CENTRAL ADVISORY BOARD OF EDUCATION

Report of the

CABE Committee on

FINANCING OF HIGHER AND TECHNICAL EDUCATION

NATIONAL INSTITUTE OF EDUCATIONAL PLANNING AND ADMINISTRATION
New Delhi

June 2005

Acknowledgments

The Government of India had reconstituted the Central Advisory Board of Education (CABE) vide Resolution dated 6 July 2004. In pursuance of the decisions taken in the meetings of the CABE on 10-11 August 2004, the Government of India had constituted in September 2004 seven committees of the CABE to examine in detail critical issues facing education. The Committee on the subject of 'Financing of Higher and Technical Education' of the CABE is one such committee constituted to examine in detail critical issues relating to financing higher and technical education.

To Committee was required

- To examine the adequacy of investments in higher/technical education and to find ways of augmenting the resource flow in higher education;
- To examine the question of a fair share of 6% of GDP, for education; and
- To suggest the ways of encouraging and regulating private participation and investments in higher/technical education.

Taking note of the resolve of the United Progressive Alliance Government made in the Common Minimum Programme to *ensure that nobody is denied higher education because he or she is poor,* the Committee took a comprehensive view of the problems relating to financing of higher and technical education in the country and had extensive discussions in the meetings of the Committee held on 16 November 2004, 20 January 2005 and 19 May 2005 at the Planning Commission and at the National Institute of Educational Planning and Administration.

The Committee recognises the critical role higher and technical education can play in development of the Indian society, and the need to accord high priority to it in our development planning strategies. It also recognises the limitations of non-governmental funding, and the vital importance of state funding of higher and technical education to promote equity and growth.

Based on the discussions held in the first two meetings, a draft report was prepared by Professor Jandhyala Tilak, Member-Secretary. The draft report was circulated among the members and was thoroughly discussed in the meeting held on 19 May 2005. The comments, suggestions and submissions made by the members were quite helpful in finalising the report. We acknowledge the valuable

contributions of all the members of the Committee and special invitees, whose names are given in the Annexure at the end of the Report.

We are also thankful to the National Institute of Educational Planning and Administration, the Planning Commission and the Ministry of Human Resource Development, Government of India for the assistance provided for the smooth functioning of the Committee.

We are pleased to place the *Report* before the Central Advisory Board of Education, with a hope that the recommendations of the Committee will receive serious attention and help in sound policy making in higher education.

Bhalchandra Mungekar
Chairman

Jandhyala B G Tilak
Member-Secretary

23 June 2005
New Delhi

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Report of the CABE Committee on FINANCING HIGHER AND TECHNICAL EDUCATION

1. INTRODUCTION

Everyone has the right to education … and higher education shall be equally accessible to all on the basis of merit.

UNIVERSAL DECLARATION OF HUMAN RIGHTS (1948).

… higher education determines its (India's) economic and technological progress… Government funding must continue to be an essential and mandatory requirement for support to higher education. The Government/State must continue to accept the major responsibility for funding...

REPORT OF JUSTICE DR K PUNNAYYA COMMITTEE ON UGC FUNDING OF INSTITUTIONS OF HIGHER EDUCATION (1993).

… ensure that nobody is denied professional education because he or she is poor...

COMMON MINIMUM PROGRAMME UPA GOVERNMENT (2004).

Context

After independence India has started almost from a scratch and made significant progress in the field of education. During the post-independence era, the progress in the case of higher education is also very impressive. The number of universities has increased from a meagre 28 in 1950-51 to above 300, and the number of colleges increased from less than 700 to more than 15,000 by 2004. There was an explosion in student numbers, as the

enrolments in higher education swelled from less than half a million in 1950-51 to about one crore in 2003.

At the same time, it must be noted that despite massive growth in numbers, hardly 8-9 per cent of the relevant age-group population in the country is presently enrolled in higher education institutions. Quality and equity dimensions of higher education also need serious attention. Despite some improvement in equity over the decades, higher education is still not accessible to the poorest groups of the population. Inter-regional variations in quality, quantity and equity dimensions of higher education are marked. 'Empowerment of higher education,' as Shri A.P.J. Kalam, President of India observed, is the critical need of the hour. Higher education needs to be empowered, as it, and it alone, helps in sustainable social, economic and political development of the society and some assurance of equity.

Empowerment of higher education requires liberal funding by the government. But the funding pattern has been far from satisfactory. As the Government of India has admitted in the *Tenth Five Year Plan*, "part of the problem facing universities is the inadequate provision of budgetary resources from the Government." In a sense, higher education in India is in a deep financial crisis, with escalating costs and increasing needs of the system on the one hand, and shrinking provisions of the public budgetary resources on the other. As a result, several universities and institutions of higher education are in continuous deficit. The unveiling of economic reform policies in the early 1990s also contributed to the accentuation of financial hardships of the institutions of higher education. Some of the recommendations of the UGC committee on UGC Funding of Institutions of Higher Education (under the chairmanship of Justice Dr K Punnayya, 1992-93), and the AICTE Committee on Mobilisation of Resources for Technical Education (under the chairmanship of Dr D Swaminadhan, 1994) have been implemented and some not. All those that were implemented have not necessarily produced desirable results, while some which have not been implemented may still be relevant.

Thus we need a serious rethinking on policies relating to financing higher education, including specifically financial reforms that have been introduced during the last decade and a half. In this context, it may be noted that the UNESCO World Conference on Higher Education held in 1998, the International Task Force on Higher Education and Society that consisted of members of the World Bank, Unesco and the present Prime Minister of India among others (*Higher Education in Developing Countries: Peril and Promise,* 2000) and the World Bank (*Constructing Knowledge*

Societies, 2002), have highlighted: (a) the importance of higher education, including the importance of liberal higher education in development, and (b) the importance of State funding of higher education and have argued for almost a u-turn in the policies on higher education in developing countries. It is time for us now to reexamine our recent policies and to have a fresh look at the problems of financing higher and technical education in the country.

The present report is an attempt in that direction. It reviews some of the important trends in financing higher and technical education since the beginning of the 1990s, examines the policies and approaches adopted, and makes some suggestions on selected aspects for the improvement of the system.

Higher Education and Development

First, it is necessary to have a clear perception of the concept and nature of higher education and its role in socio economic development, as it would guide framing of appropriate policies on financing of higher education.

Nature of Higher Education

Higher education is widely recognised as a public good, at least a *quasi*-public good, as it produces a huge set of economic, social, cultural, demographic and political externalities. Higher technical education is associated, in addition, with technological and dynamic externalities. Second, education is also a *merit* good. The Ministry of Finance, Government of India, has recognised post-elementary education at least as a *Merit-2* good (revising its stand from the initial position that it was a *non-merit* good), that needs to be financed considerably by the State. [It recognised elementary education as a *Merit-1* good.] Third, education is an important investment both from social and individual points of view. Investment in higher education makes a vital contribution to accelerate the process and rate of economic growth, through increasing human productivity. Higher education is, therefore, regarded crucial to the development of developing countries, and to their ability to compete in the global economy. Higher technical education is one of the most important components of human capital. This in fact, is seen as 'specialised human capital.' The returns to such specialised human capital are estimated to be very high. Increasing returns to total factor productivity are due to investment in specialised human capital formed through investment in higher technical and professional education, including science and

technology; and such human capital checks the general pattern of diminishing returns and even contributes to increasing returns. In fact, higher education as a whole forms an important instrument for development, as it is the higher education that makes the difference between the rich and the poor nations and the rich and the poor people. Higher education also forms a unique investment that promotes growth and equity at the same time. With respect to equity, higher education is perhaps one of the most important instruments, providing social, occupational and economic mobility to the weaker sections in the society. After all, promotion of equity is an important social function of the universities, independent of other growth promoting functions. Lastly, the current debates on human rights are no more confined to primary or elementary education; they are also getting extended to cover higher education as well. After all, the 1948 *Universal Declaration of Human Rights* of the United Nations did include higher education as an important human right, though qualified, in contrast elementary education as an absolute human right

It is also pertinent to emphasise the important functions of higher education. They are: creation and dissemination of knowledge; supply of manpower, specifically knowledge workers; attitudinal changes for modernisation and social transformation; formation of a strong nation-state, and promotion of higher quality of individual and social life. It is widely recognised that these traditional functions of higher education are ever relevant for all societies – modern as well as traditional, and developed as well as developing. These functions are performed through teaching, research and extension activities, and all the three are important facets of a sound higher education system and all the three need to be well-nurtured and strengthened.

The strong wave of globalisation and trends of internationalisation of higher education further reinforce the need to develop a strong and vibrant higher education system for two reasons: (a) our institutions of higher education have to become centres of excellence and be internationally competitive. Global competition in higher education put additional emphasis on the need for serious efforts to improve the quality of higher education. After all, only those societies could reap gains of globalisation that have strong and widespread higher education systems, while the countries that have not made much progress in higher education suffered severely. Strengthening of our higher education institutions, even on a selective basis, may help in facilitating our institutions to compete with foreign institutions that are coming into the country and even to force them to exit from India, if necessary.

After all, many foreign universities are coming to India and other developing countries, where higher education systems are weak. Hence, given the wave of globalisation, increasing international competition, building of knowledge society, and also increasing rates of international outflow of human capital, the need for according a higher priority to higher education arises in countries like ours. (b) Secondly, as inequity-enhancing aspects of globalisation are very strong, leading to progressive reduction in social opportunities, it becomes imperative to pay serious attention to improvement of access and equity in higher education. Otherwise, a larger number of our young population may get increasingly marginalised during the phases of globalisation.

It is increasingly felt that the emergence of knowledge-economy has brought into focus the interesting linkages between higher education, knowledge, and wealth creation. Knowledge is a driving force for enhancing economic strength of a nation, and that this can be realised only if education and research in liberal as well as in professional disciplines is of sound quality. While technical education produces technical manpower, it is humanities, social sciences, languages and natural and physical sciences that help in producing all-rounded citizenry. Given all this, higher education cannot be a 'non-priority area' anymore, and higher education institutions cannot be treated as if they are a part of a *non-essential* sector with the attendant vulnerability to the vagaries of fluctuations in public funding. Higher education thus needs sustained funding from public exchequer.

Current Status of Higher Education[*]

According to the latest statistics available, in 2002-03 there are 300 universities, including institutions deemed to be universities and 15,000 colleges offering general and professional education in India. Perhaps this is one of the largest networks of higher education systems in the developing world. Even with respect to technical education, a wide network has been established, that includes seven technological institutes of high standard (IITs), and

[*] The primary source of most of the statistics used here are the publications of the Ministry of Human Resource Development (*Selected Educational Statistics*, *Analysis of Budget Expenditure on Education*, and *Annual Report*s); University Grants Commission (*Annual Report*s); and reports of the National Sample Survey Organisation. In addition, some evidence is drawn from a few research studies. Given some of the well known limitations of our database, the figures need to be interpreted with caution. But for some statistics on total enrolments and institutions, the Report could not consider medical and other professional types of education. It, however, does discuss aspects relating to technical education.

six institutions of management (IIMs), 978 colleges of engineering, technology and architecture, 759 medical colleges, 873 teacher training colleges, and 1982 other professional and technical institutions comprising agriculture, law, management, computer applications, and information technology in 2003. There are 1173 polytechnics. These figures do not include the vast network of about 300 and odd science and technology institutions, including more than 200 specialised laboratories. Further, there are nearly one thousand industrial research and development laboratories in private and public sector. The output of these institutions is indeed impressive – both in quality and quantum. India could become one of largest reservoirs of scientific and technical manpower in the world, and is able to 'export' manpower, particularly in information, communications and technology sector to the world. At the same time paradoxically hardly any Indian institution of higher education figures in the list of top level institutions in the world, raising concerns about quality and standards of our higher education.

