Introduction: The key role of higher education for India’s future

Two observations have to be made at the outset of any statement on higher education in India: First, education, in general, and higher education, in particular, plays a key role in the realization of India’s extraordinary potential and aspirations for economic and technological development. Secondly, precisely because of this potential and its implications for individual advancement, there is an extraordinary demand for higher education among India’s young.

Obviously, these two observations apply to many other countries as well. However, considering both the sheer size of the country and the nature of its development potential, they become exceptionally powerful forces for determining the social, economic, and political dynamics of higher education in India.

The following is an attempt, cursory and incomplete at best, to identify and discuss a number of critical issues in Indian higher education against the background of this dynamic. The paper results from the review of a substantial amount of primary and secondary sources as well as from a series of conversations with different players in and around the Indian system of higher education in the spring of 2007. The principal purpose of this exercise is to provide the basis for an ongoing dialogue with the people I interviewed in India and with others interested in the subject; as this dialogue continues, it is my hope that my account becomes less cursory and more complete.
Five issues – quantity/quality, regulation, privatization, staffing, and studying abroad – form the core of this note on the state and the prospects of higher education in India. Other issues may well be equally critical or even more so; a more encompassing account would certainly have to include such issues as
- the provision of education, higher and otherwise, to disadvantaged groups in Indian society (the issues of “inclusion” and “affirmative action”),
- the quality and relevance of the curriculum in higher education,
- the effect that problems in higher education have on primary and secondary schools, and vice-versa,
- the role of assessment and evaluation in higher education, and
- the state of research both within and outside institutions of higher education.

There is, indeed, a multitude of interconnected problems that India faces in its higher education system; in a summary and particularly incisive diagnostic, one of the more thorough recent analyses of the situation describes both the scope and the seriousness of the challenge:

Higher education in India suffers from several systemic deficiencies. As a result, it continues to provide graduates that are unemployable despite emerging shortages of skilled manpower in an increasing number of sectors. The standards of academic research are low and declining. Some of the problems of the Indian higher education, such as – the unwieldy affiliating system, inflexible academic structure, uneven capacity across various subjects, eroding autonomy of academic institutions, and the low level of public funding are well known. Many other concerns relating to the dysfunctional regulatory environment, the accreditation system that has low coverage and no consequences, absence of incentives for performing well, and the unjust public funding policies are not well recognized.\(^2\)

At the same time, the gains to be derived from overcoming these problems and from seizing the opportunities of economic and technological development are shown by a recent World Bank study to be tremendous:

The time is very opportune for India to make its transition to the knowledge economy – an economy that creates, disseminates, and uses knowledge to enhance its growth and development\(^3\) ... Tertiary education is critical for the construction of knowledge economies. India currently produces a solid core of knowledge workers in tertiary and scientific and technical education, although the country needs to do more to create a larger cadre of educated and agile workers who can adapt and use knowledge ... Measures are also needed to enhance the quality and relevance of higher education so that the education system is more demand driven quality conscious, and forward looking, especially to retain

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\(^2\) Agarwal 2006, iv.
\(^3\) Dahlman and Utz 2005, viii.
highly qualified people and meet the new and emerging needs of the economy.⁴

What is at stake for India is aptly captured by the current president of the Indian National Science Academy (INSA) and Director General of the Council of Scientific and Industrial Research (CSIR), Dr. Ragunath A. Mashelkar:

As I see it from my perch in India’s science and technology leadership, if India plays its cards right, it can become by 2020 the world’s number-one knowledge production center, creating not only valuable private goods but also much needed public goods that will help the growing global population suffer less and live better⁵.

The “if” in this statement suggests a major condition for success; this paper is meant to be a modest contribution to assessing, against the background of the current situation of higher education in India, the chances of that condition being met.

