Slip Sliding Away

Why IITs have fallen in global rankings

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IITs have been slipping in the global university rankings for the last few years. In our euphoria about India’s progress, such reports are mentioned in passing and then promptly forgotten. IITs have made a name for themselves largely on the success of its graduates, and less on the strength of its R&D output. And most global ranking of universities are predominantly based on R&D.

The performance of IITs (and other such institutions in India) is likely to continue dropping globally. This is not to say that they are static — indeed the R&D output from IITs is increasing, but relative to others it is slipping. Interestingly, the relative decline is not because established R&D centres in the US and Europe are becoming bigger, but because newer entrants from China, Korea and Singapore are doing much better.

The central reason for the decline of IITs in relative ranking is the archaic academic governance structures that exist in Indian institutes. Autonomy of these institutes is a myth. Consider these facts: the director of institutes is appointed not by a selection committee of experts but by the ministry; pay scales of faculty and grades are decided by government; starting a new course in an IIT could even require permission of Parliament; and there is regular interference in the administration and set-up of these institutes such as reservation of seats without proper consultation. These are a reminder that though in daily affairs the autonomy is there, there is little autonomy in making structural changes or bringing about any significant changes.

A fallout of tight government control is the archaic system of fixed increment-based salary scales with no regular performance evaluation. This means that faculty members get a regular increment in their salaries, regardless of their performance. There are no regular or yearly appraisals, on which salary increments are decided. This system is guaranteed to lead to mediocrity and lack of competitiveness. This is the bane of academic governance, giving absolutely no elbow room to promote excellence or reward performance. No private company in India would think of this — all of them have performance appraisals, on which increments and promotions are decided. In academics, however, career paths are still largely decided on patronage from government. The only means of recognition are publishing in international journals and conferences.

Contrast this with the situation in China. About 15 years ago, the Chinese brought about changes in its academic governance structure. The salary of a professor in top university consists of three parts — one given by government which follows the usual scales; another given by the university allowing better institutes to compensate better; and a third based on performance of the faculty member in project and R&D work. The result of this structural change is there for all to see. The contribution of Chinese scientists to premier journals and conferences has been steadily increasing, and is now a threat to western dominance.

The situation is the same in Korea and Singapore. Universities in Singapore moved some 15 years ago to a model where the compensation of a faculty had three components — one basic, one based on market forces where a faculty member in demand got more pay, and a third based on performance. The US has been following performance-based evaluation for years — the yearly increment of a faculty member depends on his performance. Pakistan seems to have recently started a somewhat less sophisticated scheme to reward its researchers for every international paper they publish. The impact of this is an increased number of paper
submissions from Pakistan.

Earlier, much of Europe followed a fixed scale salary model. But most countries have now either migrated to, or are moving towards, an appraisal-based compensation system. Australia and the UK follow it, Germany and Italy are moving towards it. As expected, many faculty members are not happy about it. They are threatened by more transparency, but there is also a realisation that even developed countries cannot expect to do well using old models of governance.

It is clear that unless transparency about the output of individual researchers as well as that of institutes is not brought about, along with incentives and compensation based on an appraisal of the quality and quantity of output, India will continue breeding mediocrity and complacency. However, appraisal without suitable autonomy is even worse — institutes will then become the playground of power brokers from outside the system. IITs have suitable structures to potentially implement such schemes and lead the way, if they get the right leadership and necessary autonomy.

Unfortunately, the leadership of these institutes, being a beneficiary of political patronage, is unwilling to take any bold moves. They have tended to play safe and keep the ministry happy, rather than bring about innovation and controversial changes. So, changes are undoubtedly needed, without which Indian institutions will continue to slide. But it is doubtful whether any movement along this direction will be undertaken. That is why I believe that IITs will continue slipping in global rankings, despite having the potential to improve.

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