Table 1
Growth of Higher Education in India

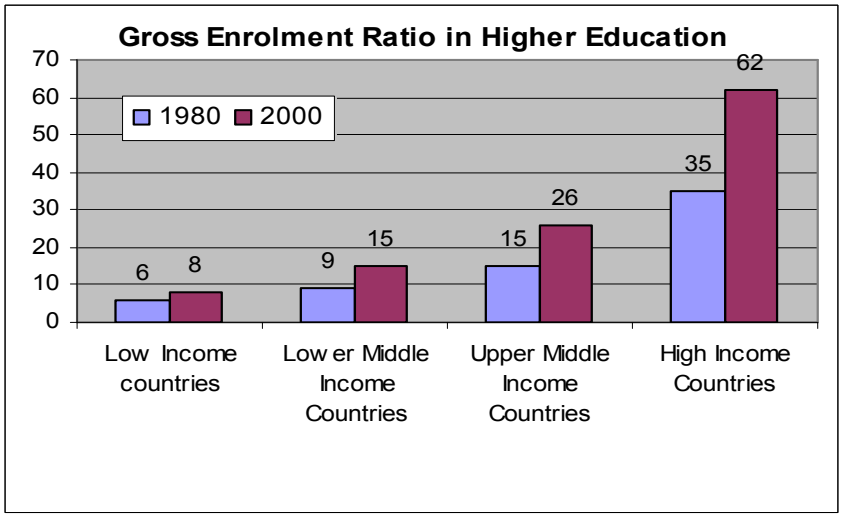
	Colleges	Universities+	Enrolment (in 10 lakhs)
1857-58	27	3	250*
1947-48	496	20	0.2
1950-51	578	28	0.2
1960-61	1,819	45	0.6
1970-71	3,277	93	2.0
1980-81	4,577	123	2.8
1990-91	6,627	184	4.4
2001-02	11,146	272	8.8
2002-03**	15,343	300	9.3

Source: UGC *Annual Report*s and other publications
*number (not lakhs) ** provisional
+ includes deemed universities, etc.

In all, nearly one crore young people are enrolled in higher education institutions in the country, of whom about one-fifth are estimated to have been enrolled in technical education. Though the number of students seems to be large, the gross enrolment ratio (number of students as a percent proportion of the youth population of the age group 17-23/18-24) is 8-9 per cent, which is not adequate for a country that aims at transforming itself into an industrial tiger economy, or in simple words, a developed country.

Though international comparisons have their own known limitations, they nevertheless provide some broad indications on the relative position a country in comparison with others. The current enrolment ratio in India is less than the average of lower middle income countries in the world. While on average high income countries have a ratio above 60 per cent, the same is more than 25 per cent in the group of upper middle income countries. For instance, the corresponding ratio is above 80 per cent in USA, above 70 per cent in Sweden, Norway, New Zealand, above 60 per cent in UK and Australia, and above 40 per cent in several European countries, and more than 20 per cent in many developed countries and also in several developing countries such as Mexico, Malaysia, Thailand, Chile and Brazil.

Figure 1



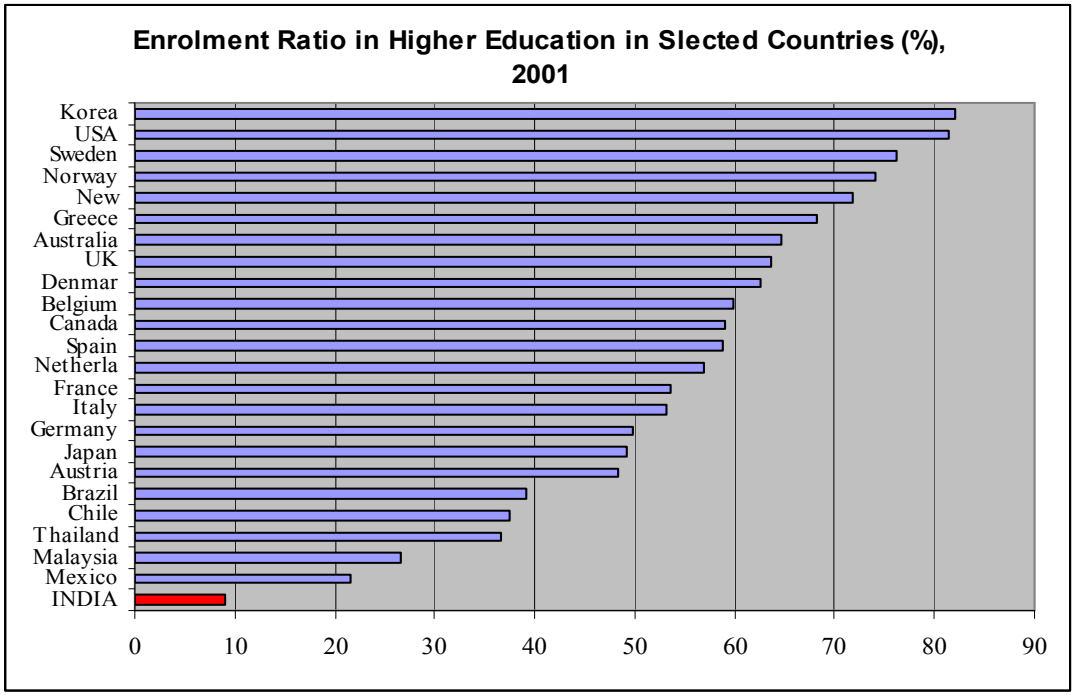
Source: *World Development Indicators 2003*

Country-wise evidence shows that no country could become an economically advanced country, if the enrolment ratio in higher education is less than 20 per cent. We find actually no country in the group of the developed countries whose enrolment ratio in higher education is less than 20 per cent, and conversely we find very few countries with an enrolment ratio of above 20 per cent among the developing countries with very few exceptions of some countries in Latin America and Philippines.

Thus a level of 20 per cent of enrolment ratio seems to be the threshold level of higher education to contribute to rapid and sustainable economic progress. However, it has to be noted that a 20 per cent enrolment ratio in higher education may not necessarily and automatically lead to high economic growth, but such a ratio in

high quality higher education can be expected to contribute to high economic growth, subject to other conditions.

Figure 2



Source: *UNESCO: EFA Global Monitoring Report 2005*

In other words, the enrolment ratio of 20 per cent becomes a necessary condition for development, but not a sufficient condition. The evidence on threshold level refers to early-to-mid 1990s. More recent evidence may indicate that the threshold level may be even higher.

Secondly, inter-state variations in the development of higher education are glaring in India. Some states have expanded their higher education systems fast, but many are lagging behind. For example, the enrolment ratio is as high as 29 per cent in Chandigarh, but less than five per cent in Jammu and Kashmir and Nagaland in 2002-03. In as many as 15 out of 31 states/union territories on which estimates are presented in Table 2, the enrolment ratio is below the national average, less than nine per cent.

Policies of development of higher education vary from state to state, particularly in terms of emphasis on provision of access to higher education, improvement in quality, funding, etc., though most states follow broadly the national policies and in conformity

with the policy guidelines periodically formulated by the apex education organisations such as the University Grants Commission, All India Council for Technical Education and other similar bodies. There are, however, several other factors responsible for inter-state variations in the development of higher education. Table 2 shows these inter-state variations.

Table 2
Gross Enrolment Ratio in Higher Education, 2002-03 (%)

State/Union Territory	Ratio	State/Union Territory	Ratio
Andhra Pradesh	9.51	Meghalaya	10.94
Arunachal Pradesh	6.37	Mizoram	9.51
Assam	8.67	Nagaland	4.33
Bihar	7.30	Orissa	8.71
Chattisgarh	7.27	Punjab	8.53
Goa	13.47	Rajasthan	8.77
Gujarat	9.65	Sikkim	6.29
Haryana	10.56	Tamil Nadu	10.91
Himachal Pradesh	12.76	Tripura	5.84
Jammu & Kashmir	4.95	Uttar Pradesh	7.03
Jharkhand	8.12	Uttaranchal	12.25
Karnataka	9.92	West Bengal	8.21
Kerala	7.66	Chandigarh	28.68
Madhya Pradesh	7.77	Delhi	10.94
Maharashtra	12.30	Pondicherry	17.88
Manipur	13.19	*All India*	*897*
Source: *Selected Educational Statistics 2002-03*			

Table 3
Enrolment of Scheduled Castes, Scheduled Tribes and Women in Selected Areas in Higher Education in India
(% of Total enrolment)

	Total	PG & Ph.D.	Degree Level	Engg*	B.Ed/BT	Medicine*
Scheduled Castes						
1990-91	8.6	8.7	8.7	5.7	8.4	8.6
2002-03	11.3	11.4	12.0	6.7	13.9	13.2
Scheduled Tribes						
1990-91	2.1	1.8	2.2	1.1	2.3	0.7
2002-03	3.6	2.7	3.7	3.2	5.0	5.0
Women Students						
1990-91	33.8	32.2	34.7	10.9	44.2	34.3
2002-03	40.1	42.3	42.0	22.6	52.0	41.6
* and related areas Source: *Selected Educational Statistics* (relevant years)						

There has been some improvement in the area of equity in higher education over the years. Women students constitute 40 per cent of all students in higher education in 2002-03. But there exists much scope for improvement in equity in terms of other social and economic groups: Scheduled Caste students form only 11.3 per cent and Schedule Tribes a meagre 3.6 per cent of the total enrolment in higher education. This is shown in Table 3. These ratios are below the corresponding ratios of respective population groups in total population. Interestingly, the representation of the weaker sections is higher in professional courses than in general courses of study.

The cumulative development in higher education gets reflected in the stock of higher educated population and labour force. According to NSSO, in every thousand on average only 29 persons have general higher education and 14 have technical education (three are technical degree holders and 11 have technical diploma) in 1999-2000. In the case of workforce, people with higher and technical education form still smaller proportions, 18 with general higher education and nine with technical education (two degree holders and seven diploma holders).

We also find very striking differences by economic groups of population in the adult population with respect to higher education. The proportion of population with higher education sharply rises with rising levels of household economic status both in rural and urban areas. In the bottom quintile (monthly per capita consumption expenditure quintile) hardly one per cent of the population has higher education, and this ratio steadily rises to above ten per cent in the richest quintile. In rural areas, the corresponding ratio increases by seven times between the bottom and top quintiles, and it increases by 15 times in urban areas, highlighting a high degree of inequalities within urban areas. The differences between rural and urban areas are quite striking at each quintile. In all, only 16 out of every 1000 in rural areas are a college graduates (or above); in contrast 112 out of every 1000 in the urban areas belong to this category.

A majority of the higher educated population in rural or urban areas consists of only first degree holders; very few have done their post-graduate studies. Among the poorest quintile group in rural India there are no post graduates at all, while in the richest group in rural areas, the corresponding ratio is 0.8 per cent.

Table 4
Adult Population (age: 15 and above) with Higher Education, by Economic Groups, 1995-96 (% of the Total Adult Population)

Quintile Groups	Graduate	Post Graduate and above	Total
Rural			
00-20	0.6	0.0	0.6
20-40	0.6	0.1	0.7
40-60	0.7	0.1	0.8
60-80	1.4	0.1	1.5
80-100	3.4	0.8	4.2
Total	1.4	0.2	16
Urban			
00-20	1.5	0.3	1.8
20-40	3.8	0.5	4.3
40-60	5.5	0.9	6.4
60-80	10.1	1.9	12.0
80-100	21.8	5.4	27.2
Total	9.2	2.0	11.2
Total			
00-20	0.8	0.1	0.9
20-40	1.5	0.2	1.7
40-60	2.0	0.3	23
60-80	3.6	0.6	4.2
80-100	8.1	2.0	10.1
Total	3.5	0.7	4.2
Source: NSS 52nd Round			

The social hierarchy by social groups that we find in enrolment in higher education institutions can be found with more intensity in the distribution of population by social groups.

Table 5
Percentage of Population (7+) with Higher Education, by Social Groups, 1999-2000

	Rural			Urban		
	Male	Female	All	Male	Female	All
Scheduled Tribes	1.2	0.2	0.7	9.1	4.7	7.0
Scheduled Castes	1.3	0.3	0.8	4.1	2.0	3.1
Other Backward Castes	2.1	0.6	1.4	1.1	3.7	5.5
Others	4.4	1.4	3.0	18.2	12.7	15.6
All	2.6	0.8	1.7	12.7	8.2	10.5
Source: NSS 55th Round						

Population belonging to scheduled castes and tribes is much less educated and skilled than the non-scheduled population both in rural and urban areas. Table 5 shows the extent of inequalities by social groups in rural and urban areas, and by gender. Females belonging to scheduled castes and tribes living in rural areas are the most disadvantaged. On the whole, both in rural and urban areas, the scheduled population are much behind the others. The other backward castes also do not seem to be faring much better than the scheduled population.

