingness to pay for them highly inelastic to cost. Several factors have encouraged this trend: the growing demand from beneficiaries for quality in education; rising incomes; lower cost of student financing; new skill demands from the marketplace; declining public sector expenditures, and others.

There is a need for ensuring quality and integrity in private higher education through competition, standards, and consistent polices. In the government-funded institutions as well, there is urgency for raising quality levels. Policies need to relate to financing, autonomy, quality, globalisation, faculty, integration with industry, technology, and research.

Growth of professional higher education institutions

Name of Course	Number of Institutions (1999/2000)	Number of Institutions (2005/06)	Percentage increase	Private Share (2003/04)	Public Share (2003/04)
Engineering	669	1478	121	88	12
Pharmacy	204	629	208	94	6
Hotel Management	41	70	70	90	10
Architecture	78	118	51	67	33
Teacher Education	1050	5190	395	68	32
MCA	780	976	25	62	38
MBA	682	1052	55	64	36
Medicine (Allopathic)	174	229	32	46	54
Physiotherapy	52	205	294	92	8
Total	3730	9947	167	78	22

Source: *Related Professional Councils and their Websites. Estimate on public and private share by author based projections.*

Remarks: *Many institutions (particularly the MBA, MCA and B.Ed. Programmes) have more than one of the above programmes; these have been counted more then once.*

At present, nearly 80% of all institutions and enrolments are in the private sector, a trend that has picked up since the early 1980s. Vocational training in the private non-university sector is also huge.

However, there is a demand supply mismatch in education arising from lags, inadequate information, and societal expectations from higher education. Skills shortage is accompanied by graduate unemployment of 17%, comprising 5.3 million of the total unemployed population of 44.5 million. Many of these are considered unemployable by industry due to poor skill levels. The formal education sector provides no training for emerging sectors such as biotechnology, hospitality, fashion designing, NGOs, etc. as also the gamut of 'soft skills required in the work-place. The stress is on written instruction, or theory, and written testing systems, with little applicability to practical work-place situations.

The demand supply mismatch in higher education is further exacerbated by outdated curriculum. UGC is supposed to update curriculum every decade, but lags in the activity. Universities have rigid systems incapable of changing curriculum due to their own structures and complex control mechanisms by multiple agencies, described earlier. Private sector supply response has far more flexibility to suit market conditions.

VIII. Conclusion: The case for private sector participation in higher education

The declining proportion of workforce in many developed countries is expected to result in greater dependence on developing countries with labour surplus and lower age-dependency ratios. At the same time, the knowledge intensity of the world economy is increasing. India's own economic growth and social equity needs also place pressures on raising education and skill levels. The emerging innovation and technology regime implies greater emphasis on R&D, presently at low levels in India. Thus, elevating expenditure on higher education as a percentage of GDP is critical to India's future growth trajectory.

A huge investment is required in higher education to revitalise the sector, cater to demand from society, supply adequate manpower for industry and build research. Funds are needed for expanding exponentially the number of seats in higher education, infrastructure, faculty, and R&D, among others. The Oversight Committee on providing reservation for Other Backward Classes has in its interim report estimated an outlay of over Rs 16000 crores for expanding seats by 54% to provide for 27% reservation to OBCs. This is only an indication of the investment needed to overhaul the higher education system to ensure equal opportunity to all.

Lack of adequate funding from government limits its role in provision of higher education. There is a strong case for encouraging private sector investment in the field. Philanthropy and charity from the private sector were instrumental in setting the foundations of the Indian higher education system in the early years of the 20th century. Such philanthropy can fill a crucial gap in funding; however, the extent of this is very limited. It should not be an anathema to let profit act as an incentive to attract private investment, both domestic and foreign, for funding the necessary response in a well-regulated framework with minimal entry barriers and accompanied by recourse to credit for students.

There are several institutions of excellence in higher education which are totally funded by the private sector and have proved their worth. Realising this, many states have legislated for private sector participation in higher education as per the UGC Regulations of 2003.

Management structure of Engineering and Medical Colleges across States (2003)

State	Medical Colleges			Engineering Colleges		
	Government	*Private*	*% Private*	*Government*	*Private*	*% Private*
Andhra Pradesh	14	14	50.0	10	213	95.5
Assam	3	0	0.0	3	0	0.0
Bihar	6	2	25.0	4	3	42.9
Chattisgarh	2	0	0.0	2	9	61.8
Delhi	5	0	0.0	7	7	50.0
Gujarat	8	4	33.3	9	16	64
Haryana	1	2	66.6	7	29	80.5
Himachal Pradesh	2	0	0.0	2	3	60.0
Jharkhand	0	2	100	4	2	33.3
Karnataka	4	22	84.6	13	99	88.4
Kerala	7	8	53.3	31	51	62.2
Madhya Pradesh	5	1	16.7	6	47.	88.7
Maharashtra	19	18	48.6	16	133	89.3
Orissa	3	0	0.0	6	38	86.4
Punjab	3	3	50.0	11	27	71
Tamil Nadu	12	7	36.8	16	234	93.6
Uttar Pradesh	10	2	16.7	25	58	69.9
Uttaranchal	0	2	100.0	5	4	44.4
West Bengal	7	0	0.0	15	37	71.2

Source: *'Indian Higher Education Reform: From Half-Baked Socialism to Half-Baked Capitalism;, Devesh Kapur and Pratap Bhanu Mehta, Center for International Development at Harvard University, September 2004*

Private funding can also address issues other than resources such as greater industry-institute linkages, research, faculty, etc. There is tremendous scope in further liberalizing the process of private participation to attract the best investors and also to provide quality, customization, greater range of courses, and diversity, among others.

India must not fall behind in the race for growth and equitable development. Higher education is a vital tool for empowerment, individual creativity and societal progress. All possible effort must be made to revitalize the higher education structure in India.