

Indian Higher Education Dilemma

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1. Introduction

In a country of 1.1 billion people, about 20 million children would be of age to enter schools every year. The fact that a large percentage of these children do not graduate from school is a sad story, reflecting our failure to manage school education in the country. This paper will not dwell on this (this is an important topic and need to be dealt with separately). The paper will also not talk about the vocational education that many children go to after their school (and not go to a college). Instead, the paper will focus on higher education in India. There are just over three million children who desire to go for higher education (entry level college) today every year. If our school system worked, this number would have easily doubled or tripled. This paper will focus on higher education in India and its failure to even provide some decent education to these 3 million children. We will look at what is the state of higher education in India today and who all lose out. We will examine the issues so as to figure out what needs to be done in short and middle term to improve the situation. Let us begin with looking at the developments in this sector in the last twenty five years.

2. Privatization and Expansion of Engineering Education in India

In early eighties, there were about one hundred engineering colleges in the country. They admitted about 25,000 students each year. There was a great demand in the country for engineering education. Parents had great desire to put their children in engineering stream and students used to strive to get in. But in a country of 800 million people, only a few could get this privilege. The number of seats was too few and the entrance process had to be highly competitive. This implied that only those who were in the city and had means to go to better off schools, would be able to qualify and enter these colleges. Others had to be disappointed and had to look for other avenues for higher education. The disappointment was putting political pressures on the Governments, especially when certain sections of the society (like backward castes and farmers who benefitted from Green revolution) were becoming politically powerful, but their children could not enter the colleges.

The small number of graduating engineers was also adversely affecting the Indian industry. About 30 to 40% of these students would leave the country leaving too few engineers for industry in India. The Government used to run these hundred institutions and these institutions were taking up a substantial portion of higher education budget. Starting new colleges to expand engineering program was their desire, but was too expensive for the fledging Indian economy. A solution was required.

The solution came in the form of allowing private engineering education. It all started in Tamil Nadu. Almost overnight, over 50 new engineering colleges were opened. The academic community opposed this development, arguing that this would dilute the standard and there

were not enough good teachers. But in spite of their protests, the liberalization of engineering education continued. Within a few years, about five hundred private engineering institutions started operating in Tamil Nadu, Andhra Pradesh, Karnataka and Maharashtra. The number of engineering seats crossed over 100,000 per year. After a few complaints of huge donations being demanded, the Government moved in to regulate the admissions by state level entrance exams. As the number of seats increased and transparent process of admissions were worked out, one noticed that students from small towns and even rural areas started getting admissions. The process has continued from mid eighties and the number of engineering colleges in the country has continuously expanded to reach about 1600 today, taking in over 500,000 students every year. While South India was pioneer in this regard, some states like W. Bengal opened up only near the turn of the century.

The quality of education in these private colleges was very uneven. Many of the colleges have practically no quality teachers. Many lack basic labs and facilities. But on the other hand, many have strived to enhance its standards and some of them would rank better than many of the Government run engineering colleges today.

The 500,000 engineering graduates every year, in spite of the very uneven standards, have brought in immense gains to India. It is these numbers, which have driven the Indian industry to its glorious heights in the last ten years. The initial gain was in IT and telecom industry, but now its gains have reached much wider, including auto and auto-parts industry, pharmaceutical industry, chemical and engineering industry. Most of these industries do not find the students adequately trained (it is believed that less than 10,000 of these are adequately prepared for industry today) and complain vociferously, but goes about spending substantial amounts in

training these graduates to be useful. They have been able to use these graduates to make India a R&D center of the world. As a result, India's average annual growth is accelerating from 3.5 percent between 1950 and 1980 to 6.0 between 1980 and 2002 to 8.0 between 2002 and 2006.

The second gain is that most youngsters, who want to get into engineering education in India, can get in. The admissions are no longer confined to the graduates of sophisticated English medium urban schools, but even those who graduate from small towns and rural areas, are able to find admissions. In fact, some years some of the seats (in worse off colleges) now find no takers. Democratization has happened in engineering education in India.