Further, with the reservation policies based on regions, the national character of the universities is fast getting lost. In some states, the admissions are also restricted to sub-regional – local levels. That universities are a place where scholars from various corners of the country and the world come and live together, is becoming an obsolete idea.

Similarly that universities are also a place where scholars from various disciplines come together, discuss and debate various social, political, economic and scholarly issues, is also becoming a thing of the past. This is particularly true with the emergence of single faculty and special universities on the one hand, and the changing perceptions and aspirations of the students. Universities are also suffering from loss of social concerns with the demise of programmes such as NSS, NCC, and sports meets etc.

Thus, given (a) the current level and status of higher education in the country, (b) the highly iniquitous system in general and in higher education in particular, (c) the relationship between higher education and development, (d) the rising aspirations of the people, and (e) development goals of the country such as creation of a 'knowledge society' and transforming itself into a developed economy, some of which are stressed in the Tenth Five Year Plan, the need for according a high priority to higher education and specifically the need for substantial increase in allocation of public resources for quantitative expansion, for promotion of equity in the system, and for improvement of quality in higher education is obvious.

But the attention that is being paid to higher education has been on a rapid decline. It is widely felt that higher education is being neglected by all, particularly the government. The neglect is clear from, apart from the funding pattern described in the following section, from the absence of any discussion on higher education in important official documents. For example, in the recent past little reference to higher education can be found in the chapters on

education in the *Economic Survey*s and *Economic Review*s of the Government of India and state governments. Again, the whole discussion whether it is relating to quantitative or qualitative achievements or budget allocations, is concentrated on elementary education and literacy programmes. Annual Reports and plan documents also provide only a lip service to higher education. More importantly, even the Five Year and Annual Plan documents of the Planning Commission and of the many state governments do not provide explicit information on allocations to higher education. At best *ex-post* expenditure levels are mentioned, but not *ex-ante* allocations. While discussion on literacy and elementary education is important, it does not mean that higher education can be altogether ignored. Thirdly, it is quite surprising that even detailed statistics on higher education are not available for the recent period. Perhaps they are not being properly collected. Publications of the UGC and the MHRD used to provide detailed statistics on higher education. In the absence of basic vital statistical information, policy formulation on important issues and planning of education cannot be sound, not to speak of implementation, and much scope arises for committing serious blunders, that would be dangerous to the society in the long run.

2. FINANCING HIGHER AND TECHNICAL EDUCATION

2.1 Trends in Public Expenditure on Higher and Technical Education

Total and Per Student Public Expenditure

Total expenditure on higher education has increased remarkably during the post-independence period. At the inception of planning in the country India was spending barely Rs.17 crores on higher education, while, the government expenditure alone was of the order of above Rs9,000 crores in early years of the present decade This impressive growth is however, more than offset by increase in prices, and increase in population, more particularly student numbers in higher education. Nevertheless, on the whole, the trends suggest that higher education had a good start during the 1950s (with a real rate of growth of 7.5 per cent per annum), had its golden days during the 1960s, with the real expenditure increasing at an annual rate of growth of 11 per cent; but suffered significantly during the 1970s, with the annual rate of growth coming down to a meagre 3.4 per cent; and showed some tendencies to recover during the 1980s. Though the growth in expenditure on higher education has been erratic during the 1980s, it had increased on the whole at a rate of growth of 7.3 per cent per annum. The 1990s heralded an era of austerity and higher education suffered most. With the introduction of economic reforms at the beginning of the decade, the allocations of budgetary resources to higher education have indeed been severely affected. The trends seem to continue in the present decade as well.

Table 6 shows that public expenditure on higher education has been subject to severe budget squeezes since the beginning of the 1990s. In real terms, the union government's expenditure on higher education declined from Rs. 646 cores (in 1993-94 prices) to Rs. 559 crores in 1996-97. A sizeable part of the union government's allocation (through UGC) is understandably accounted by the central universities; though plan expenditure includes allocations to central and state universities and colleges. Any way, since bulk of the expenditure is incurred by the state governments, the total expenditure on higher education in the country as a whole did not decline so steeply. Though state governments had experienced severe fiscal problems, they could not cut the budgets

for higher education, essentially because they are mostly non-plan expenditures, or simply the maintenance expenditure. But there was no significant increase. Cut in union government expenditure does mean cuts in plan allocations for higher education. However, since 1988-99 the union government seems to increase its allocations to higher education substantially. But this did not last long, as we again find a significant decline.

Table 6
Government Expenditure on Higher Education in India (Rs in crores)

	State	Union	Total	State	Union	State	Union	Total
	In current Prices			Per cent Shares		in 1993-94 prices		
1990-91	1836.4	475.5	2311.9	79.43	20.57	2493.9	645.7	3139.7
1991-92	1948.1	495.6	2443.8	79.72	20.28	2325.4	591.6	2917.1
1992-93	2195.1	504.8	2699.9	81.30	18.70	2410.1	554.3	2964.4
1993-94	2589.3	514.3	3103.6	83.43	16.57	2589.3	514.3	3103.6
1994-95	2841.1	684.2	3525.3	80.59	19.41	2592.3	624.3	3216.6
1995-96	3158.1	713.2	3871.3	81.58	18.42	2643.1	596.9	3240.0
1996-97	3571.4	716.5	4287.9	83.29	16.71	2784.5	558.6	3343.1
1997-98	3921.0	938.1	4859.1	80.69	19.31	2864.0	685.2	3549.2
1998-99	4516.8	1600.0	6116.8	73.84	26.16	3054.3	1081.9	4136.2
1999-2000	6047.0	2201.4	8248.4	73.31	26.69	3936.1	1433.0	5369.1
2000-01	6909.5	2285.3	9194.8	75.15	24.95	4349.1	1438.5	5787.6
2001-02	6440.0	1647.7	8087.7	79.63	20.37	3920.4	1003.5	4923.5
2002-03RE	7241.2	1748.4	8989.6	80.55	19.45	4233.1	1022.1	5255.2
2003-04BE	7506.6	1771.6	9278.2	80.91	19.09	4261.5	1005.8	5267.2

Source: Based on *Analysis of Budgeted Expenditure on Education* (various years).

In nominal prices, there was an increase by nearly 70 per cent between 1997-98 and 1998-99, and by 43 per cent between 1998-99 and 2000-01. This was followed by a decline in nearly 30 per cent in the following year. On the whole, as we note below, even the overall increase has not been proportionate to the increase in student population. Secondly, how far this trend would last is also doubtful, for we have already experienced a sudden fall after 2000-01 even in nominal prices.

Public expenditure on technical education does not seem to have suffered major fluctuations during the 1990s. It increased steadily from Rs.753 crores in 1990-91 to Rs.3182 crores in 2003-04 (budget estimate) in current prices. However, in real terms it increased only by about 75 per cent during this period. Further,

plan expenditure has not increased as much as non-plan expenditure during this period.

Table 7
Budget Expenditure on Technical Education in India
(Rs in Crores)

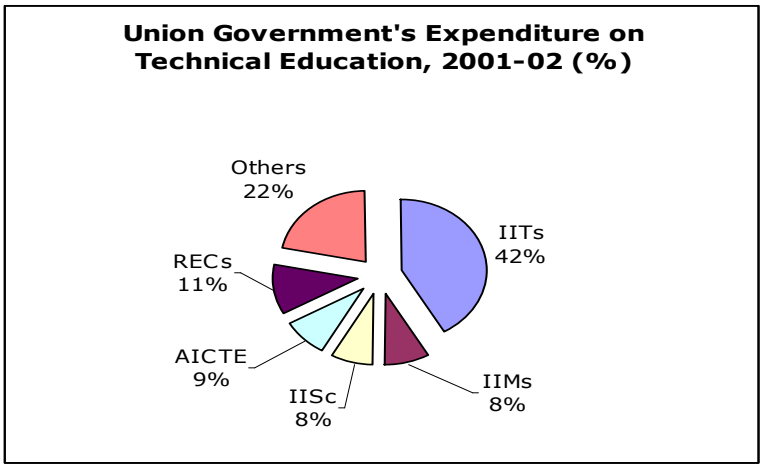
Year	In Current Prices			In 1993-94 Prices		
	Plan	Non Plan	Total	Plan	Non Plan	Total
1990-91	265.38	487.63	753.01	360.41	662.24	1022.65
1991-92	289.99	519.47	809.46	346.15	620.07	966.22
1992-93	313.87	593.25	907.12	344.61	651.36	995.97
1993-94	345.48	672.25	1017.73	345.48	672.25	1017.73
1994-95	471.40	717.86	1189.26	430.12	655.00	1085.12
1995-96	488.85	801.40	1290.25	409.01	670.51	1079.51
1996-97	554.05	895.96	1450.01	431.98	698.55	1130.53
1997-98	619.37	1003.19	1622.56	452.49	732.90	1185.39
1998-99	706.33	1366.81	2073.14	477.73	924.45	1402.17
1999-2000	874.18	1584.78	2458.96	569.23	1031.94	1601.17
2000-01	735.21	1792.81	2528.02	462.78	1128.48	1591.25
2001-02	789.35	1771.04	2560.39	480.52	1078.13	1558.66
2002-03RE	832.14	2056.36	2888.50	486.45	1202.11	1688.57
2003-04BE	1076.58	2105.73	3182.31	611.17	1195.41	1806.58

Source: *Analysis of Budget Expenditure on Education* (various years)

While the union government meets only 30 per cent of the total government expenditure on higher education, in the case of technical education, the union and the state governments share almost equally the total financial responsibilities. In 2001-02, the share of the union government was 48 per cent, while the states funded the remaining 52 per cent.

A substantial proportion, above 40 per cent, of the union government's expenditure is accounted by the grants to the Indian Institutes of Technology in 2001-02, as shown in Figure 3. The All India Council for Technical Education, the Indian Institutes of Management, and the Indian Institute of Science get eight per cent each. The Regional Engineering Colleges account for 11 per cent, and all others account for the rest. The others include community polytechnics, technical teachers training institutes, and a few specific institutes such as the National Institute of Industrial Engineering, the National Institute of Foundry and Forge Technology, the Asian Institute of Bangkok etc., and also some programmes such as apprenticeship.

Figure 3



But on the whole, the flow of grants from the union government to these various institutes of technology and management have not been smooth.

Table 8
Union Government's Expenditure on Technical Education
(Rs crores in current prices)

	1993-94	2001-02	2002-03RE	2003-04BE
Total	405.2	1241.8	1349.1	1544.9
IITs	142.1	517.5	588.0	589.0
IIMs	17.5	102.4	72.2	74.7
IISc	51.6	100.0	110.0	99.0
AICTE	2.4	108.6	120.0	130.0
RECs	72.5	139.7	190.1	216.7
Others	119.1	273.7	268.7	435.5

Source: *Analysis of Budgeted Expenditure on Education* (various years)

As described later, the total (union plus state government) expenditure on technical education forms a small proportion of the total government expenditure (0.4 per cent) and even of total education expenditure (about four per cent).

Expenditure per Student

Estimates of expenditure per student are somewhat indicative of the quality and efficiency of education. Public expenditure per student on higher education in nominal terms increased by several

times during the post-independence period, but the real expenditure has registered a negative growth, as shown in Table 9.

