

Growth and Financing of Higher Education in India

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INTRODUCTION

India, the second most populated country in the world, with about 1.04 billion people, is home to one-sixth of humanity. It has also become one of the world's new economic giants. Since 1980s and between 1990 and 2002, the Indian economy grew at 5.9% annually, compared with the average 2.8% for the world overall. The Economic Intelligence Unit estimates that India's average annual real GDP growth rate will remain at this lofty level for the 25 years between 2005 and 2030. The World Bank Report put India's annual GDP growth from 1990 to 1999 at 6.1% - a rate it expects will increase to 15% in 2012.

The major contributor to the striking performance is India's thriving service sector, led by information technology (IT). This sector's expansion has far outstripped those of agriculture and industry. Services now account for more than half of India's GDP. India's people are justly proud of the rapid development in the IT sector, where the country has now assumed 30% share of the worldwide software export market. Almost 180 of the Fortune 500 companies were outsourcing to India by mid-1990s. Among those firms that have set research and development facilities in India or have tied up with the Indian companies or academic and research institutions are such famous names as Oracle, Pentafour, SAP, Philips, Yahoo, Google, IBM, HP, Intel, Microsoft etc. India is estimated to have an impressive 65% share of the market in information technology-enabled services, or offshore IT. Moreover, there remains an enormous potential for further growth in these markets.

Why has India's economy grown so quickly? How has it become one of the most important economic powers in the new world economic order in such relatively short time? The main key to the country's current socio economic success appears to be education, particularly the development of higher and professional education. India is well known for its large pool of technical and vocational labor. It would not have this advantage if it had not provided strong support for higher and professional education over the past six decades. Without this asset, it could not have achieved its new economic standing on the world stage.

This paper examines the growth and financing of higher education in India. It also analyses the contribution of higher and professional education to the country's rapid growth.

Contextual Background and Overview:

The correlation between economic development and the development of higher education-and the paramount importance of higher education to economic and social development in the knowledge-based economy- are almost universally accepted. Without exception, a great part of the success of the Indian model in economic development stands upon the foundation that India has built over time in its education sector - a large, complex system to provide higher and professional education that imparts useful, usable skills reliably and on a large scale produces theoretical and practical knowledge.

Broadly defined, the term "higher education" in the Indian context covers the entire spectrum of education beyond 12 years of formal schooling. Generally, it comprises three levels of qualifications: bachelor or undergraduate degree programs, master's or postgraduate degree programs, and the predoctoral and doctoral programs - master of philosophy and doctor of philosophy.

History of Higher Education in India:

Although education in ancient India was highly advanced and great centers of learning existed in the Buddhist monasteries from the 7th century B.C. to the 3rd century A.D. Nalanda, the modern higher education system dates back to mid 1850s and was founded by the British colonial regime. The three Universities were established at Bombay, Calcutta, and Madras in 1857. These pioneer universities were largely affiliating and examining bodies and had little intellectual life of their own. They were modeled on the University of London, established in 1836. They were also designed to serve the economic, political, and administrative interests of the British and in particular to consolidate and maintain their dominance in the country.

India's independence in 1947 was watershed in its modern social development. It forever changed the higher education system, which has generally grown and

improved steadily ever since. By the end of the Tenth Plan (2002-2007) the number of universities in India increased from 20 in 1947 to about 378, a thirteen fold increase. There are now 23 central universities, 216 state universities, 110 institutions deemed to be the universities, and 13 institutes of national importance established through central legislation and 5 Institutions established through state legislation. The number of colleges increased from 500 in 1947 to 18,064 in 2006, twenty-six fold increases. The number of university level teachers has grown from 700 in 1950 to 4, 92,000 in 2006. (See Table 1)

Table 1: All India Growth of Institutions, Enrollments and Teaching Faculty at the Higher Education Level, 1950/1951 – 2005/2006

Year	Universities	Colleges	Total Higher Education Institutions	Enrollment ('000)	Teachers ('000)
1947-1948	20	496	516	100	-
1950-1951	28	578	606	174	24
1960-1961	45	1,819	1,864	557	62
1970-1971	93	3,227	3,370	1,956	190
1980-1981	123	4,738	4,861	2,752	244
1990-1991	184	5,748	5,932	4,925	271
2000-2001	266	11,146	11,412	8,399	395
2004-2005	348	17,625	17,973	10,481	472
2005-2006	378	18,064	18,419	-	492

Source:-University Grant Commission, Annual Budget 2005-2006

The fastest growth in institutions was in 1950s and 1980s, as shown above, reflecting the small educational base in 1947 and the ambitious expansion that independence sparked. The growth was relatively slow in 1970s and 1980s but picked up again from the 1990s onward because of increased demand for higher education, particularly in IT.

