Research in science and engineering: Malady and remedy

For more than a decade, an intense debate is seen in this journal on 'what ails Indian science'. Depending on perceptions/motives, various kinds of analyses and suggestions for reforming the system have been offered. It would seem that policy makers do not attach any importance to such deliberations - a recent example is the proposal to establish an autonomous National Science and Engineering Research Foundation (NSERF) on the pattern of NSF, USA. I became aware of this disturbing news first from The Hindu; now Ramachandran¹ has written an informative critique on this proposal. The NSERF is proposed to have an annual budget of Rs 1000 crores. Ramachandran characterizes the current policy by one word 'arbitrariness'. I differ on this and argue that the proposal is a continuation of the grandiose design, that in the first place initiated the process of degeneration and that unless the edifice built on this design is dismantled, no reform can save Indian science.

The vicious circle of this design has high sounding terms: 'talented few' and 'internationally competitive science'. Both these terms have been misused to perpetuate feudalism, and block any sort of accountability. Since independence, some so-called eminent few have managed Indian science; and it is solely they who have been deciding as to who are the talented few and what constitutes cutting-edge science. Mediocrity with servile mentality has been systematically inducted into the system and elevated to higher positions in science establishment/universities. Increased level of mediocrity with successive generations was bound to happen. NSERF would essentially absorb the large number of such servile and mediocre scientists, as this is what has been happening in so-called centres of excellence, and give legitimacy to feudalism and growth of a coterie. If there are no fiercely independent and original minds, who will check this cancerous growth? Note that the much publicized, well-meaning initiatives to help colleges/universities are metaphorically similar to the so-called socially responsible five-star hotels, which instead of throwing away the left-overs serve the same to the poor.

If there is an honest desire to regenerate Indian science, then the vicious circle of feudalism and mediocrity will have to be broken. One of the important factors responsible for this state of affairs is the policy of appointing retired persons in key administrative and managerial positions in science and academic organizations/establishments. I suggest that as a policy no one after retirement shall hold any administrative government position or shall be appointed in any policy-making body or shall head any laboratory/centre of excellence/university. The logic of retirement is nullified if a retired person is appointed on a job more demanding both physically and intellectually, than the position from which he/she retired. Further, such a person is more prone to prejudices and fixed notions developed over the years; and due to a sense of insecurity with advancing age he/she would be more compliant to political power and vested interests, at the same time creating a coterie for oneself.

If someone wants to contribute to science and society after retirement, there are many creative things that could be pursued. He/she can also be invited to offer his/her suggestions/advice on policy issues as a private citizen of India. Pension benefit is already there, so support for minor requirements could be provided (some kind of contingency grant) and access to library/laboratory could be offered to the really interested one.

I think besides contemporary social trends, the lack of quality books in Hindi/ regional languages on science subjects is responsible for the failure in spotting and nurturing talent amongst the vast number of students who are not at ease with English medium. Finally a small effort may go a long way to attract good students to science: offer merit scholarship to those studying in B Sc all over India. Even 10,000 number of scholarships at Rs 5000 per year would require a meagre fund of Rs 15 crore for three years. I believe instead of wasting money on emeritus scientists/professorships and special schemes for retired scientists, the money can be utilized for attracting young students after 10 + 2. Assuming 10% success of the scheme, about 1000 science students would be trained every year who would be genuinely interested in science.

1. Ramachandran, R., *Frontline*, 22 April 2005, pp. 39–42.

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Plagiarism

The editorial on plagiarism¹ is most depressing. The culprits are the computer, internet and search engines as well as the overemphasis on publications. The craze for name and fame forces some individuals to go to any length to achieve success. Perhaps it is now time that the overemphasis

on publications is withdrawn and candidates are asked only to state their achievements, without listing their published papers.

 Balaram, P., Curr. Sci., 2005, 88, 1353– 1354. P. TAURO

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