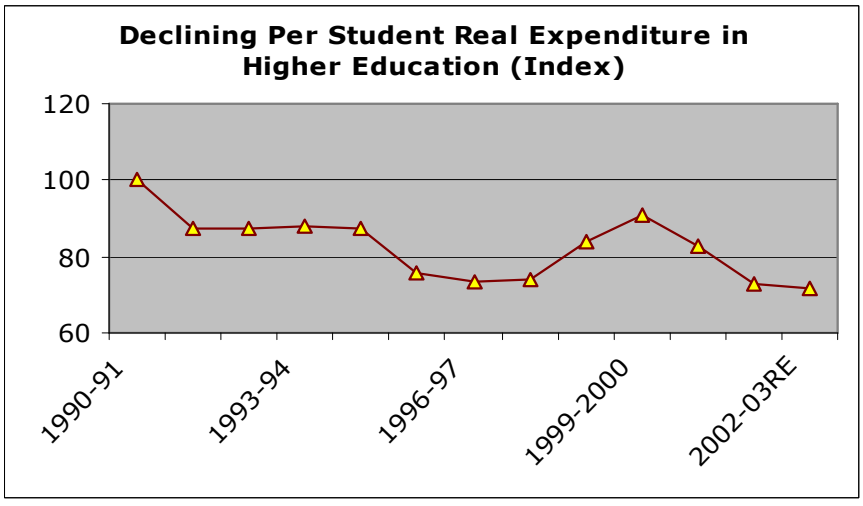
Table 9
Public Expenditure on Higher Education per Student (Rs.)

	in current prices	in 1993-94 prices	Index
1990-91	5652	7676	100.00
1991-92	5636	6727	87.64
1992-93	6111	6710	87.42
1993-94	6738	6738	87.78
1994-95	7329	6687	87.12
1995-96	6944	5812	75.72
1996-97	7207	5619	73.20
1997-98	7793	5692	74.15
1998-99	9536	6448	84.00
1999-2000	10683	6954	90.59
2000-01	10543	6367	82.95
2001-02	9669	5582	72.72
2002-03RE	9446	5522	71.93

Source: Based on *Analysis of Budget Expenditure on Education* (various years).

In fact, the decline has been very drastic during the 1990s. In 1993-94 prices, expenditure on higher education per student declined from Rs. 7676 in 1990-91 to Rs. 5500 in 2002-03 (budget estimates), a decline by nearly 28 percentage points in the index in a 12-year period.

Figure 4



Decline in per student expenditure means decline in real resources available per student on an average, seriously affecting the quality of higher education. There were steep cuts in budget allocations for libraries, laboratories, scholarships, faculty improvement programmes, and even for faculty salaries, along with others. Given the present level of development, it may be necessary to ensure that per student expenditure does not decline in real terms over the years.

Relative Priorities

Ever since the recommendation of the Education (Kothari) Commission in 1966, and the *National Policy on Education* (1968), the government has promised repeatedly to increase the allocation to education so that it reaches at least six per cent of national income. However, currently only four per cent of the gross national product (GNP) is being spent on education. The *Common Minimum Programme* also promises the same. Even though there is no sanctity of the six per cent norm, this has been regarded as a modest goal to be reached soon, so that education sector does not suffer from paucity of resources. According to some earlier estimates, we may indeed require much more than six per cent of the GNP to provide reasonably good quality education.

In terms of relative priorities, higher education suffered severely. The relative priority accorded to higher education can be measured in terms of the share of higher education in the GNP. Presently 0.4 per cent of GNP is being spent on higher education, while many developed countries invest between 1.0 to 2.5 per cent of their respective GNP. Even some of the developing countries in the Asian region, which are economically not better off than India, seem to be spending more than India on higher education.

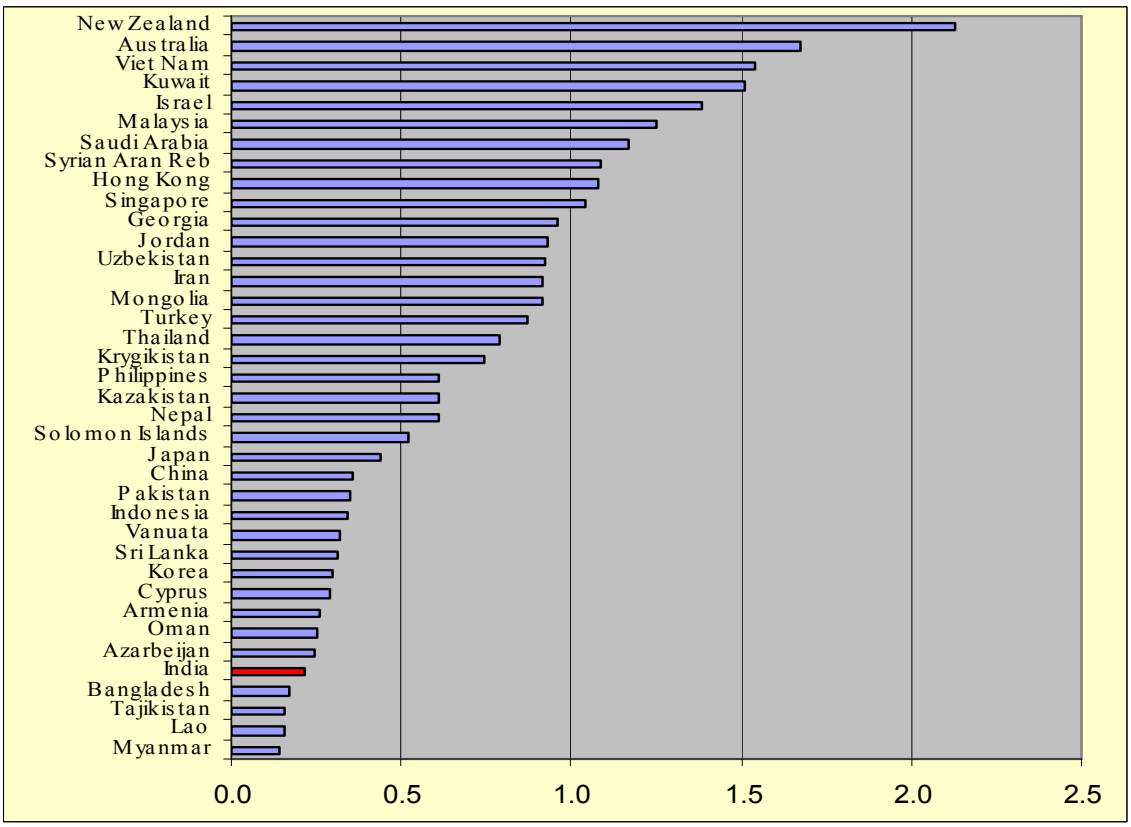
Share of higher education in the total government expenditure may tell us more clearly about the priority that the government attaches to higher education, as the government has more direct control on its own expenditure than on the national income as a whole. As a percent proportion of total government expenditure, the share of higher education declined from 1.6 per cent in 1990-91 to 1.3 per cent in 1996-97; it has increased in the later years to 1.6 per cent in 2000-01, but according to the later figures, it declined steeply to 1.2 per cent in 2003-04, i.e., to much below the 1990-91 level.

Table 10
Higher Education: Relative Priorities

	Government Expenditure on Higher Education as		Government Expenditure on Technical Education as	
	% of GNP	% of Total Government Revenue Expenditure	% of GNP	% of Total Government Revenue Expenditure
1990-91	0.46	1.58	015	0.51
1991-92	0.42	1.43	0.14	0.48
1992-93	0.41	1.42	0.14	0.48
1993-94	0.40	1.42	0.13	1.47
1994-95	0.39	1.40	0.13	0.47
1995-96	0.37	1.35	0.12	0.45
1996-97	0.35	1.30	0.12	0.44
1997-98	0.35	1.31	0.12	0.44
1998-99	0.43	1.39	0.13	0.47
1999-2000	0.47	1.61	0.14	0.48
2000-01	0.49	1.61	0.13	0.44
2001-02	039	131	0.12	0.41
2002-03RE	0.40	128	0.13	0.41
2003-04BE	0.37	1.23	0.13	0.42

Source: Based on *Analysis of Budget Expenditure on Education* (various years).

Figure 5
Share of Public Expenditure on Higher Education in GNP (%) in Asia



Source: UNESCO and World Bank

Similarly the share of public expenditure on technical education in GNP and in the total government expenditure has been small and also declined marginally. As a proportion of GNP it is now 0.13 per cent, and as a proportion of total government expenditure it is 0.4 per cent, declining from 0.5 per cent in 1990-91.

Higher Education in Five Year Plans

Five year plans set new directions for development—quantitative expansion, improvement in quality, innovations, as well as several other dimensions of education development. The share of higher education in total (five year) plan expenditure increased from 0.7 per cent in the First Five Year Plan (1951-56) to 1.2 per cent in the Fourth Five Year Plan (1969-74). But ever since, it has declined continuously to 0.5 per cent in the Seventh Five Year Plan (1986-90) and further down to 0.3 per cent in the Eighth Five Year Plan (1992-97).

More strikingly, relative allocations to higher education in the eighth and the ninth five year plans reached the all-time bottom levels. Though plan expenditures in education are generally small compared to huge non-plan expenditures, since they set directions for future development, allocations in the five year plans assume much importance. Hardly 0.3 per cent of the total five year plan expenditure in the Eighth Five Year Plan and 0.5 per cent in the ninth plan was devoted to higher education, compared to 1.2 per cent in the Fourth Five Year Plan. (Table 11)

Table 11
Share of Different Levels of Education in the Total Expenditure in the Five Year Plans (%)

Five Year Plan	*I*	*II*	*III*	*IV*	*V*	*VI*	*VII*	*VIII*	*IX*
Elementary	4.3	2.0	2.3	1.5	0.8	0.8	1.3	2.1	3.2
Secondary	1.0	1.1	1.2	0.9	0.4	0.7	0.8	0.8	1.1
Higher	0.7	10	1.0	1.2	0.5	0.5	0.5	0.3	0.5
Technical	1.0	0.7	1.5	0.7	0.4	0.3	0.4	0.6	0.6

Source: Tilak (2003)

The share of technical education also declined from the Third Five Year Plan onwards – from 1.5 per cent in the Third Plan to 0.3 per cent in the Sixth Plan. Later, it seems to have regained a little bit of its lost ground, and is being treated marginally better than general higher education.

It may be important to note that since all levels of education received declining shares in the total five year plan allocations/expenditures. No systematic pattern can be found in Table 11 to argue that reduction in allocation of resources to one sector of education benefited any other level of education. Therefore, it may not be tenable to view that cut in expenditure on higher education is necessary for increasing allocation to elementary or secondary school education, or *vice versa*. Hence, the practice of posing one level of education against another in allocation of resources may not be proper and in fact, may sound absurd.

Within the total plan expenditure on education in the five year plans also, the share of higher education moved in a similar fashion. For instance, the share of higher education doubled in the total expenditure on education from nine per cent in the first Five Year Plan to 18 per cent in the Second Five Year Plan, and increased to an all time peak of 25 per cent in the Fourth Five Year Plan, and since then it has been consistently declining, and was 14 per cent in the Seventh Five Year Plan.

Table 12
Allocation of Plan Expenditure in Education to Higher and Technical Education in the Five Year Plans in India (Rs. In crores)

Five Year Plan	Higher	Technical	Total Education as % of Total Plan Outlay
First	14 (9)	20 (13)	7.86
Second	48 (18)	49 (18)	3.83
Third	87 (15)	125 (21)	6.87
Annual Plans	77 (24)	81 (25)	4.86
Fourth	195 (25)	106 (13)	5.04
Fifth	205 (22)	107 (12)	3.27
Sixth	530 (18)	324 (11)	2.70
Seventh	1201 (14)	1083 (12)	3.50
Annual Plans	595 (11)	848 (16)	4.20
Eighth	1516 (7)	2786 (13)	4.90
Ninth Plan	4350 (8)	4778 (9)	6.20

Note: Figures in ( ) are% to total.
Source: *Five Year Plan*(s), *Annual Plans*(s),*Analysis of Annual Plan, Education Sector*

The share of higher education in the total education expenditure in the Eighth and the Ninth Five Year Plans was found to be a meagre 7-8 per cent, the lowest proportions in the last half a century, compared to 18 per cent (actual expenditure) in the Sixth Plan, and above 20 per cent in the Fourth and the Fifth five year plans. During the first four five year plans, increasing priority was given to higher education in the five year plans and in the later period, higher education was paid scant attention in terms of allocation of plan resources.

Technical education also received relatively better treatment in the first three five year plans, and ever since, the share allotted to it has come down. On the whole, the relative allocations to technical education did not experience significant variations during the plan period. Except in the Second and the Third Five Year Plans, when the allocation was raised to 18 per cent and 21 per cent respectively, the share of technical education has been stable at around 11-13 per cent. It is only in the Ninth Plan, the share was reduced to below ten per cent.