**Critical issues in Indian higher education**

1. **Excellence and expansion: Quantity and quality in Indian higher education**

Most observers agree that Indian higher education, the significant and impressive developments of the past few decades⁶ notwithstanding, faces major challenges in both quantitative and qualitative terms. Perhaps the clearest and boldest statement of this issue can be found in the “Report to the Nation 2006” of the National Knowledge Commission which concludes that there is “a quiet crisis in higher education in India that runs deep”⁷, and that it has to do with both the quantity and the quality of higher education in India.

Recognizing this dual challenge, the Indian Prime Minister, Manmohan Singh, severely criticized in a recent speech the serious qualitative deficiencies in Indian higher education while at the same time announcing plans for a major expansion of the system. Reflecting on the findings of a confidential report by the National Assessment and Accreditation Council, which is affiliated to the University Grants Commission (UGC), he expressed his concern over the fact that two thirds (68%) of the country’s universities and 90 percent of its colleges are “of middling or poor

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⁴ Ibid., xi-xii.
⁵ Mashelkar 2005, 1417.
⁶ Such as the remarkable growth of the system between independence and now: from 28 universities in 1950 to 348 in 2005/06, and from an enrolment of 200,000 students to ten and a half million now (Agarwal 2006, Table A2, p. 155).
quality” and that well over half of the faculty in India’s colleges do not have the appropriate degree qualifications.

At the same time, the Prime Minister expressed concern over the fact that only 7 percent of India’s 18 to 24 year olds enter higher education (compared to 21 percent in Germany, and 34 percent in the US), announced plans for the government to set up at least one “central University” in each of the 16 (of India’s 28) states that do not currently have one, and at least one degree-granting college in each of the 350 (of 604) districts that are without one. The “central universities” are to become “a symbol of excellence, a model of efficiency, and an example in terms of academic standards and university governance for other state universities to emulate”. While these plans are considerably more modest than what the National Knowledge Commission has proposed (it foresees an expansion of the university system alone from the existing 350 to a future total of 1,500 institutions, including 50 “national universities” as centers of excellence), the added cost to the government of the Prime Minister’s expansion plans already is estimated at around $13 billion.

Summary Thesis: The qualitative deficits in Indian higher education and the need for a major quantitative expansion represent two major challenges for India, each of which would require an exceptional effort; to tackle them both at once, as experts and the government agree is necessary, is a particularly formidable task.

2. Regulation and governance

Besides its quantitative limitations and qualitative deficits, Indian higher education is also considered to be suboptimally organized and significantly overregulated, limiting initiatives for change and stifling or misdirecting private efforts. In its assessment of the existing regulatory arrangements, the National Knowledge Commission (NKC) has concluded that “the overall state of Indian higher education is dismal and therefore poses a severe constraint on the supply of qualified manpower” (Agarwal 2006, ii). It should be pointed out, however, that problems of quality are by no means limited to higher education; a recent study of India’s Industrial Training Institutes (ITIs) in three Indian states (Orissa, Andhra Pradesh and Maharashtra), for example, revealed serious deficits in both their internal and their external efficiency (ILO 2003).

8 Chronicle of Higher Education (CHE), July 6, 2007, p. A38; on the basis of a summary of several studies, a recent analysis concludes that “the overall state of Indian higher education is dismal and therefore poses a severe constraint on the supply of qualified manpower” (Agarwal 2006, ii). It should be pointed out, however, that problems of quality are by no means limited to higher education; a recent study of India’s Industrial Training Institutes (ITIs) in three Indian states (Orissa, Andhra Pradesh and Maharashtra), for example, revealed serious deficits in both their internal and their external efficiency (ILO 2003).

9 OECD, Education at a Glance 2006. Paris: OECD, 2006, Table A.3.1 (some care is advised in the comparison of these statistics, as they are gathered differently in different countries). Agarwal (2005, p. 158) has compared, on the basis of U.S. data, “gross enrolment ratios” (the ratio of total enrolment in higher education to the population of the appropriate age group) for India, compared to 16 for China, 51 for Germany, and 83 percent for the US.