Unfortunately, the policy of privatization and rapid expansion has not been followed to similar extent in medical education. As a result, even today, there are less than 30,000 medical seats in India (including the ones in Ayurveda and Homeopathy and in dental colleges). The expansion is controlled by the medical professional associations and they have contrived to stem the growth. It is here the capitation fees are very high and significant degree of democratization has not happened.

In the subject of Business Administration, the start was delayed. But the privatization and expansion is now taking place rapidly and it is expected to follow the pattern of engineering discipline.

3. Affirmative action program

In early eighties, the Indian education system was dominated by persons from forward castes of Indian society. There was reservation for persons from Scheduled Castes and Scheduled Tribes,

but most engineering colleges struggled to fill these seats. At the same time in many states in India, the political power was passing in the hands of so called “backward castes.” There was restlessness amongst the backward caste communities. It is at this point of time, reservations were introduced for backward castes in state-financed engineering colleges. There were some protests, but over time an elaborate entrance process was designed (for example in Tamil Nadu), so that people from backward castes had a separate merit list and got admitted. There was some initial difficulty in their coping up with the engineering education. But soon that became the matter of the past. Fairly significant number of backward caste students got admitted and by the turn of the century, in states like Tamil Nadu, there were more students from backward castes in these colleges as compared to those from the forward castes. This started impacting the Government and industry too as the dominance of forward caste personnel in these places has virtually ended.

This has gone to the extent that in many places today the same proportion of forward and backward caste students would be admitted whether there was a reservation or not. For example, if the cut-off percentage for engineering entrance in the open category is 91% today, for backward category it is invariably 90% (for the SC category it is lower and for ST category it is much lower). This is so not in one specific year, but results of the last five years in Tamil Nadu show the same trend. As people from backward castes have started getting their share in industry and Government, the disadvantage has withered away. In fact an astute political leadership could move on to get rid of some of this reservation in states like Tamil Nadu. However, the situation throughout India was not the same. It is only recently that the affirmative program is slowly being extended to other parts of the country, where the engineering colleges are still dominated by the forward caste.

However, in elite engineering education, mostly financed by Central Government, the reservation for backward communities does not exist today. This is where most of the central Government resources go and it is these institutions which have better faculty and facilities. It is these colleges, therefore, that produces the best students, who get the best jobs. The politics of Backward Caste movement have been asking their share of this privilege for some time; and last year, the Government decided to introduce the reservation in these institutions. There have been some vociferous protests and adverse court rulings, but finally the reservation is likely to be implemented from next year onwards. Before we discuss this further, let us examine another dimension.

4. Limitation of Quality

Now let us look at another very important aspect of Indian Higher education system. This is with respect to quality. Quality is the key to India's future growth as knowledge economy start dominating. It is here that Indian Higher Education System is being found to be most wanting. We discussed this with respect to engineering education earlier in the paper. But this lack of quality, except in a handful of institution, permeates throughout the higher education sector, be it engineering, medicine, Business Administration or in Science, commerce, humanities, liberal arts and law institutes. Only a handful of these institutions make the mark. The rapidly expanding Indian industry finds the graduates of these institutes lacking in simple skills required for employability. Therefore on the one hand, the industry do not find enough people to employ, spiraling up the salaries and its wage bill; on the other hand, many who graduate do not find ready employment (they finally do get employment, but are often under-employed in vocations which do not use the skills they were trained for).

The total number of higher education seats in India is just over 3 Million per year, but those with high quality, may not number much more than 30,000. May be there are about another sixty to seventy thousand seats, which may be classified as not very bad, but far from quality. Quality rapidly deteriorates after that. The problem with the institutes with poor quality is that they fail to inspire the students even to a small extent.

Let us examine the repercussion from two points of view, form that of the not-so well off people in India and from the point of view of those who are well off.