On the whole, the ninth Plan allocations to higher education and technical education as a proportion of the total expenditure on education are less than the allocations made in the first plan.

Though in terms of total (plan plus non-plan) expenditure as a proportion of GNP and the government budget, technical education received much less than higher education, technical education received better treatment in the case of the allocations in plan expenditure. About one-third of the total public expenditure on technical education is of plan category.

In the total (plan plus non-plan) expenditure on education, the relative share of higher education has been a little bit stable around ten per cent; similarly the share of technical education remained stable at a low level of about four per cent.

The most serious casualty of this decline in expenditure on higher education has been the quality of education, as investment in those inputs that have stronger relationship with quality, such as research is reduced. The reduction in expenditure on education first results in the fall in investment in books and journals in the libraries, consumable material in the laboratories, infrastructure and other quality improvement programmes in colleges and universities. Further, quality of education may deteriorate with increased number of students per teacher, with reduced number of books in libraries, etc. There has been an enormous increase in prices of books and journals, published within the country and more importantly outside; and as a result, with declining budgetary resources, many

universities have had to inflict very serious cuts on acquisition in libraries. Budget cuts for libraries have actually led to impoverishment of libraries, a crucial place of learning in higher education. The reliance on modern electronic facilities for library resources, which are unevenly distributed, and also the not so highly effective programmes of developing consortia of universities for sharing library material, and the corresponding cuts in acquisitions in general and in particular acquisitions of hardcopy material in libraries also affect the quality and access in higher education.

Funds for research have become scanty in many universities and other institutions of higher education. UGC's non plan grants for research fellowships have dwindled form Rs.24.4 crores in 1995-96 to Rs.18 crores in 2001-02 and grants for teacher awards declined from Rs.39 lakhs in 1993-94 to Rs.13.9 lakhs in 2001-02. This is despite the fact that some of these programmes have great potential for promoting research and excellence in higher education, and hence it is necessary to strengthen research-support programmes with increased allocations. Not only the grants by the UGC, but also grants to research by other central bodies (of the union government) also seemed to have declined.

Whenever there is a cut in public expenditure on education, it is the quality, and more importantly equity, that get traded-off. One can note a steep decline in the budgets for scholarships in higher education that have great potential for promoting equity in higher education, as a large proportion of scholarships are meant for weaker sections. What is important is scholarships themselves constitute a very small proportion of total expenditure on higher education. (Table 13)

But even the small proportion declined further: it declined from 0.5 percent of the total expenditure on education in 1990-91 to 0.15 percent in 1999-2000. Even the total absolute amounts have declined by 46 per cent in real terms between 1990-91 and 2001-02. Nor did the budget expenditure on scholarships in technical education fare any better. It also declined from 0.45 per cent of the total expenditure in 1990-91 to 0.12 per cent in 1999-2000, and has marginally increased in the recent years. Even in absolute terms, there was a decline in real prices by more than 20 per cent between 1990-92 and 2003-04. At a time when fees were increasing, and when the economic reform policies caused severe problems to the lower and middle income groups, allocations to scholarships were also reduced.

Table 13
Public Expenditure on Scholarships in Higher and Technical Education

	Higher Education			Technical Education		
	in current prices (Rs Crores)	in 1993-94 prices (Rs Crores)	% of Total Expenditure on Higher Education	in current prices (Rs Crores)	in 1993-94 prices (Rs Crores)	% of Total Expenditure on Technical Education
1990-91	11.30	15.35	0.49	2.00	2.72	0.45
1991-92	13.00	15.52	0.53	2.36	2.82	0.48
1992-93	12.60	13.83	0.47	2.11	2.32	0.37
1993-94	13.40	13.40	0.43	5.74	5.74	0.94
1994-95	14.00	12.77	0.40	1.91	1.74	0.26
1995-96	14.70	12.30	0.38	1.84	1.54	0.23
1996-97	17.10	13.33	0.40	6.25	4.87	0.68
1997-98	13.40	9.79	0.28	1.92	1.40	0.19
1998-99	20.30	13.73	0.33	2.12	1.43	0.17
1999-2000	18.99	15.85	0.15	1.66	1.08	0.12
2000-01	15.31	9.64	0.22	314	1.98	0.25
2001-02	11.55	7.03	0.18	3.63	2.21	0.28
2002-03RE	20.81	12.17	0.29	3.86	2.26	0.25
2003-04BE	23.77	13.49	0.32	3.75	2.13	0.23

Source: Based on *Analysis of Budgeted Expenditure on Education* (various years)

Though all those who advocate increase in fees also argue for sufficient protective measures for weaker sections, any increased sizeable efforts being made in the form of scholarships to weaker sections etc., are yet to be seen. Additional budgets for scholarships and other student welfare schemes seem to be least forthcoming. All this will drastically affect the demand for higher education at a time when the demand for higher educated and skilled labour force is likely to increase significantly, and more importantly, the composition of the students in higher education is likely to change in favour of the rich. The best way of translating the intention of the United Progressive Alliance government stated in the *Common Minimum Programme* that nobody is deprived higher education because he or she is poor, into practice will be through launching a liberal massive scholarship scheme for the weaker sections – scheduled castes, scheduled tribes, backward castes and other economically backward sections of the society.

The financially unsatisfactory situation in higher education gets clearly reflected in the physical infrastructure of our higher education institutions. It is common knowledge that many institutions of higher education suffer from severe inadequacy of

physical resources such as buildings, classrooms, libraries, laboratories, etc., not to speak of high-tech modern equipment, as one frequently notices higher education institutions being run in poor quality buildings with inadequate libraries and laboratories, classrooms often without power, playgrounds, etc. The situation is far from satisfactory in many universities, including in some of the best universities, whether central or state. The situation is worse in affiliated colleges, where 90 per cent of the under graduate students and 34 per cent of the post graduate students study. There has been no proper attempt to make a detailed survey of the physical infrastructure facilities and of even teachers available in higher education institutions, of the kind made in school education (by the National Council of Educational Research and Training through its *All India Educational Surveys*). It would be useful to have such a survey conducted once in a while, if not at regular intervals. Such a survey would be extremely useful to examine the quantum and quality of physical inputs that go into higher education. This may serve as an eye-opener to many to the ground realities, and may also help in better planning and more efficient allocation of resources. An *operation blackboard*-like programme may be necessary to ensure that all institutions of higher education have at least basic minimum infrastructure facilities. The infrastructure should include physical infrastructure -- buildings, space, libraries, laboratories, computers, etc., and also human infrastructure – faculty. It should also provide for up-gradation of all technical equipment.

Financial stringency also necessitated the state governments and universities to adopt methods that are not necessarily desirable, e.g., methods of recruitment of teachers. In fact, recruitment of teachers has come to a virtual standstill in many states; and wherever it is critically needed, teachers are appointed on contractual and ad-hoc basis. As a result, today many universities and colleges seem to be running with a larger number of contractual, part-time and guest teachers, also known as teaching assistants in some states, and a small number of regular teachers. As the Supreme Court in its judgment (T M A Pai Foundation *vs* State of Karnataka) observed, "teachers are like foster-parents who are required to look after, cultivate and guide the students in their pursuit of education," and perhaps we cannot afford contractual and part-time *parents*! The contractual and part-time teachers are under-paid, and in several cases they are also under-qualified, who accordingly may not have long term commitment to academic aspects, all significantly affecting the quality of higher education. The situation has become so grim in many universities – central as well as state, that there may be no

regular teachers after the current generation of teachers retire in a few years, as recruitment has been halted for several years – more than a decade in some of the states. According to the estimates of the Association of Indian Universities, there is a shortage of 3.33 lakh teachers in our universities. Hence, faculty recruitment requires serious attention; we may have to revisit the norms for faculty recruitment. Conventional norms such as student-faculty ratios or work load may not be very much relevant in higher education, as faculty with various specialisations are required particularly in post graduate and research institutions.

2.2 Recent Financial Reforms

Following the introduction of economic reforms that include tightening of the public budgets, and recommendations of some of the committees, such as the Dr Justice K Punnayya Committee and the Dr D Swaminadhan Committee, the union and the state governments, and many universities and institutions of higher education have taken several kinds of initiatives, particularly focusing on mobilisation of resources. Some have paid 'dividends' and some not. Important ones are as follows:

Fee Reforms

Increase in cost recovery rate through student fees has been an important initiative taken in the 1990s in most universities and institutions of higher education. The official view has been that the levels of fees in higher education in India are very low and that there exists much scope for increase in the fees. This is more so in case of higher technical education. The UGC and AICTE Committees recommended that at least 20 per cent of the recurring expenditure per student be generated through student fees (and other sources). While there is no sanctity about 20 per cent, generally the need to rationalise the fee structure is increasingly felt.

According to the available statistics, fee revenue in higher education in India in mid/late 1980s, the latest period for which such comprehensive data are available, constituted about 15 per cent of the recurring costs of higher education, a proportion favourably comparable with other developing and developed countries, including the USA Some, however, feel that as the corresponding ratio was as high as 40 per cent in India at the time of independence, there is large scope to raise the current ratio to the earlier level. But it has to be noted that at the time of

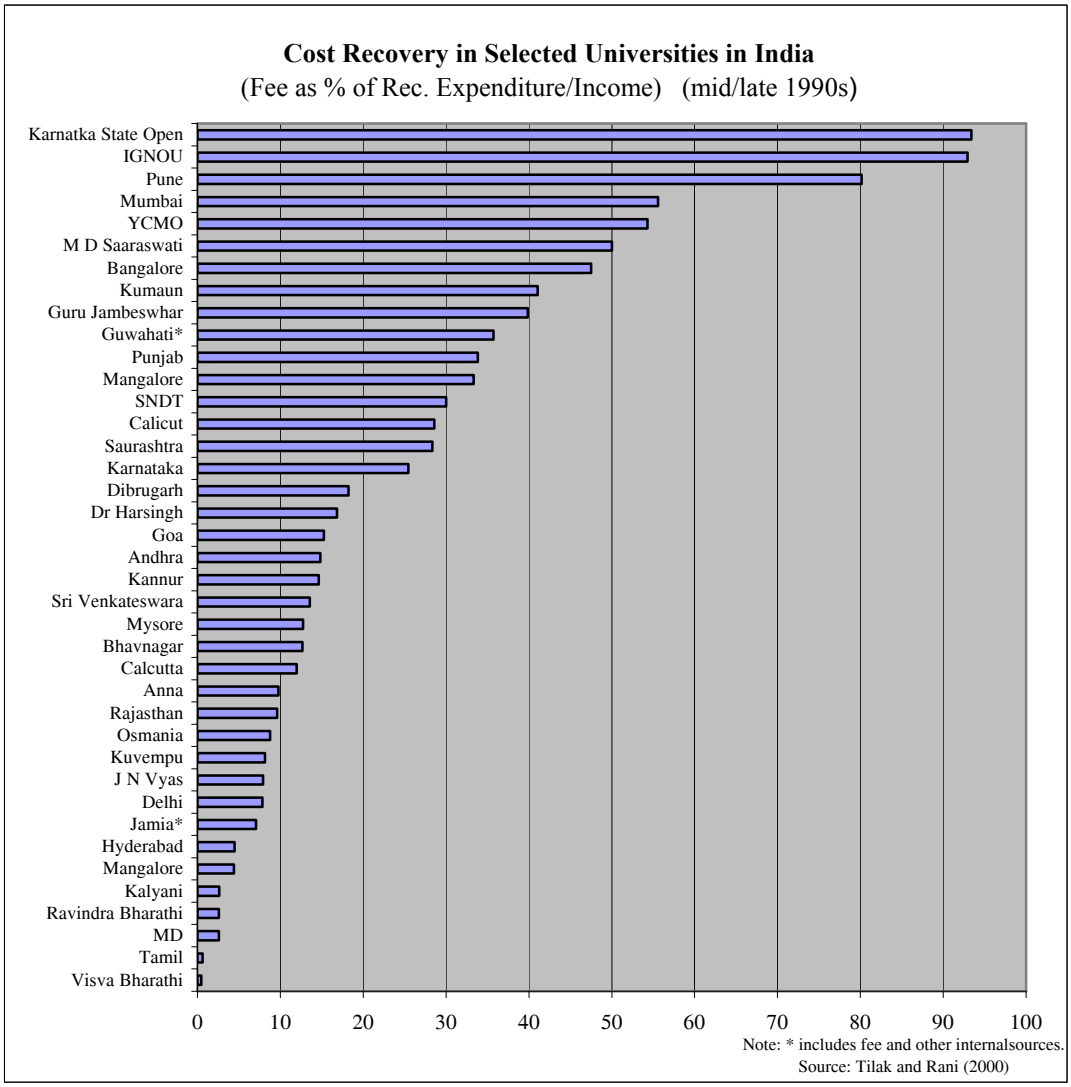
independence, the higher education system was highly elitist, and the access was restricted only to the affluent sections of the society. Going back to the earlier level of fee ratios may mean going back to the elitist system of higher education, in contrast to a somewhat democratised system of higher education that was developed during the post-independence period. Nevertheless, many universities seem to be raising their fee levels considerably, as shown below.