11 NKC 2007, p. 43-44.

12 CHE, June 15, 2007 (Volume 53, Issue 41, Page A40); total government expenditure on higher education (UGC, central government, state government) in 2005 has been calculated as amounting to 186.100 Rs. crores or approximately $45 billion (Agarwal 2006, Table A8, p.159; cf. Kapur and Mehta 2004, 4-5 and Tilak 2004, 2160).
Knowledge Commission concludes: “In sum, the existing regulatory framework constrains the supply of good institutions, excessively regulates existing institutions in the wrong places, and is not conducive to innovation or creativity in higher education.”\textsuperscript{13} Pratap Bhanu Mehta, President of the Centre for Policy Research, concurs: “Our regulation is faulty, because it contemplates very little place for diversity of experiments.”\textsuperscript{14} It is not surprising that one of the key recommendations of the National Knowledge Commission, right behind the expansion of the system, is to change the system of regulation for higher education, claiming that “the system, as a whole, is over-regulated but under-governed” and proposing to establish an “Independent Regulatory Authority for Higher Education (IRAHE)” that is to operate “at an arm’s length from the Government and independent of all stakeholders”\textsuperscript{15}. A particularly interesting part of the debate on this issue centers around the need for new forms of governance in Indian higher education, where the focus would be on the twin postulates of Autonomy and accountability\textsuperscript{16}. An important step was taken in this regard by the Central Advisory Board of Education (CABE) which set up a special committee to design ways for promoting both autonomy and accountability in Indian higher education. The Committee has come up with a wide range of recommendations in 2005\textsuperscript{17}; to judge from the analysis of the National Knowledge Commission cited above, however, no major breakthrough in this matter seems as yet to have been achieved.

**Summary Thesis:** Both the extent and the nature of the regulatory arrangements appear to inhibit both the reform of Indian higher education and the mobilization of additional (private) resources for its further development. The debate over new forms of governance, especially with regard to the twin issues of autonomy and accountability, is thus of critical importance for the future of the system.

3. The privatization of higher education

One of the striking features of the development of higher education in India over the last few decades has been the extent to which private institutions have entered the scene and attempted to respond to the massive demand for education at the post-secondary level. This is particularly true in the fields of

\textsuperscript{13} NKC 2007, 54; see also Khemani and Narayan 2006, 4; Kapur and Mehta 2004, passim; Agarwal 2006, 76-102; Kaul 2006, 31ff.
\textsuperscript{15} NKC 2007, 43.
\textsuperscript{17} CABE 2005.
engineering, medicine, and management, and much less at the broader level of university education. The institutional variants of privatization range from small technical colleges to internationally recognized professional schools such as the Indian Business School in Hyderabad\(^{18}\), the technical and teacher training institutions created by the Gondia Education Society in Maharashtra\(^{19}\), major educational conglomerates like Symbiosis in Pune and elsewhere\(^{20}\), or recent plans for the $3.5-billion, elite Vedanta University in Orissa\(^{21}\). Many of these institutions owe their existence and success to the entrepreneurial spirit and resources of successful and/or visionary individuals such as the late Shri Manoharbhai Patel in the case of Gondi, S.B. Mujumdar in the case of Symbiosis or the “metals-and-mining mogul” Anil Agarwal in the case of Vedanta; quite a few politicians appear also to have actively participated in, and benefited from, the growth of private professional education\(^{22}\). The strong emergence of the private sector is reflected in the funding pattern: While the government’s share in overall education expenditure has declined from 80 percent in 1983 to 67 percent in 1999, private expenditure on education has increased more than ten times over the same period\(^{23}\).

In the field of professional training in particular, the size of the private sector is formidable: According to 2003 figures for 19 major Indian states from the Medical Council of India (MCI) and the All India Council for Technical Education (AICTE), of 198 Medical Colleges, 44 percent were private, and of 1102 Engineering Colleges, as many as 92 percent were private\(^{24}\); similar conditions prevail in business management. In some instances, competition between public and private institutions has begun to produce improvements on both sides\(^{25}\).