4.1 Dilemma of the not-so-well-off

The not so well off people (backward castes) of the country are the first losers when the quality seats in higher education is so limited. Smaller number of seats implies more competition, and the well-off have advantage in any such competition. They go to better schools. They can afford better coaching. They live amongst the milieu which trains them better to compete. They move amongst people who have succeeded and get the inspiration, mentoring and guidance. When the seats are very small, the not-so well-off has hardly any chance to succeed.

One of the ways out to get fair share of quality admissions in such a situation, is reservation, where some percentage of the seats is reserved for the backward castes. This is exactly behind the recent central Government's move to extend reservations for backward castes in the elite centrally funded institution. But all that it implies is a share of a small pie. Over the last twenty years, with the assertion of backward castes in political arena, and subsequent reservations in

state colleges, the backward castes have to some extent moved forward in social and economic terms. As a result, some backward castes students are able to compete and get admissions to these elite colleges, even without reservations. For example, some count of backward caste students in some IITs and IIMs have revealed that the percentage of backward castes amongst undergraduate students already exceeds 15% and is growing year after year. The extension of 27% reservations, would give a benefit, but to a minor extent. The pool of excellent seats being small, not enough backward caste students would get benefit.

4.2 The well-offs

Those who have been doing well in this society want their children to do well. Most of them are able to send their children to good high schools and spend considerable amount of money in their early development. After high schools, they want to send their children to the colleges with quality. They get their children to prepare for years for this competition through a variety of coaching (India as a result has one of the largest and flourishing coaching markets and it is believed that the amount spent on coaching in India to get admissions to colleges is not much less than the total amount of money spent on higher education by the Government or the private sector). Yet, as the number of such quality seats is so small, many of these people are disappointed and extremely frustrated.

Over the last ten to fifteen years, as many of them have started acquiring reasonable wealth, they take the next best option and have started sending their children to United States, Europe or Australia for undergraduate education. This is usually very expensive, with many of them even spending Rs 10 million towards this. Further, many of these colleges that they send these children to, are not even of high quality. Yet, these medium quality institutes, with relatively

open atmosphere, are preferred over the tier two and tier three institutions in India. Many of the upper middle class persons are spending their life's savings towards this and do not consider this as a good option. But the lack of quality in even tier two institutions, leave them with no option. There is some estimate that Indian parents now spend close to a billion dollar (Rs 4000 Crore) per year in sending their children for education abroad.

5. Why can we not have more quality institutions in India?

Another consequence of the small number of quality higher education seats in India is that the industry does not get enough quality people. In this knowledge-driven world, this slows down the Indian growth as it is not able to realize its true potential. The lack of quality of graduates may become the single biggest factor in India not achieving the status of R&D house of the world.

Further, it is an irony that while Indians spend huge amounts on coaching schools today to get admissions for their children in colleges and spend close to a billion dollar in sending their children abroad, we have not much more than 30,000 quality seats for admission to colleges each year in this country of a billion plus people. What can be done to rectifying this situation? There is money in the country to be spent. There is a hunger amongst students to study. No section of people in India benefit from such a situation¹. Then where is the problem?

The primary problem in expanding quality institutions in the country is the great shortage of quality teachers. The shortage is because teaching at this level, is no longer an attractive vocation. The compensation for these highly trained college teachers in India is far below what the equivalent scales are in the industry. The gap has widened to such an extent that most parents would discourage their children from taking this route. The life style of the families of a

college teacher is, as a result, far below that of those who take up other vocation. In such a situation, only a small fraction of the best minds would look for teaching (and R&D in academia) as their profession. Small fraction of the best minds will always be driven to such an endeavor as their inner quest for excellence would drive them to an academic position and they would consider the rest as secondary; but this number will be small in this highly material world. Rest, even if they would have preferred to be in academia, would drift away.