Many universities and state governments have made very significant upward revisions in fee levels in the recent years, besides introducing different kinds of fees. Fee income includes not only tuition fees paid by the students, but also other fees such as examination fees, and others. Other fees include a variety of fees such as entrance examination fee, admission fee, registration fee, eligibility fee, library fee, laboratory fee, sports fee, convocation fee, certificate fee, fee for marks statement, etc. In the total fee income, in fact, tuition fee forms a small proportion. For example, while based on tuition fee alone, the fee income was estimated to be about 2-3 per cent in late 1980s in higher education in India, the total fee income was of the order of about 15 per cent. In the case of universities more recent information is available. For example, in the University of Bangalore, tuition fee income amounted to 2.2 per cent of the total recurring income, while income from all fees accounted for above 40 per cent in 1999-2000.

Student fee of various kinds has been raised by several times. In many universities and institutions, fee increases have been erratic and unsystematic, with substantial increases in the fees for every item, including application/registration fee, marks sheets and convocation fees, transfer certificate etc. Many new types of fees are introduced for services that were earlier not directly charged or used to be delivered free. While increases have been made in tuition fee rates, they are relatively modest, compared to increases in fees in non-tuition items such as application fee, development fees, library fee, laboratory fee, etc., and charges for hostels and similar other services where the increase has been very steep. In the case of hostels and similar other 'student welfare' services almost full cost recovery is being attempted.

As a result, many universities are able to generate substantial resources, much above the recommendation made by Dr Justice Punnayya Committee. A recent study found that out of 39 universities studied, more than half a dozen universities raised fee rates in such a way that they could generate more than 50 per cent of the total recurring income of the respective universities from student fees in late 1990s; and another 13 universities could generate more than 20 per cent.

Figure 6



Source: University Finances in India. New Delhi: National Institute of Educational Planning and Administration, 2000 (mimeo)

Not only open universities such as the Indira Gandhi National Open University and the Karnataka State Open University, but also many other conventional universities seem to be generating substantial amounts from fees.

In general, the rates of recovery are lower in central universities vis-a-vi state universities. Even among the central universities, the rates vary. Particularly, universities that have affiliated colleges are able to generate higher levels of fees than those having no affiliated colleges. This holds true in case of state universities also in principle; but actually many state universities have affiliated colleges under their jurisdiction, though they may not be equal in number. In many cases, universities generate surpluses

on examination accounts. Hence on the whole, universities with affiliated colleges are found to be able to generate more fee income than others.

Table 14
Distribution of Universities by the Share of Fees in the Income of the Universities (late 1990s)

< 5%	5-10%	10-20%	20-30%	30-40%	40-50%	> 50%
Hyderabad, Kalyani, Maharshi Dayanand, Ravindra Bharati, Tamil, Viswa Bharati	Anna, Delhi, J.N. Vyas, Osmania	Andhra, Bhavnagar, Calcutta, Dibrugarh, Dr Harsingh, Rajasthan, Sri Venkateswara	Calicut, Goa, Kannur, Karnataka, Kumaon, Mangalore, Mysore, Saurashtra, IGNOU	Guru Jambeswar, Punjab, S.N.D.T. Women's	Bangalore	Mumbai, Karnataka State Open, Kuvempu, M.D Saraswati, Pune, YCM Open

Source: University Finances in India. New Delhi: National Institute of Educational Planning and Administration, 2000 (mimeo)

On the whole, there has been an increase in the rates of cost recovery in many universities during the 1990s. In several state universities the hike in fee income is more pronounced than in central universities. Fee income forms more than 20 per cent of recurring income in many state universities. The fee increases are much higher in the case of technical institutions, including the Indian Institutes of Technology, the Indian Institutes of Management, engineering colleges and other colleges of professional education. Currently the annual fee in the Indian Institutes of Technology is of the order about Rs.40,000 per student, and in the Indian Institutes of Management it is above Rs. 1.75 lakhs. They used to be a couple of hundreds or at best a couple of thousands not long ago.

In this context, it may be important to note that the cost recovery rates through student fees in many developed and developing countries of the world are not particularly high. In the case of public higher education in advanced countries the corresponding ratio hardly touches 15 per cent. In public institutions in US it was estimated to be 12.2 per cent (1999). Still many countries, particularly the Scandinavian ones offer free or virtually free higher education to the domestic students; fee increases have been confined to foreign students. Even in the case

of private universities in countries such as USA, student fees formed only 39 per cent of the total costs of higher education (in late 1980s).

Any reforms in student fees have to be related to the living conditions of the students, as substantial increase in fees will push away students belonging to poorer socio-economic strata from higher education institutions. In view of this, it would be neither desirable nor feasible to aim at increasing the proportion of the fees significantly. It is important to note that higher education in India is somewhat democratised, with a good number of students from weaker economic background entering these institutions, because of public subsidisation (involving both direct and hidden subsidies). Even if it is feasible to raise cost recovery rates to higher levels, it has to be seen whether it is desirable from the point of view of equity in higher education and the manpower requirements of the developing economy. After all, the need for 'democratisation' or 'massification' of higher education is being increasingly felt everywhere, for social and economic as well as political reasons.

In addition, a large number of universities have also launched 'self financing courses', mainly to generate additional resources for the universities. Even some of the 'best' universities – central and state – have found it convenient to introduce self financing courses even in disciplines such as Economics, Political Science, Social Work, Anthropology, Botany, Zoology, Human Genetics, Hindi, etc., that are otherwise and/or ought to be provided as normal courses in different universities, charging often fees much higher than the costs, exploiting the 'excess demand' phenomenon in higher education. Universities have also set up post graduate centres, some offering only self financing courses. It is necessary to see that introduction of such revenue generating courses and setting up of such centres do not distort the long-term priorities of the higher education institutions. In other words, in the zeal to introduce more and more self-financing courses, non-revenue generating but vital areas of higher education and research might get neglected. This is in addition to restricting overall access of weaker sections to higher education.

It is generally argued that since the distribution of enrolments in higher education is skewed in favour of the affluent sections of the society, public subsidisation of higher education benefits the rich more at the cost of the poor. While this is true, the alternative, viz., reducing public subsidies and levying of high rates of fees would accentuate the degree of skewness in the distribution; it further reduces access of the poor to higher education. In this context, often a system of targeting public subsidies and a

differential fee system are discussed. But the inefficiencies in targeting (errors of omission) and practical difficulties in adopting an effective differential fee system are well known. Thus one is led to conclude that a progressive taxation system is the only option available in this regard to finance higher education, a principle widely in practice in several European and advanced countries, and even in some developing countries of the world.

Student Loans

Student loan programme has been one of the most prominent methods that is advocated as an effective solution to the problem of financing higher education. This is also advocated as an effective antidote to check the regressive effects of increase in fees. At the same time the poor performance of many countries with the student loan programmes is also well known.

Student loan financing is not a new phenomenon in India. A scheme of interest-free national loan scholarships was introduced in 1963. The most important problem faced with respect to student loans in India, as in most other developed and developing countries and as in case of many other loan schemes in India, relates to non-repayment of the loans.

Recently efforts have been made to revitalise the programme. As a consequence, now almost all public and private sector banks offer a variety of loans to students for higher education within the country and abroad. Since banks operate them, the loan schemes are operated on commercial lines, caring neither for education background of the students nor for their economic background. They are merely known as education loans, but are almost like any other loans such as car loans, or housing loans, as far as banks are concerned. They have very few features that are associated with student loans programmes operated in other countries, or with the national loan scholarship programme operated in India earlier, in terms of conditions of repayment, rates of interest, period of repayment, grace period, and exemptions. Specifically economic backwardness does not seem to be an important criterion in granting loans by the banks. With collateral and similar conditions attached, the access to loans is severely restricted and the weaker sections of the society may not be able to benefit much from the loan scheme as it is being currently operated.

Basically student loans shift the responsibility of higher education from social domain (State responsibility) to household domain and within households from parents to the children – from present to the future. The philosophy of loans treats higher

education as a highly individualised commodity, as against its well-acknowledged pubic good nature. Without noting such inherent weaknesses, many advocate student loan programmes and the widening of the same by making interest rates cheaper etc. However, the prevalence of loan facilities also encourages institutions to further escalate the fee levels both in public and private institutions.

Given the experience of India and also of some other countries, a word of caution is also necessary on the level of optimism regarding the potential significance of student loans. Loan programme cannot be viewed as an efficient solution to the problem of finances in the short, medium or even long term.

However, there has been a suggestion to set up an Educational Development Bank of India (by Dr Swaminadhan Committee) or a Higher Education Finance Corporation, with contributions from union and state governments and from the corporate sector, to float soft loans to students and to institutions. This can also take up coordinating and monitoring roles of all student loan schemes being operated by several commercial banks, so that the really needy students do benefit from it. In fact, such a corporation should also be responsible for providing scholarships to the students, as there is need to focus more on scholarships rather than on education loans.

Education Cess

With respect to mobilisation of additional resources, there has been a proposal to levy an education cess on industries and other organisations that use technical manpower. Specifically the education cess is an education specific tax to be levied from those who employ higher educated manpower. The basic argument is that the employers who employ educated manpower should be required to share the costs of production of this high skilled 'human capital'. The cess could be levied based on the wage bill referring to size and quality of the educated manpower employed. The amount of cess to be levied needs to be based on the cost of education and the number of graduates employed. It is hoped that once the employers start paying the education cess regularly, the resources that would thus accrue to the higher education system can form a reliable and continuous source of financing it in the years to come.

Many including the industrial sector are apprehensive about the appropriateness of cess. Since there is already an education cess for elementary education, levied by the Union government, it may not be advisable and feasible to have another education cess,

in the name of higher education. Any how, education cess can neither be a long term solution nor can it be the principal source of funds for higher education. Unless it is levied at a very high rate, revenue from this source can only be supplementary to revenues from general taxation, whose base is wide, and may need to be expanded. Education cess is also not in extensive practice in other developing and developed countries.

Economy in Expenditure

There is need for improving efficiency in utilisation of resources in educational institutions and to effect economy in expenditure. This is more the case when resources are becoming scarcer. One important measure refers to consolidation of uneconomic institutions. There are number of institutions, which are economically, managerially and academically unviable with a small number of enrolments, and a small number of teachers with very poor facilities, offering very limited number of programmes to students. Institutions with very small size would be uneconomic. The AICTE felt that institutions of technical education should have enrolments in the range of 1,500-2,000, with a minimum annual intake of 180, and with an intake of 40-60 for every course/discipline. The Committee has also suggested staff-student ratios to vary between 1:15 and 1:20. Available data on some engineering institutions show that more than half the institutions have enrolment below 1,500, and more than 80 per cent of the institutions have a staff-student ratio of less than 1:15. Dr Justice Punnayya Committee has suggested a norm of one teacher per 12 students in central universities. Student-faculty ratios are, however, not generally found to be so relevant in higher education, as in school education. Nevertheless, all this suggests the need for consolidation of technical education institutions, through proper institutional planning. In principle, the need for consolidation exists in case of general higher education institutions also. A good number of colleges and even some universities are very small in size.