Looking beyond these numbers, however, and the generosity of so many sponsors of higher education institutions notwithstanding, privatization in Indian higher education appears not to be an unmitigated success. It is clear, on the one hand, that in order to meet the massive demand for higher education, India will need to attract significant private investment in terms of both philanthropy and individual fees; even with a major reshuffling of spending priorities in the public sector, the overall investment needed is likely to exceed significantly whatever public funds will be available in the foreseeable future. On the other hand, there are persistent and fairly well-documented claims that the existing political, regulatory and judicial context is not at all conducive to the adequate

\(^{18}\) [http://www.isb.edu/](http://www.isb.edu/).

\(^{19}\) [http://ppce.ac.in/Society.htm](http://ppce.ac.in/Society.htm).

\(^{20}\) [http://www.symbiosis.ac.in/](http://www.symbiosis.ac.in/).


\(^{22}\) Kapur and Mehta argue that “the rapid expansion of capacitation fees colleges came about as a result not of great middle class pressure or demand, but rather the entrepreneurial activities of politicians” (2004, 14).

\(^{23}\) Data from the National Sample Survey (NSS) cited by Kapur and Mehta 2004, 5.

\(^{24}\) Kapur and Mehta 2004, 33 (Table 5); cf. Sengupta 2006.

\(^{25}\) Khemani and Narayan discuss the example of the competititon between the Indian Institute of Management (IIM) – Ahmedabad and the Indian School of Business (ISB): 2006, 7).
mobilization of private resources and energies for higher education26. What has been said above about the constraining nature of the regulatory framework applies particularly to private institutions; the need for affiliating such institutions to public universities is a case in point27. By the same token, there seems to be a strand of regulation, until recently strongly supported by the courts, that makes it exceedingly difficult or counterproductive for public institutions of higher education to mobilize private resources through higher fees, licensing arrangements, or philanthropy (including the practice by the UGC to deduct such added earnings from a university’s grant-in-aid); partly as a result, the proportion of philanthropic contributions to higher education has decreased from more than 12 percent in the 1950s to less than 3 percent in the 1990s28. Some particularly critical observers attribute this general reluctance to involve the private sector in higher education to an “ideological commitment to some principle of equality”29. Be that as it may, the courts in India have played a rather major role in determining the prospects of private elements in higher education and, even more importantly, in limiting the degree to which public higher education can draw on private resources for its own development30.

Summary Thesis: Private initiatives and resources already play a major, if ambiguous, role in Indian higher education. However, a variety of factors appears to prevent the full utilization of this potential for the further quantitative as well as qualitative development of the system.

4. Staffing higher education

Should the ambitious plans of both the public and the private sector for the massive development of higher education in India have a chance to succeed, one of the key prerequisites is a large and highly capable pool of scholars who can provide academic leadership in teaching and research. Many of these scholars already exist or are moving into the ranks of the professoriate at the better Indian (and foreign) universities; many more will be needed to satisfy the growing demand and to take the place of the large numbers of college and

26 Agarwal 2006, 91ff.
27 “The requirement that all private colleges grant degrees through existing universities is, with rare exceptions, a real deterrent to innovation. And it corrupts the state system further because often universities pretty much sell these affiliations. If the intent of this affiliation was quality control, the intent has failed.” (Mehta 2005, Part II).
28 NKC 2007, 56.
29 Kapur and Mehta (2004, 13; 18ff.) who characterize this dilemma as “oscillating between half-baked socialism and half-baked capitalism, with the benefits of neither” (ibid.); see also Tilak 2004, 2163-2164.
30 “The courts have historically been suspicious of private enterprise in education.” (Kapur and Mehta 2004, 22); see also the more recent and rather incisive analysis of the legal aspects of privatization in higher education in lawstudent 2007.
university faculty who are not up to the standards of an internationally competitive system of higher education.