This is exactly what is happening. As a result, there is a huge shortage of quality teachers in higher education. Even the best institutions in the country (IITs / JNU / IISc) struggle to find enough quality teachers. The other institutes find it almost impossible. Many of the new private institutions are the worst sufferers. In many of these institutes, “fresh graduates who fail to get any other job,” become the teachers. As soon as they acquire some experience and get a bit better, they drift to industry. This is the main reason that quality is a commodity in serious shortage in our academia. The students are not too bad. Once inspired, many of them are capable of working hard and even work on their own to learn adequately. But most of these youngsters fail to see even one quality teacher and fail to be inspired in any way. Frustrated, they just while away and wait to get out of the colleges with the degree as a stamp to go further.

The lack of facilities some time deter the students, but not to the same extent as low quality of teachers. Colleges which lack quality are also incapable of creating an open atmosphere for learning. Teachers and administrators spend more energy on controlling the students. Overall the academic atmosphere disappears. Often, the poor quality of teachers goes hand in hand with authoritarian and non-accountable administration. This is so both in Government as well as

private run institutions. Teachers and administration spend more time on petty things (like how can one earn little more by setting question papers), than on educating and inspiring youngsters.

Before we proceed further, let us discuss a strong mis-conception. As the problem of low quality amongst teachers in these institutions is becoming very apparent, it is often toutedⁱⁱ that the low quality of teachers is due to inadequate opportunity for these teachers to get trained. It is often forgotten that training of teachers (in form of Quality Improvement Program) had been a major focus in the nation for the last thirty five years. While training the teachers continuously is important, this often hides the true problem of inadequate compensation. The result of these training the teacher program has been that most of the time when a teacher gets adequately trained, he/she leaves the educational institutes and migrate to the industry. Those teachers, who fail to benefit even from these quality improvement programs, stay as teachers. The only answer to the quality is to make the vocation more attractive. Once this is done, enough bright youngsters will find various innovative ways to train themselves to take up such positions.

6. Why can the teaching vocation not be made more attractive?

Let us examine this by doing some calculations, taking the higher education in India as a whole. In 2005, there were about 10.5 million students in about 18,000 Indian educational institutions. The Government spent about Rs 19,000 Crores and the fee collected from students is also about Rs 19,000 Crores. This amounts to Rs 35000 per student per year. Even assuming that 70% of this could be spent on faculty salary, the amount available for salary is Rs 25,000 per year. Now assuming that there is one teacher for twenty students, the total teacher remuneration will be

average Rs 5 lakhs per yearⁱⁱⁱ. This would include everything, including housing and other allowances and retirement benefits. Those starting their career as teachers would get about Rs 3 lakhs and the senior most in best institutions would get about Rs 8 lakhs. This is just too low, especially as most teachers have at least a Masters degree, if not a PhD. It needs to be at least doubled at the starting level and increased to triple at the senior-most level, if one has to attract the best people to this vocation.

This would require a little more than doubling the available amount of money per student. The amount has to go up from Rs 35,000 per student on the average, to about Rs 70,000 to 75,000 per student for this to be possible^{iv}. Where would such larger amount of money come from?

It is possible that the Government share for higher education increases. But it is unlikely to increase by more than 50% above the current number of Rs 19,000 Crores. The rest of the increase (Rs22,500 Crore if the enrollment does not increase) have to come from elsewhere. In some parts of the world, philanthropic organizations (especially from industry) do contribute significantly to education and have help built up large corpuses. In India, however, the philanthropic contribution to the education is insignificant. While an attempt has to be made to get alumni and industry to contribute towards the corpus of individual institutions, this is hardly going to make an impact in the short run. Therefore the extra amount has to come from fees charged from the students.

But can the students and parents really afford this doubling the fees. Will this not make the higher education more non-egalitarian and only those who are better offs will be able to send their children for higher education? Let us examine this?

