

Indian Higher Education and Its Contribution to Economic Growth in Global and Knowledge Economy Era

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The Dragon and the Elephant:
Emerging Lessons from the
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Special Features of Indian Higher Education System



- Quantity: India has the third largest HE system in the world after China and US.
- Quality: majority institutions are mediocre which leads to brain drain (Altbach , 2000) .
- Seven Indian Institutes of Technology (IITs) follow MIT model. They are the cream of the cream in Indian HE system and can compete with world-class institutions (Pilny, 2007; Smith, 2007) .
- Finance: Share of educational expenditure in GDP increases, and India outperforms China.
- Academic programs
 - Traditionally, Indian HE has a weak link with vocation and job.
 - It has begun to change since 1960s (Bordia, 1995) .
- Governance
 - British or London University Model
- Direct and indirect public subsidy (21.8%) to private HE (30%)

Comparison between India and China by Major Indicators in Tertiary Education



Table: Comparison between India and China by Major Indicators in Tertiary Education

Indicators	India	China
<u>Institution and Enrollment</u>		
No of Institutions	17,973 (2004)	2,236 (2004)
Enrollments (000)	10,481 (2004)	17,533 (2004)
Faculty (000)	472 (2004)	944 (2004)
Student-faculty Ratio	22 (2004)	19 (2004)
Students per Institution	583 (2004)	7,841 (2004)
Gross Enrollment Ratio (GER) (%)	11.4 (2005)	20.3 (2005)
Combined Primary, Secondary and Tertiary GER (%)	63.8(122/177)(2005)*	69.1(104/177) (2005)*
Change of GER (1991/2006) (%)	6/12	3/22
Average Annual Growth Rates in Tertiary Enrollments (1995-2002) (%)	6.1	12.1
% of Enrollment in Private Sector	30 (2005)	15 (2005)
<u>Finance and Expenditure</u>		
% of Educational Expenditure to GDP	4.02 (2001)	3.19 (2001)
% of Educational Expenditure to Governmental Expenditure	10.7 (2003)	13.0 (1999)
Tertiary Education Expenditure/Total Education Expenditure (%)	18	21
% of Tertiary Education Expenditure to GDP (%)	0.8 (2003)	0.8 (1999)
Relative Proportions of Public and Private Expenditure on Tertiary Education Institutions	99.7/0.3 (1999)	56.8/43.2 (1999)
Relative Proportions of Direct Public Expenditure on Public Institutions and Private Institutions and Indirect Transfers and Payment to the Private Sector (tertiary) (1999)	78.2/21.5/0.3	93.7/0/6.3
Percentage of Current and Capital Expenditure (tertiary) (1999)	96.9/3.1	77.6/22.4
Percentage of Staff Compensation and Non Staff Expenditure (tertiary) (1999)	99.6/0.4	46.0/54.0

Indicators	India	China
<u>Employment and Benefits</u>		
Employment (%)	83 (2001)	70.9 (2007)
Private Rate of Return (%)	18.2 (1998)	6.0 (1996)
Social Rate of Return (%)	10.3 (10.3)	NA
<u>Institutions</u>		
Appropriation Mechanism	UGC	Ministry of Finance
Autonomy	High	Fair
Legal Infrastructure	Strong	Weak
History of Openness and Close International Ties	Long and Continuous	Short and Interrupted

Sources: UNDP , http://hdrstats.undp.org/countries/country_fact_sheets/cty_fs_IND.html;

UNESCO

, http://www.uis.unesco.org/ev.php?URL_ID=5263&URL_DO=DO_TOPIC&URL_SECTION=20

1. 4 April, 2008.

Notes: Figures in bracket are years of the data. *rank of the country among 177 countries.

The Contribution of HE to Economic Growth



- HE is prerequisite for economic growth.
 - An empirical study shows that human capital has positive effect on Indian service economy and insignificant effect on manufacture economy between 1980-2000 (Amin and Mattoo, 2008) .
- Other factors that promote economic growth
 - Global & knowledge economy, democracy, legal system, language, privatization etc.
- In knowledge economy, HE plays unprecedented role in economic growth (Carnoy, 1999) .
 - Overseas Indian helped to set up a so-called “Silicon Valley” in Bangalore (Altbach , 2000) .

Policy Implications



Emerging Lessons from Indian Experience

- (a) Unprecedented role of HE in knowledge economy, that goes beyond traditional measurement of social economic return.
- (b) The distinction between general and vocational education has become blurred. Trainability and generic skills are a crucial aspect that special attention should be paid.
- (c) In global economy, new solution come about for problem of brain drain .
- (d) India has developed a high-quality professional education particularly its IITs under economic constraints.
- (e) Close tie between HE and economy