To judge from the existing analyses of the situation, the achievement of this goal appears to require a combination of several different strategies, including:
- a change in the criteria for academic recruitment and promotion,
- significant improvements in the economic condition of the academic teaching profession,
- a very ambitious program for the identification, training, support and placement of young scholars, and
- a major effort at repatriating successful Indian scholars from abroad.

None of these measures is easy; all of them will have to overcome deficits where standards for academic recruitment have been rather lax or arbitrary, where the remuneration of teaching in higher education has been rather dismal (compared to opportunities both abroad and in the private sector), where graduate and doctoral programs have been short on capacity, academic rigor, and financial support, and where the increasingly intensive efforts to bring Indian scholars back from abroad have so far met with only limited success.

Summary Thesis: Adequate staffing may well be the critical bottleneck in India’s ambitious plans for expansion and excellence. To cope with it will require a concerted effort involving the academic culture, economic conditions, graduate training, and bringing back expatriate Indian scholars.

5. The two sides of studying abroad

Studying abroad, primarily in the United States and the United Kingdom, has played, and continues to play, a major role in expanding and enhancing the pool of qualified Indians. More than 17,000 Indian students are pursuing higher education in the UK (a number predicted to increase to 26,000 by 2010). In the United States, the number of Indian students in 2004/05 exceeded 80,000 and was twice what it was ten years earlier, having become the largest group of foreign students in the US. Altogether, 160,000 Indian students study abroad, and it is likely that especially European efforts to attract larger numbers of

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31 Even the prestigious IITs are reported to face a faculty shortage of 20 to 35 percent (Sinha 2002).
32 NKC 2007, 50; 58.
33 Khemani and Narayan describe a “state of disrepair” in the processes of faculty recruitment and promotions (2006, 26); similar criticisms exist regarding the process through which positions of academic leadership are often filled (Basa 2001; Virk 2001).
35 “Talented students who are potential faculty members have choices that are far more attractive in other professions in India or in the academic profession outside India” NKC 2007, 50.
36 Khemani and Narayan 2006, 15 and notes 22 and 23.
37 NKC 2007, 13.
talented students from abroad (as in the “Erasmus Mundus” program\(^{39}\)) are likely to make these numbers grow further. These are impressive indicators of educational mobility, especially when one considers the educational and professional success of many of these students. Many Indian graduates of US universities have gone on to become major figures in the development of modern technology and entrepreneurs in their own right in areas like Silicon Valley\(^{39}\).

At the same time, this large exodus of young talent has serious drawbacks. A significant portion of these students remain abroad after graduation, and while they often become interesting commercial partners for Indian firms (as in the case of many Indian-led companies in Silicon Valley), their academic talents and experience is largely lost to the task of advancing higher education and research in India. Furthermore, it is estimated that the 160,000 Indians studying abroad are spending roughly $4 billion each year outside of India, and while some of this is covered by scholarships and assistantships of their host institutions, the overall financial drain on India’s resources is considerable, and has to be added to the intellectual drain\(^{40}\). It is not surprising that an important part of India’s strategy for developing its system of higher education is making at least some universities sufficiently attractive to persuade talented young Indians to remain at home, or to return.

A related, but also controversial issue is the interest of a growing number of foreign universities, notably from the US, to set up programs in India to tap into the growing demand for quality higher education. Programs of this kind might obviate the inclination of some young Indians to study abroad; at the same time, there is a good deal of controversy over the financial and regulatory terms under which these programs would be permitted. A pending piece of legislation, the “Foreign Education Providers Bill”, is designed to regulate these programs\(^{41}\), but a bitter debate has emerged over the effect they would have on access to higher education for less fortunate members of Indian society\(^{42}\).

**Summary Thesis**: As India has entered an increasingly globalized higher education market, the economic and social ramifications of that market are felt more and more clearly. The degree to which, and the terms on which, India opens herself to that market will have a serious and lasting impact on the direction and pace of India’s own development in higher education.