7. Is higher fee the answer?

First of all, there is a large section of people, who send their children to colleges in India, who can afford larger fees. One is talking about fees of Rs 50,000 to 100,000 per year. Many of these middle class and upper middle class parents spend much larger amounts for their children in schools^v. The amount spent by many on coaching classes to get into the good institutes is far higher. Of course, as mentioned earlier, some spend even 50 times this amount to send their children abroad. At present, even these students pay pittance in Indian higher educational institutes. These students are highly subsidized, and as still the majority of the students in these institutes come from middle and upper classes, in fact the less well to do are subsidizing the education of better offs.

But there are now quite some numbers of students, who have started coming into these institutes, from not so well off back-ground. If they are asked to pay higher fees, they would just have no means. Can they be financed by banks? In fact, banks have started providing educational loans over the couple of decades. But today less than one lakh students (out of 30 lakh students graduating each year) avail education loans in India. Further, there is significant default, as banks do not have adequate legal provision for recovery, even if the student is doing financially well after graduation.

There is a need to introduce a scheme of income contingent loans to make it easier for students from poor backgrounds to participate. This loan arrangement has to have built in insurance against inability to pay and help low earners. There could be provision to write off a fraction of loan for each year of service in the rural areas or national R & D system.

Since, student loans are inherently risky; the government is required to share part of the risk of a student loan program. Such loans should be widely available to all or most students in need. Risk can be lessened through a judicious use of cosignatory requirements, with government as a primary guarantor only for families with insufficient collateral, and then a secondary guarantor for families who are able to cosign the loan and bear part of the risk. The practice of deferred payment of fee on graduation and employment with risk of unemployment / under employment transferred to the Government exists in many countries to address equity issue. This also takes care of problem of student indebtedness^{vi}.

Further, recovery of loans for those doing well, there must be provision that the banks can ask employer to deduct the loan amount and pay it to banks. Also, appropriate tax incentives for paying back the educational loan need to be incorporated.

None of this is going to be easy. But it is doable. With this, the institutes will have enough money to pay the teachers well, making the teaching profession, a wanted profession.

8. So where is the bottleneck?

The bottleneck includes the political and regulatory system, which does not allow larger fees to be charged. The bottleneck also comes from courts, which have ruled occasionally, that larger fees are not acceptable. Finally the bottleneck comes from the

public opinion, which believes that larger fees would amount to profiteering and that the poorer students will be denied benefits of higher education.

Let us start with the last point. The public perception is to a reasonable extent correct. The regulators have to move in to examine the accounts of educational institutes and trusts more closely. It should be clear that the higher fees are not being siphoned away by management, but being used for higher salaries as well as more amenities. This is the most important step and is difficult, but doable. The task should be given to an independent strong regulator. Only persons with impeccable public service record should be the regulator. The exercise must not only be transparent, but must appear to be so, and generate public confidence.

At the same time, not only proper bank loan process (as discussed above) need to be created, but public has to be educated that this is adequate to protect students from poorer background. Also, an effort can be made for industry to institute scholarship for poorer students.

Thirdly, the higher salary should see that more people choose this vocation and we start getting better teachers. This evaluation is also necessary and should help in generating public acceptability.

The judicial system is unlikely to interfere if the laws are clear and there is a transparent process as defined above.

The political and regulatory system has to also be educated to see that there are not too many other options to bring in quality. There is little point in artificially keeping the fees low and lose the quality, as this would benefit no one. It is also being practiced in rather peculiar manner, as some colleges can charge atrocious amounts as fees in India today. For example, ISB at Hyderabad charges about Rs 19 lakhs for a year. It is surprising that this does not cause as much commotion as is caused when another Business School increases its fees to Rs 1 lakh per year. Even media seems to be selective in this regard. The increase in fees to Rs 1 lakh in some of these institutes is portrayed as rip-offs and profiteering from the poor in India, whereas ISB fees are not even mentioned. Instead, the political and regulatory system should help set up the regulation mechanism described above, along with appropriate banking processes. The law should also be suitably amended. The goals should be clear. It should include:

- Quality will be nurtured and promoted, by enhancing the teacher's compensation to the extent that it becomes an attractive vocation for the best to come in. Fees would be increased to fund the higher salaries.
- No person would be denied opportunity for higher education because of financial status. Appropriate loans (with guarantees provided by the Government) would be made available for him / her to get educated. At the same time, mechanism will be evolved for the banks to recover money as deduction from salaries in future; wherever the graduate is not employed in a vocation where repayment is easy, the Government will move in.

