

Mediocrity To The Fore

Why Scientists Suffer In India

By J.V. NARLIKAR

A LAZY beggar went to a self-made millionaire to ask for alms. The millionaire gave him a rupee. Not satisfied with the amount the beggar argued: "Sir, as fellow-humans are we not brothers and so should share your wealth equally?" The millionaire agreed and asked for the rupee back so that he could give the beggar his due. The beggar was shocked to find that the revised amount was a paisa. The millionaire explained: "By your argument I regard all fellow-humans as brothers and sisters and one paisa is in fact more than your share if all my wealth were to be equally divided amongst all my brothers and sisters".

The story has a moral for our institutions which depend on public funding for education and research. Should we follow the democratic norm and share the national kitty amongst all claimants in an equitable way or should we impose criteria that stress merit and achievement to select only a few amongst the many? In the former mode (the one paisa mode) everybody gets something and the donor is not criticised for partiality; but, of course, that something achieves nothing. The selective mode makes it possible to support activities at or above the threshold when they can deliver the goods; but it assumes that the donor's assessment is fair and realistic, involves an element of risk in that judgment and is open to criticism of partiality.

Barring a few exceptions, India's post-independence record shows a steady decline in appreciation of merit and a growing tendency of opting for mediocrity. This is true not just in the field of education and research but in all walks of life. Let us see, however, how the system operates in the sphere of education and research.

Hypothetical Cases

Start with the institutional building and look at two hypothetical cases. Building A is beautifully designed, properly constructed and well-maintained. Building B is a slipshod affair, constructed by accepting an unrealistic lowest tender which the contractor abandoned before completion. In our present ethos of public buildings, A is an exception and B is the rule. We do not mind B because so many others are no better, but we jump to the conclusion that A is a sign of extravagance that a poor country cannot afford. Well, it may come as a surprise that the amount spent on A per square foot may be no more than the amount spent on B.

Again, consider the hypothetical case of two members. A is diligent and quality-conscious, does the assigned work and is willing to learn new techniques. B is lazy, avoids work and has no interest in the welfare of his/her institution.

Logic demands that A should receive faster promotion and other incentives while B should be fired. In reality when you bring up a proposal to promote A, you are told that all his/her good qualities are to be routinely expected of any employee and if a promotion is given all others (that is all the Bs) would demand similar treatment. So A is asked to cool his heels in the existing grade. But then you cannot invoke the argument of "routinely expected qualities" for firing B because the union of all the Bs will be up in arms. So both A and B are treated alike with the result that A will either leave your institution to look for better opportunities elsewhere, or lose his/her enthusiasm and slowly sink to the level of B. In either case that leaves you with mediocrity.

Graver Implications

What is true of the infrastructural staff is true also of the academic staff, only in this case the implications are even graver. For, the academic component is the nerve centre of the institution and if that is poor and ineffective you might as well pack up and go. In this connection it is worth comparing the evolution of a good scientist and a good administrator. The latter improves with experience which comes with advancing age. The knowledge of rules and regulations, the knack of interpreting them to assist rather than hinder good projects, the ability to deal with human problems and to resolve complex situations, etc., are not picked up overnight but acquired steadily over a long period. The steadily rising promotional ladder of the IAS and other services correctly reflects this situation.

The evolution of a scientist is different. Barring a few exceptions who are evergreen in their creativity and originality, the vast majority bloom early and then fade slowly. It is in the age span 20-40 that we normally expect the scientists to deliver their best work. At higher ages the scientist slows down and develops other interests which may be creative but not in research. Thus the scientist may spend more time in management of science, in popularising it or even in teaching it. This suggests that the careers of gifted and creative young scientists should advance along faster avenues while those of senior less productive scientists should coast along slower tracks.

Unfortunately, the research institutes have adopted a ladder of advance that is more or less the same as that of the administrative cadres. Not only that, this ladder has brought a hierarchy that is detrimental to the free and frank discussions between the young and the old which is so essential to the prosperity of science. This is one of the reasons for the dissatisfaction and frustration felt by so many of

our young scientists.

Against this background, the University Grants Commission has taken the welcome step to encourage evaluation and grading of performance of institutions within the university sector by the newly set-up National Accreditation and Assessment Council. All merit-conscious academics and the enlightened public would wish the NAAC to succeed in its task. One only hopes that political pressures and corruption that have made a mockery of our examination system will be resisted by the NAAC and the UGC and that the criteria for assessment are not watered down. If through such efforts it is possible to identify the truly meritorious institutions, then it may be easier for the funding agencies to dole out their grants in a more rational manner.

The NAAC-type exercise needs to be carried out for all our scientific institutions. To what extent are they completing the projects entrusted to them? What is the quality of research generated there? Such monitoring exercises are rarely carried out in a critical manner by the funding agencies. If Dr A has been given X lakh by way of funds to be spent over three years, the agency may ask for the audited account of how the money was spent. But there is no external evaluation of what scientific goal was reached. The real accountability lies here.

Growth Industry

In 1963 Derek de Solla Price highlighted the fact that scientific research is a growth industry and that it has a tendency to grow like compound interest. Since this rate of growth is faster than that for the overall development of a nation, a stage inevitably comes when economic and social constraints step in to limit it. This is when scientists start feeling the pinch, when they discover that fewer and fewer of their projects can be supported. This stage has been reached in the advanced nations. While in India there is still a good case for further expansion, the relative availability of resources is becoming more and more difficult. Hence for supporting research there is a growing need for becoming choosy in favour of merit. Because of not caring for merit, however, we end up propagating mediocrity. And when merit leaves our shores for better opportunities elsewhere, we shed crocodile tears for "brain drain". As for monitoring, the statement that I hear now and then in academic circles and which makes me most uncomfortable is "money is not a problem". Money should be a problem: the academic must have merit to acquire it and demonstrate achievement to justify it.