Establishment of a Unique, Differentiated System

India has established a huge, complex modern system of higher education. It inherited British models but developed an Indian style of its own. The higher education system is largely based on the practice of affiliation, which was started in London University. This system consists of a University, which sets courses, conducts examinations and award credentials, and a number of colleges that are affiliated with it to do the actual teaching. The other remarkable feature is the diversity within the system, with different types of institutions arranged in a national framework.

India's institutions of higher education can be classified in several ways. They are divided by titles into universities, institutes of national importance, and colleges. They are owned either by the national or state government or privately - in which case, they can be aided or unaided. Depending on how they function, they can be affiliating universities, teaching-cum affiliating universities, unitary universities, federal universities and open universities.

Role of Government in Higher Education:

Governments play an important role in promoting and administering higher education institutions in India but they generally do so through agencies set up for this purpose. The most important are the National Planning Commission (NPC),

University Grant Commission (UGC), the Central Advisory Board of Education (CABE), and the coordinating councils that are concerned with professional disciplines.

The NPC is an advisory board established in 1938 to formulate and watch over the implementation of five year plans. The NPC acting at the central level with the Ministry of Education prepares a national educational development plan in two parts - one dealing with the national government's direct responsibility in education, and a second that is an integrated summary of state's educational development plans.

Table 2 shows the formulation of five year plans by NPC.

Table 2:- Indian Educational Five Year Plans by year

Year	Plan
1951/1952 - 1955/56	First Five Year Plan
1956/1957 1960/1961	Second Five Year Plan
1961/1962 1965/1966	Third Five Year Plan
1969/1970 1973/1974	Fourth Five Year Plan
1974 - 1979	Fifth Five Year Plan
1979 - 1984	Sixth Five Year Plan
1985 - 1990	Seventh Five Year Plan
1992 - 1997	Eighth Five Year Plan
1997 - 2002	Ninth Five Year Plan
2002 - 2007	Tenth Five Year Plan
2007 - 2012	Eleventh Five Year Plan

Although the market has a great influence on Indian higher education, the central and state government play important role. By setting up the UGC in 1956, India's government took a revolutionary step towards implementation of quality standards in higher education. The commission's prime duties were to monitor the establishment of universities providing higher education and the quality of teaching and other integrated service in universities and higher education institutions, as well as providing grants for improvements. Government is active in other ways as well.

CABE, established to find ways to promote both autonomy and accountability in Indian higher education, came up with a wide range of recommendations in 2005. So far, nothing seems to have come of the CABE report.

Financing Higher Education:

Higher education has been recognized as a public good and government has therefore assumed most of the responsibility for its funding. The bulk of this spending goes to central universities, state universities and deemed universities in the form of maintenance or developmental grants from the UGC to organization or organization and management committees at the state level. Most of the public institutions are administered by the states and so they pay for up to 90% of their operating costs. 74% of total expenses of state institutions are funded from state expenditure, only 26% from the central government.

The UGC, the central government's main higher education funding agency, uses almost 60% of its budget to finance the operating expenses of the central universities and Delhi colleges. The remaining 35% is spent on the system at large. Most universities - and all private unaided universities and colleges - are expected to meet all

their expenses from their own revenue sources, mostly tuition.

The total central and state government budget for higher education, including technical education, was Rs 131.4 billion in 2004/2005.

Tables 3 provide details.

Table 3:- Public Expenditure on Higher Education in India, 2004/2005

(Amount in Rs Billion)		Higher Education	Technical Education	Other	Total
Central Government	Plan	6.40	7.5	0.65	14.55
	Non-plan	11.57	8.45	0.45	20.47
	Sub-total	17.97	15.95	1.10	35.02
State Government	Plan	4.94	5.41	1.25	9.15
	Non-plan	72.72	12.52	4.02	87.20
	Sub-total	77.66	17.93	5.27	9.64
Total		95.63	33.88	6.37	131.37

Source: - Analysis of budgeted-expenditure on education (2002-2003 to 2004-2005), Ministry of HRD Govt. of India

Note: - Operating expenses are generally under non-plan, where capital investment comes from plan.