9. But can profiteering institutes be really controlled?

Well, one has to depend to some extent on market mechanism to control those institutions which do not spend the fees to enhance teacher quality. The reputation of these institutes will suffer and soon, the students will start opting out of it. If there are enough quality institutes, those without quality will fade away.

Also, is it really possible to get enough quality faculty soon enough, even if the fees are increased? Well, in about three to five years time frame the young graduates can get into academia. Once the compensation is significantly enhanced, it would be a matter of few years for the change to start showing. Even before that we will find people from outside the country and from other vocation starting to come in. The transition has to be managed and will be difficult.

Equally important would be an attempt to democratize the educational institutes. The academia loves its freedom and it likes open atmosphere. Good teachers would join an institute only if the open atmosphere is practiced. Managements have to strive to create such atmosphere.

10. Conclusion

To conclude, liberalization of Higher Education in India over the last twenty five years, have enabled creation of huge capacity, which today fulfills the required demand. The youngsters are no longer denied the Higher Education Opportunity. Coupled with some affirmative action programs, the students from backward communities and rural areas

have also started getting their share of the education. The initial liberalization of the education has resulted into its democratization.

However, the system suffers from lack of quality to a very large extent. In a country where about 3 million children get into higher education each year, less than 30,000 get quality education. Lack of high quality teachers is the primary reason and the poor compensation given to the teachers is the primary reason, we do not get enough good youngsters attracted to the profession. The teacher's remuneration needs to be increase by two to three times the current level, if we have to make a difference.

The only way this higher compensation can become possible, is by increasing the fees significantly. This would not make any difference to the well off in India as the fees in higher education sector, are lower than what they are used to paying even for school education. For the not so well to do, bank loans with some Government Guarantees and change in certain laws, would be required. The institutions have to be regulated by an independent regulator to ensure that the higher fees are indeed used towards enhanced teacher's remuneration and creating certain amenities for students and also to see that quality is really improving.

If India has to establish its place in tomorrow's knowledge economy, fixing our higher education would be of utmost importance. While liberalization over last fifteen years have got Indian economy get into a new trajectory, education sector has not sufficiently changed. Time has come to fix it. It is fixable and would take India significantly forward.

ⁱ the only benefit seems to be the coaching school industry in India and the colleges in USA, Europe and Australia, many of which it is believed, will not survive in absence of these students from India and other developing countries

ⁱⁱ This reason is especially presented by the Human Resources (HR) department of the IT industry.

ⁱⁱⁱ Average numbers often hide issues. Some institutions receive larger Government support, whereas others charge higher student fees. Also the best institutes would also have no less than one teacher for every 15 students, whereas many others may have one teacher for 25 students. Still the average number does reflect the low salary dilemma adequately.

^{iv} Average here again can be deceiving. While for BA / BCom / BSc programs, where the teachers need not have PhD, and the number of students per teacher may be even 30, the expenditure per student may be only about Rs 30,000 per year, whereas in the elite professional institutes, where the teachers have to be highly qualified, the amounts could be as large as Rs 120,000.

^v One is not even talking about the real well to do. They spend outrageous amounts. For example, the G.D.Goenka School in Delhi charges a fees of Rs 14 lakhs per student per year and is fully air-conditioned. The Delhi Public School is also fully air-conditioned.

^{vi} This paragraph has been borrowed from Working Paper No, 179, Higher Education in India, The Need for a Change, Pawan Agarwal, May 2006, ICRIER, New Delhi, May 2006.