Another aspect relating to efficiency in utilisation of resources refers to allocation of funds to academic and other academic activities in higher education institutions. As Justice Punnayya Committee also recommended, it would be desirable to see that the expenditure, specifically the non-plan or the recurring expenditure on higher education is distributed rationally between academic and other activities in the universities and other institutions of higher education. Core academic activities that include teaching and

research may be allocated 60-65 per cent of the total, academic administration 10-12 per cent and others including auxiliary services and maintenance 20-25 per cent.

Private Higher Education

In addition to the above, an important development of the 1990s refers to the very fast growth in privatisation of higher education. Besides making significant efforts towards financial privatisation of higher education through reduction in public expenditures and introduction of cost recovery measures, efforts were also initiated towards 'direct' privatisation of higher education and rapid growth of private institutions, all in conformity with the structural adjustment policies, which include liberalisation, privatisation andglobalis ation.

The current type of private institutions is different from private philanthropic type of institutions set up in the 1950s, 1960s etc.; it is also different from the type of engineering and medical colleges set up by politicians in the 1970s and the 1980s. Current type of private institutions includes private institutions and foreign universities being set up with commercial motives.While a few formal private universities have just been set up in some states, there are a large number of private colleges in the general and technical education spheres. Private colleges are of two types: privately managed but publicly funded, famliarly known as (government) 'aided' colleges, and privately managed and funded colleges, known as 'unaided' or self financing colleges. Private colleges of the former category receive government aid to meet almost the entire recurrent expenditure. The private aided colleges have not contributed significantly to easing the financial responsibility of the government, as more than 95 per cent of the recurring expenditure, and some times even the capital expenditure, is met by the public exchequer. Hence strictly from the point of view of finances, such private colleges do not have any significant role. Anyway there is a virtual halt in the growth of private aided colleges in most states, as the state governments find it increasingly difficult to provide grants to any new private colleges.

Unaided private colleges might provide financial relief to the government in providing higher education, but at huge and long-term economic and non-economic cost to the society. Such institutions have been really a recent phenomenon. They are the result of private enterprise and initiative and they work in their own fashion, distinct from public sector institutions of higher education. Growth of private engineering and medical colleges has been

remarkablein the last dec ade and a half. These colleges receive little public support. They charge huge donations and high levels of fees. While other colleges are, by definition, non-profit institutions, these institutions not merely cover their costs, but also make huge "quick profits", which are not necessarily reinvested in education. Unaided or self-financing private colleges have been associated with several problems relating to quality, fees, admissions, appointment/salaries of teachers, etc., often necessitating judicial intervention and setting up of committees to fix and regulate fees, to regulate admissions, to regulate other practices etc. Profit maximisation seems to be sole objective of many of the private institutions in higher education.

Currently, private self financing colleges in engineering and management education outnumber public institutions, by several times. In fact, in absolute numbers, and also as a proportion of the total, government colleges turn out to be negligible. About 85 per cent of the engineering colleges in India are self financing. In a state like Andhra Pradesh there were 95 private self-financing engineering colleges, compared to only 11 government colleges; similarly there were 303 self-financing medical colleges, compared to 25 government colleges (2000-01). In a sense, the system of higher education in India is more privatised than in most developed countries. The casualty is not just equity, which is well known, but also quality of higher education. With respect to quality, it may also be underscored that while some of our public institutions of higher education, e.g., some central and state universities, institutions of medical research, and institutions of management and technology could rise to the level of top quality institutions, without at the same time trading off equity considerations, one finds hardly any such institution in private sector. Further, large scale unplanned growth of private institutions also produced mismatches between demand and supply in higher education, and also gluts and shortages in labour market.

Dominance of private sector prevents many from seeking admission in higher education. Dual pricing mechanism in private institutions allows charging of exorbitantly high fees (nearly equivalent to full cost pricing or even higher) from about half the students and reasonably high charges from the remaining half. This is also subject to controversy with recent interpretations and judgments of the courts. All these regressive policies will have a deterring effect on social demand for higher education, as the policies principally aim at squeezing as much money as possible from the students, irrespective of other considerations. The questionable practices of the private sector in education and the inability of the

government to effectively regulate the private institutions should be kept in mind in framing policies on private higher education.

Further, it is important to note in this context that countries with dominant private higher education systems in terms of size could not economically progress much and tend to remain as developing countries, though the overall enrolment ratios in higher education are high. For example, in many South American countries the enrolment ratios are high, and they are also having large private higher education systems; but all of them are developing countries. The converse is also true. Only those countries where the higher education system is predominantly public, like those in Europe and North America could succeed. Exceptions to this are very few (e.g., Japan and Korea).

Lastly, some advocate 'privatisation but not commercialisation,' some advocate 'private participation but not privatisation' and some others advocate 'not private participation but public-private partnership.' Similarly some also argue that private education is desirable, but not profit making private education; some argue that private institutions can generate 'surpluses' but should not make profits; and some find no problem with profits but not with 'exorbitant' profits. It may be necessary to note that there is not much difference in practice between these several forms; and even if there is some difference to start with, it will be difficult to have one and contain other forms. All non-philanthropic private contributions could be detrimental to the growth of a healthy higher education system and to contribute to the development of a humane society.

Other Measures for Financial Self-Reliance

With declining or stagnant budgets for education, specifically for higher education, institutions of higher education have increasingly felt the need to become financially self-reliant by generating resources not only through increase in fees, but also through other measures, such as augmentation of resources from corporate sector in the form of donations, consultancy charges, and other similar contributions, by forging effective relationships between the higher education institutions and the industrial sector. The government has also offered incentives both to the institutions and to the individual donors. The institutions that generate such resources were to receive matching grants from the UGC and the government, besides such resources were to be ignored while making block/maintenance grants. The donors were offered fiscal incentives in income tax savings (tax deduction at the rate of 125 per cent of the contributions to professional institutions and 100 per

cent to other institutions of education; and even up to 150 per cent for contributions to some areas in research and development). But the results in terms of contributions received by higher education institutions from corporate and other such non-governmental sources are dismal in quantum. Three aspects are worth noting here:

- Private voluntary contributions such as donations, endowments, and other gifts to public education institutions have declined drastically over the years. For example, such contributions accounted for 12 per cent of the total expenditure on education in 1950-51, which declined to belowth ree per cent by the 1990s.
- Colleges and other institutions of higher education are set up by private individuals, bodies and trusts in recent years. But nearly the whole expenditure of these institutions is met by student fees. Private management itself invests very little out of its own resources in these institutions.
- The relative share of private sector in research and development in the country is also very limited. For example, in late 1990s, it accounted for less than one-fifth of the total investment made in science and technology, while the remaining 80 per cent was accounted by the union and state governments and the public sector industry.

With respect to all these three dimensions, India stands in great contrast with developed and other countries. Private sector makes huge donations regularly to public higher education institutions in USA, as the regular listings in e.g., the *Chronicle of Higher Education*, reveal. Huge corpus funds are created in private universities with private funds in many advanced countries, interest income of which is used for offering scholarships and for other quality and equity related aspects. Thirdly, private sector plays a major role in investment in R&D in many other countries.

Indian private sector should recognise that skilled qualified manpower required by the industrial sector can be produced by universities only if the universities are well endowed with finances. Voluntary donations and contributions by private corporate sector to higher education institutions is an important feature of some of the advanced countries. Our corporate sector is yet to learn this basic truth.

On the part of the institutions, except a few institutions like some IITs, IIMs, and some central universities, higher education institutions, in general, could not generate any substantial amounts.

At the same time it should be noted that establishment of linkages between industrial sector that is essentially characterised by profit motive and universities characterised by no-profit motive, is not easy, and the monetary gains for the universities may not be generally sizeable.

The budgetary squeezes compel the universities to spend considerable time and energies of the faculty and the heads of the institutions not on the improvement of quality of research and teaching, but more on mobilisation of financial resources. As a result, mobilisation of resources and reduction in costs are becoming important, if not the sole objectives of university management. Because of such policies, even some of our institutions of higher education known for excellence are in peril.

To sum up, reduction in state funding for higher education, and the corresponding cost recovery measures introduced such as increase in fees, augmentation of other 'internal' resources by the institutions of higher education, reorganisation of student loan programmes, introduction of self financing courses, and the rapid growth in privatisation of higher education – all began to produce serious problems on access, quality, equity and efficiency in higher education. They might affect (a) the overall demand for higher education, (b) even if (a) is not true due to the phenomenon of excess demand, it would affect the demand from middle and low income group students, and (c) adversely impact the demand for and supply of certain disciplines of study adversely affecting the balanced growth of various disciplines of higher education. After all, social sciences and humanities are as, if not more, important, than natural, physical, technological and professional sciences for development of an all-rounded society. All such policies might have serious consequences on the development of higher education. These developments also result in a drastic change in attitudes and concerns of the students to education, and to nation-society, which could be dangerous for the sustenance of a humane society.

Several of these measures may have a high potential of generating revenues. But they provide only partial and limited solution to the problem of finances. More importantly, as they are also potentially highly risky in terms of equity and efficiency in education, delicate balancing has to be done between monetary gains and educational losses, between mobilisation of resources and safeguarding the considerations relating to social equity, economic efficiency and educational excellence. The potential of these several measures in generating resources is rather limited, unless welfare, equity and even educational considerations are sacrificed. In other

words, while experimentation with a variety of measures is needed, and will continue to be made, the limitations of the several measures in terms of desirability from social, economic and educational points of view and practical feasibility have to be noted, and deliberate efforts should be made to reduce the ill effects of these policies. At the bottom-line, none of these measures for mobilisation of additional resources should aim at reducing the demand for higher education, as the need for more educated manpower increases with globalisation.

3. SUMMARY OBSERVATIONS AND RECOMMENDATIONS

The role of higher education needs no emphasis. It is the engine of economic growth; it is one of the most effective instruments for promoting social, occupational and economic mobility and equity in the society; and it forms a critical condition for transforming the society into a knowledge society. Given (a) the public good nature of higher education, (b) the current level of development of higher education (hardly 8-9 per cent of the eligible youth are presently enrolled in higher education, as against a probable threshold level of 20 per cent), and (c) the inequalities in the society in general, and higher education in particular, where marginalized groups such as Scheduled Castes, Scheduled Tribes and economically backward sections are severely under represented, the need for according a high priority for higher education in development planning is obvious. Further, in this overall background, the role of the government in financing also assumes crucial significance. The Government has been repeatedly promising (the *Common Minimum Programme* also reiterates) to raise public spending to the level of six per cent of national income, which currently stands around four per cent.

Keeping in view the above in background, a few following recommendations are made for the improvement of higher and technical education:

1. A significant growth in finances is critically needed for quantitative expansion, for improvement in quality and excellence, and for preserving and promoting equity in higher education. There is need for preparing a detailed perspective plan for the development of higher and technical education, including detailed estimates of resource requirements.
2. State funds for higher education have been on decline in the recent years, though it is increasingly realised that state financing of higher education is important, and that state should make a firm commitment to finance higher education. Generous state funding of higher education is important. After all, it is the practice in most countries. The government – union and the states – must make a firm commitment to sustained funding of higher education institutions, in such a way that basic teaching, research and extension activities are not affected in their quality and quantum due to paucity of financial resources.