Financing Higher education in 11th Plan

Public expenditure on higher education and professional education in India increased by a whopping 550 times in nominal terms between 1950-1951 and 2004-2005, when it reached Rs 95,620 million (see Table 4). But growth has been erratic at times and has recently slowed. Spending rose at a good real annual rate of 7.5% in the 1950s and enjoyed a golden period in 1960s when it reached 11%. It suffered a severe setback during the 1970s, when it declined to 3.4%. Spending rose by 7.3% a year in nominal terms in the 1980s and from Rs 23,120 million to Rs 95,620 million in current prices in the 1990-1991 - 2004-2005 period, or at 12.3% annual rate.

Table 4:- Budget Expenditure on Higher Education

Year	Budget (Revenue)	Expenditure (Rs million)	Per Student Current Prices	Expenditure Constant Prices \$	Index (Per student)
1990-1991	23120	31400	5652	7676	100
1991-1992	24440	29170	5636	6727	88
1992-1993	27000	29640	6111	6710	87
1993-1994	31040	31040	6738	6738	88
1994-1995	35250	32170	7329	6687	87
1995-	38710	32390	6844	5810	76

1996					
1996-1997	42880	33430	7207	5619	73
1997-1998	48590	35500	7793	5693	74
1998-1999	61170	41370	9536	6450	84
1999-2000	82480	53710	10683	6956	91
2000-2001	91950	57880	10543	6636	86
2001-2002	80880	49230	9669	5886	77
2002-2003	88600	51790	9310	5442	71
2003-2004	93810	53250	-	-	-
2004-2005	96620	51520	-	-	-
Rate of Growth	12.3	54.4	5.6	4.5	

Source: - Analysis of Budget Expenditure on Education, MHRD, various years
By 2012, the rate of growth is expected to increase by 15%.

Rising inflation however made this increase an illusion. After adjusting for inflation with national income deflators, the real rate is only 5.4%, a decrease from prior period and decades.

Financing Higher Education in Eleventh Plan (2007-2012)

The government has pledged to rise public spending on education to 6% Gross Domestic Product (GDP). For accelerating public expenditure, the Central Budget 2004 introduced a cess of 2% on major central taxes/duties for elementary education and Budget 2007 a cess of 1% for secondary and higher education. In the Eleventh Plan, the Central Government envisages an outlay of about Rs 2.70 lakh crore at current price (Rs 2.37 lakh crore at 2006-2007 price) for education. This is a four-fold increase over the Tenth Plan allocation of Rs 0.54 lakh crore at 2006-2007 prices. The share of education in the total plan outlay will correspondingly increase from 7.7% to 19.4%. Around 50% of Eleventh Plan outlay is for elementary education and literacy, 20% for secondary education, and 30% for higher education (including technical education).

Role of Higher Education in Indian Economy

Before the 1990s, India's higher education system had only loose ties to the economic development. In fact, the rapid growth of higher education in 1950s and 1960s had brought unemployment and a brain drain, economic problems that were unexpected and unwelcome. In more recent decades, however higher education has engaged with and served the Indian economy in many ways. The human capital represented by the highly skilled workforce it has produced made significant contribution to India's service industry 1980-2000 and supports the country's increasingly important role in the global and knowledge economies. India's recent

economic success is due to a large extent to educational investment. The social economic rate of return arguably underestimates the contribution of higher education. In other words, we need to review the contribution of higher education, especially to global and knowledge economies, which favor creativity and innovation. The brain drain, for example, was once viewed as an economic loss in India. However, Indians who left their country for overseas have, in the new world economy, often contributed to their country's growth in ways that were once unforeseen, including the development of IT expertise, industries, trade and markets for services.

Conclusion

In recent years, the Indian economy has grown remarkably and caught the world's attention. It has become a world center for the IT industry and IT services. India's economic success is mainly due to its investment in education, especially higher and professional education. Despite economic constraints, India has built world standard IITs. This experience needs to be shared, internationally, especially with the developing countries.

In the age of economic globalization, India is planning to boost its economic strength by using comparative advantages in its labour force and its consumption market. The government plans to transform its big population into huge human capital. This can be only achieved through continued investment in education in general and higher and professional education in particular. Indeed, this investment is also necessary to sustain India's current level of growth.

India is conscious that barriers must be overcome to meet these goals. They include a shortfall in professional and technological personnel, a misalignment between the content and emphasis in current higher education and the needs of the economy, as well as diminishing quality due to rapid expansion in institutions of higher and professional education. India is taking steps to reform its system, as it has done in the past. India's successful experiences in solving problems of higher and professional education that are common to many countries should be learned and shared in international community.

References:

1. University News
2. Commercialization of Higher Education Report
3. Planning Commission, Government of India, Gupta, S.P. India Vision 2020, New Delhi.
4. Issues in Higher Education, Vol II.