\(^{38}\) CHE, August 3, 2007, A32.

\(^{39}\) Saxenian 2006; Wadhwa et al. 2007a; 2007b; 2007c.

\(^{40}\) “If one considers the potential economic gains, which these exceptionally talented people could have brought to India, one realizes that the economic losses due to this mass migration are enormous.” (Mashelkar 2005, 1415).

\(^{41}\) Times of India, February 5, 2007; May 31, 2007.

\(^{42}\) “the notion of equal rights to education has been lost in favour of catering to that small but moneyed section, here and abroad, who would in any case be the main beneficiaries of higher education” (Rajalakshmi 2007).
Conclusion: A challenge of major dimensions

Considering both the multitude and the magnitude of the difficulties that Indian higher education faces, it would be easy to be overwhelmed by the problems and to despair of finding solutions. At the same time, given the tremendous potential of India’s booming industry and technology and the considerable progress made in higher education and research in recent decades, it would also be easy to reach a state of exuberance and expect that, somehow, India will surmount these difficulties. Neither of these two reactions appears warranted on the basis of a sober assessment of the situation. The problems India faces in higher education and research are, as this paper and other analyses show, very real and very serious; they will not go away by themselves, nor are they amenable to easy and routine solutions. For them to be overcome seems to require not only massive rearrangements in both the provision and the utilization of public as well as private resources, but also profound and durable changes in institutional cultures inside and outside higher education.

At the same time, the gains to be derived from overcoming these problems and from moving boldly in the direction of an internationally competitive system of higher education and research are tremendous. Dr. Mashelkar’s vision on India becoming “the world’s number one knowledge production centre” is extraordinarily ambitious, but by no means beyond reach; for this vision to be achieved will require an unprecedented effort on the part of everybody concerned, especially if it is to be reached by as early as 2020.

All of the present problems notwithstanding, India has a number of assets that appear to bode well for living up to that challenge. Having built up a modern system of higher education and research virtually from scratch since independence has been a major achievement and should be a solid predictor of future growth. Furthermore, and especially for an outside observer, one of the most impressive aspects of the current situation in Indian higher education is the emergence of an extraordinarily lively and critical discourse on the further direction that the Indian system of higher education should take. This critical discourse, some of which has found its way into the present paper, is fully cognizant of the problems the system faces, but is also a very valuable source of ideas and proposals for change. It appears that, in many ways, the work of the National Knowledge Commission is aggregating this discourse into actionable proposals for India’s body politic. The decisions that are going to be taken on these and similarly bold proposals are likely to hold the key to India’s future as a center of knowledge production.

Incidentally, the open and free-flowing nature of this discourse highlights one of the key differences between India and China at this juncture in their otherwise similar developmental trajectory.
Sources cited


Chronicle of Higher Education, various issues (cited as CHE) (http://chronicle.com)


Tulika Khemani and Jayaprakash Narayan, Higher Education Sector in India: Opportunities & Reforms. Hyderabad: Foundation for Democratic Reforms/Lok Satta, March 2006 (no longer available online)
S.C. Lakhotia, India’s ambitions to be a world leader in S&T depend upon a drastic overhaul of the university system. *Current Science*, Vol. 88, No. 11 (10 June 2005), 1731-1735 (http://www.ias.ac.in/currsci/jun102005/1731.pdf)


Pratap Bhanu Mehta, Three-part series on regulating Indian higher education:
Part II – Critiquing the Regulatory Regime (June 15, 2005) (http://www.indianexpress.com/res/web/ple/full_story.php?content_id=74416);


J.B.G. Tilak, The Dilemma of Reforms in Financing Higher Education in India. *Higher Education Policy* 10, 1 (March 1997), 7-21


H.S. Virk, Appointment of Vice-Chancellors in Universities. *Current Science* 81, 6 (25 September 2001), 628-629 (http://www.ias.ac.in/currsci/sep252001/contents.htm)