3. With respect to state funding for higher education, as a thumb rule

   a) If 50 per cent of the total education budget is being allocated to elementary education, for balanced development of all levels of education, 25 per cent to secondary education and 25 per cent has to be allocated to higher and technical education together. Presently about 15 per cent is allocated to higher and technical education. The suggested normative ratios, however, assume significance, if the total allocation is raised to the level of six per cent of the gross national product (GNP) from the current level of about four per cent, as promised by the government. This would mean higher and technical education would together get about 1.5 per cent of the GNP – approximately one per cent for higher education and 0.5 per cent for technical education. Currently hardly 0.4 per cent is being spent on higher education, and 0.1 per cent on technical education.

   b) It would be desirable to fix certain norms regarding the share of education, and share of higher and technical education in particular in the total government budgetary resources, so as to ensure a steady flow of funds to education and to various sub-sectors within education.

   c) Most public institutions of higher education are severely starved of basic needs. It may be necessary that an 'operation blackboard' like programme is launched for provision of basic facilities to all universities and colleges in the country. This should ensure a minimum level of human (teachers) as well as basic infrastructure facilities in all colleges and universities. This requires a one-time grant to clear the whole backlog.

   d) It is also important that allocations to quality related inputs in higher education, particularly research are substantially increased. Besides professional subjects, liberal arts and sciences also require special attention in this regard. Allocations for research need to be substantially hiked, as it is the research that contributes to quality improvement and excellence in our higher education institutions. It may be worthwhile for the government and the universities to earmark special funds for promotion of research.

e) Similarly, allocations that promote equity in the system, that include particularly scholarships to the weaker sections, need to be considerably enhanced. At present they constitute an insignificant proportion of the total expenditure. At the present stage of development policies, strengthening of scholarship schemes will be of special significance.

f) A block grant system that is inelastic to the genuine needs of the system may not be able to help in promoting development of higher education, and its proper maintenance. Perhaps a proper mix of block grants, maintenance grants, matching grants and development grants has to be evolved that would promote excellence in research, support innovations in teaching, strengthen equity in the system, reward efficiency, being performance-linked, and at the same time meet all the important needs of the higher education system.

g) The system of grants and the principles of grants-in-aid need to recognise the different needs of the central and state universities, postgraduate and undergraduate institutions, general and professional/technical institutions, old and recently founded institutions, etc.

h) The method of making grants needs to be based on transparent criteria and principles.

4. Rates of cost recovery in higher education are already fairly high in many universities, and the scope for any further increase in cost recovery is extremely limited. Further increases in the same, particularly through student fees, will be highly regressive in effect.

a) Earlier committees have recommended raising of resources through fees and other sources to the extent of about 20 per cent of the recurring requirements of the universities. This may be considered as a *desirable upper* level. Revenue generation through student fees beyond 20 per cent may seriously affect access to higher education.

b) There cannot also be a uniform ratio for all universities and institutions of higher education. It has to be different for central and state universities, general and professional institutions, under graduate and post graduate colleges, etc.

c) Fees, for this purpose, include tuition fee, examination fees, and *all other* types of fees paid by the students.

5. Given the practical difficulties in having a sound differential fee system in higher education, based on the principle of 'ability to pay' though desirable, the best option left is progressive taxation system, where the affluent are taxed more to benefit the middle and lower income groups. One may have to search for ways and methods of improving the progressiveness in the taxation system, looking beyond the income tax.

6. A sound method of cost recovery is requiring the graduates, particularly professional and technical education provided by the state, to take up employment in public sector and in rural, tribal and remote areas for a minimum period.

7. Given the small number of foreign students in India, high fee rates for foreign students may not necessarily generate huge funds for higher education institutions. However, detailed and sound guidelines may have to be prepared on the admission criteria and fee structure for foreign students, with a view not just to mobilize additional financial resources, but to improve the quality of education, by enhancing academic environment in the universities, with students coming from various cultures and backgrounds.

8. Extensive reliance on student loan programmes may be counter productive in the long run, creating a view that higher education is not a public good, but a highly individualised private good, as the responsibility of funding shifts from state to households (through introduction of fees) and within families from parents to the children themselves (through loans).

   a) Careful monitoring mechanisms have to be developed so that the loans are available mainly to the economically needy and educationally deserving students to pursue higher education and to protect social and educational values. Educational loan programmes have to be designed keeping educational considerations, and they cannot be run solely on commercial lines by commercial banks.

   b) A body like Higher Education Finance Corporation (HEFC) may be set up with contributions from the government and corporate sector, to coordinate the student loan schemes being operated by several banks and to provide on its own scholarships and soft loans to students. Scholarships need to be an important area of focus. Both scholarships and loans are to be designed

in such a way that economically needy and meritorious students feel assured of the financial assistance.

9. There is need to regulate the growth of self financing courses in higher education institutions. Only those departments in universities and colleges that have excess staff and expertise may offer some self financing courses that may be in demand and are not normally offered in the universities. As such courses tend to be offered at the cost of normal courses, the tendency to start more and more self financing courses needs to be curbed.

10. Growth in distance education programmes also needs to be monitored and regulated, as universities tend to offer more and more programmes in distance education mode, as they generate substantial revenues. Laboratory and even extensive library based courses may not be offered through distance mode, as this defeats the very purpose of offering courses in distance mode to those who cannot afford to go to full time formal education. Distance education is certainly not the best way of providing laboratory and library based study and research programmes.

11. Institutions of higher education may be encouraged to forge close links with industry, mainly to improve academic relevance of the programmes being offered by the university. Caution also needs to be taken to see that institutions of higher education do not extensively rely upon corporate sector for funds, as that might affect academic autonomy of the institutions. But it is important to note that only those institutions that enjoy high level of government support generally tend to attract private funds and alumni support as well. Whenever institutions appear to be loosing sources of governmental funding, unfortunately, the private endowments also declines, leading to downward spiral of funds, academic standards and reputation.

12. Industrial sector should recognise that skilled qualified manpower required by the industrial sector can be produced by universities only if the universities are well endowed with finances. Voluntary donations and contributions by private corporate sector to higher education institutions is an important feature of some of the advanced countries. Our corporate sector is yet to learn this basic truth.

13. Non-government and non-student sources of income are negligible and are also unreliable as a source of funds for higher education. Philanthropic contributions need to be encouraged, but the higher education institutions cannot be expected to rely on such funds for performing their basic functions. These resources can be supplementary to meet additional requirements

with respect to additional peripheral functions of the institutions. The bottom line is: universities may be encouraged to generate additional revenues from non-governmental sources, without affecting equity, and other academic aspects of the higher education institutions.

14. The growth of private higher education has to be regulated. A detailed regulatory framework has to be developed that would allow only genuinely interested private sector that has philanthropy and education, and not profit as the main consideration, to enter higher education sector. Tendencies to open profit-seeking private institutions need to be curbed altogether, lest higher education be subject to vulgar forms of commercialisation. At the same time, philanthropy in education, which has rapidly declined to insignificant levels during the last couple of decades, needs to be encouraged by the government through appropriate fiscal incentives. On the whole, the overall role of private sector in education cannot but be limited.

15. Similarly, foreign universities that enter India with a view to exploiting the situation here and essentially to raise resources, need to be prevented. Tough and detailed regulations are required to enable only those foreign universities having high academic standard wishing to provide good quality education and not having commercial considerations as the main factor behind, to be able to use the provisions in WTO/GATS to enter the higher education scene in India.

16. Some of the resource-saving measures could be highly counter productive. For example, there is no justification for non-filling up of thousands of vacant teacher positions in the universities and colleges, a measure that is adopted to save financial resources and also to avoid problems of management of teachers. Certainly such an approach does not lead to sustainable quality higher education. The urgent need to fill up at least many of the vacant posts has to be recognised.

17. It would be desirable to see that the expenditure, specifically the non-plan or the recurring expenditure on higher education is distributed rationally between academic and other activities in the universities and other institutions of higher education. Of the total plan expenditure, core academic activities that include teaching and research may be allocated 60-65 per cent, academic administration 10-12 per cent, and others including auxiliary services and maintenance 20-25 per cent.

18. State funding of higher education out of tax and non-tax revenues will remain to the best and the only sustainable way of

financing higher education. This has both theoretical and empirical advantages. To increase the revenues of the government, so that government increases its allocations to higher education, one may have to think of additional general and special taxes for higher education, rather than looking at user charges like student fees.

19. While the need for expansion of higher education facilities is obvious, it is important to see that proliferation of poor quality and unviable universities, colleges and other institutions of higher education does not take place. The growth in the higher education institutions has to be based on sound criteria.

20. Lastly, the database on higher education in the country is very weak. Ministry of Human Resource Development used to publish earlier reasonably good amount of data on higher education in their annual publication *Education in India*. But it ceased to cover higher education since the mid 1980s, and as a result, a huge vacuum exists on data on various aspects of higher education. It is important that MHRD and UGC launch a programme on a priority basis, of building up a strong database on higher education.

At the end, we may underscore two points to avoid familiar confusion:

Though finances do not solve all problems, they are absolutely necessary for any improvement, even for maintenance of the system. It can be said that though finances are not a sufficient condition for development, they form a crucial necessary condition for development of higher education. Inadequate funding certainly would seriously affect the quality and quantum of our higher education, which will have further implications for growth and equity.

Secondly, when we are arguing in favour of funding higher education, it does not mean that we are arguing against school education. All levels of education are important, and they are inter-dependent. All levels of education need sustained funding from the government. In this context, it's relevant to quote Surendranath Banerjee from his Presidential Address to the Congress Party in 1895:

> *We are not in favour of High Education vs. Primary Education. We are in favour of all education, high and low. They act and react upon each other. They are part and parcel of a common and indissoluble system.*

Annexure

TERMS OF REFERENCE AND MEMBERS OF THE COMMITTEE

Vide Resolution dated 6th July 2004, the Government of India had re-constituted the Central Advisory Board of Education (CABE) and in pursuance of the decisions taken in the meetings of the CABE on 10-11 August 2004, the Government of India had constituted vide Orders dated 8 and 10 September 2004, seven committees on various areas to look into critical issues facing education, including one Committee on the subject of "Financing of Higher and Technical Education" under the Chairmanship of Professor Bhalchandra Mungeker, Member, Planning Commission, with Professor Jandhyala B G Tilak, Senior Fellow & Head, Educational Finance Unit, National Institute of Educational Planning and Administration, New Delhi as Member-Secretary.

The **terms of reference** of the Committee are:

- To examine the adequacy of investments in Higher/Technical Education and to find ways of augmenting the resource flow in Higher Education;
- To examine the question of a fair share of 6% of GDP, for Education; and
- To suggest the ways of encouraging and regulating private participation and investments in Higher/Technical Education.

The **members of the Committee** are as follows:

1.	Professor Bhalchandra Mungeker Member, Planning Commission, New Delhi	*Chairman*
2.	Minister In-charge of Higher Education Government of Andhra Pradesh Hyderabad	Member
3.	Minister In-charge of Higher Education Government of Delhi Delhi	Member
4.	Minister In-charge of Higher Education Government of Orissa Bhuwaneswar	Member

5.	Professor Zoya Hasan Jawaharlal Nehru University New Delhi	Member
6.	Shri Praful Bidwai New Delhi	Member
7.	Chairman University Grants Commission New Delhi	Member
8.	Professor Mrinal Miri* Vice-Chancellor North-Eastern Hill University, Shillong	Member
9.	Shri S.V. Giri Vice-Chancellor Sri Sathya Sai Institute of Higher Learning Prashanti Nilayam	Member
10.	Shri Bakul Dholakia Director, Indian Institute of Management Ahmedabad	Member
11.	Professor Deepak Nayyar* Vice-Chancellor, Delhi University Delhi	Member
12.	Shri M.R. Kolhatkar Mumbai	Member
13.	Dr. Sukhdeo Thorat Indian Institute for Dalit Studies New Delhi	Member
14.	Chairman All India Council for Technical Education New Delhi	Member
15.	Chairman Distance Education Council Indira Gandhi National Open University New Delhi	Member
16.	Professor Andre Beteille New Delhi	Member
17.	Shri Azim Premji* Chairman, WIPRO Bangalore	Member
18.	Dr. A.K. Mishra* Director, Indian Institute of Technology Powai, Mumbai	Member
19.	Shri N. Srinivasan Secretary-General Confederation of Indian Industries, New Delhi	Member

20. Professor Jandhyala B.G. Tilak *Member-Secretary*
National Institute of Educational Planning
and Administration, New Delhi

Special Invitees

1. Prof Dayanad Dongaonkar
Secretary-General
Association of Indian Universities
New Delhi
2. Dr Ved Prakash Mishra
Dean, Faculty of Medicine
Nagpur University
Nagpur
3. Shri Prafulla Kumar Dhal
FEVORD, Bhuwaneswar
4. Dr J.L. Azad
New Delhi

Other Invitees

1. Secretary
Department of Secondary and Higher Education
Ministry of Human Resource Development
Government of India, New Delhi
2. Principal Advisor/Senior Consultant
Education
Planning Commission, New Delhi
3. Director, Education Division
Planning Commission, New Delhi

Note: * could not attend any meeting of the Committee.