
OPINION

We publish below an article sent to us by a well-known scientist reacting to a press report of a speech made by a senior member of the Comptroller and Auditor-General's office. The press report is summarized at the end of the article. The relationship between scientists and auditors in our national context has not always been a happy one. However, we have met many audit officers who not only sympathized with but also understood the problems of working scientists. How can these two groups integrate to help maintain a sense of financial responsibility and accountability and yet allow the effective growth of science and technology? We would like our readers to react.

—Editor

ARE SCIENTISTS PROFLIGATE?

The health of Indian science is a topic for frequent discussion. Practically everything that can be said on the subject has probably been said, and it is difficult to add anything new. And yet I have, in response to the Editor's recent invitation, chosen to write on this subject for a very important reason.

It is no secret that all is not well with our S&T. But then our problems are symptomatic of the problems of our society as a whole, and there is no particular reason why the scientific community should be singled out for attack. Lately, several news reports have appeared about criticisms emanating from the Comptroller and Auditor-General (C&AG) concerning various scientific departments. The latter are quite capable of defending themselves and I do not intend to speak for them. More worrisome to me are the observations made during a meet-the-press session by the person in charge of auditing scientific departments. For convenience, a summary of the press report is given on the next page. What I am concerned with here are the sweeping charges made against scientists.

By way of making my point, let me consider the question of delays. Scientists do projects because they want to, because completing a project successfully is a professional achievement more valuable than anything else. However, in spite of their best efforts, delays occur frequently, mainly on account of the prevailing system as well as owing to external causes. Once, a manufacturer in Calcutta delayed the supply of an important piece of equipment to me for over a year owing to power shortage followed by labour trouble. What was I to do? I could not cancel the order and turn to another supplier because that involved an even more time-consuming procedure. I had to live with the delay.

Taking another example, a piece of equipment is imported, say. Often, there is some damage or supply of a wrong part. Only a person who has gone through the hassle of insurance, customs, etc. knows how painfully slow and enervating the process of obtaining rectification is. What about the delays caused by bureaucracy itself, which delights in coming down so heavily on others? Bureaucrats conveniently count delay from the time the sanction is issued but no notice is taken of the delay in issuing the sanction itself (sometimes quite considerable), even if it produces severe loss of morale. And in the case of grants made by funding agencies, the physical release of funds by the finance people takes its own sweet time, even after all the approvals have been given. As the final example, let us consider the supercomputer. Everyone knows that there has been a considerable delay in procuring it, thanks to fluctuating international relationships, the foreign exchange crisis, the internal resource crunch, etc. Nevertheless, one should not be surprised if finally the auditors come down on the scientists for 'bad planning'. But can the scientists really be blamed?

It is not necessary to write a long essay to highlight the fact that, contrary to the opinion held by the C&AG, financial audit is the wrong way of ensuring accountability. Yes, we *must* have accountability, but not of this kind. What we need is liberal autonomy coupled with *performance audit*, preferably by peers.

Autonomy is no doubt anathema to the C&AG, but, mercifully, there are a few good examples to prove that scientific institutions with autonomy perform better than those under tight control. This is not surprising because, in the present system of control, every approval must go through several individuals, most of whom have no interest or stake

in the project involved. It is amusing therefore to read that the auditors believe that a Utopian set-up prevails! On the contrary, many institutions that were started as registered societies so that they could get the benefits of autonomy soon found their flexibility being snatched away. The dictum seems to be: if money comes from the Government, then everything must be done Government style, autonomy or no autonomy.

Checks and balances are no doubt needed but shackles certainly not. And, on top of it, like applying salt to the wound, we now have the auditor phenomenon looming larger than ever before. One of the curious aspects of the present monitoring system is that the loop is not closed, i.e. the performance of the auditors is not audited! On the other hand, if we take scientific publishing, for example, referees and authors belong to the same self-consistent loop, exchanging roles depending on the circumstances. This is healthy, and is what we would have if peer review and performance audit

replace the presently obtaining financial audit by unconcerned and non-involved people.

Over and above the numerous obstacles already being experienced, our scientific community now has to face a new hazard—damnation without any suggestion as to how things could have been done better or recommendations about the removal of obstacles. (Auditors claim that their job is to interpret rules and not to suggest reforms.) In turn, such ill-informed comments are leading to nasty editorials, angry Parliament questions, etc., all very demoralizing and certainly not deserved by our scientists, especially considering that many have willingly forsaken greener pastures. It is sad to think that the financial service, once adorned by the greatest scientist this country has produced, now has such a dim opinion of our science as well as our scientists.

G. VENKATARAMAN

Summary of the press report

Some time ago, Mr S. Satyamurthy, Director in charge of Auditing in the office of the Comptroller and Auditor-General of India, addressed a group of science journalists under the aegis of the Indian Science Writers' Association.

From the First Plan figure of Rs 20 crores we have come a long way, to spending about Rs 6748 crores in the Seventh Plan. In 1987-88 alone, Rs 3300 crores was spent under the Plan. 'Where has all this gone?'

In a welfare State, the return on investments is important and hence the need for an audit, Mr Satyamurthy said. In our country, 'money is absolutely no problem for science, but there is a lack of commitment to use it effectively'. The scientists are equally unscientific when it comes to programme implementation. Often, there is an underestimation of costs and overestimation of capabilities. The ground rules here are, however, different, he said, but felt that there is a lack of organization at all levels of scientific administration. According to him, scientists tend to fight shy of analysis, which is their own forte. 'Responsibility must be fixed for delays',

he said.

'There is not only profligacy but also proliferation' was Mr Satyamurthy's remark on the growth of scientific activity in the country. 'Nowadays there is one new department every year.'

Speaking about the extent of governmental support that science gets in the country, he said even within the scientific institutions a kind of Utopian set-up prevailed. All vertical controls have been removed and only horizontal controls exist. He referred to the import liberalization rules extended to scientists for their research purposes, the kind of autonomy that has been granted to them—the Council of Scientific and Industrial Research is a registered Society, for example—, the independence they enjoy—the 'give-money-and-do-not-ask-questions' syndrome, and, finally, protection in the form of bringing scientific departments under the wings of the Prime Minister. Mr Satyamurthy said: 'When all the controls are removed there is only one control, that is the audit. This vestige of control has to be preserved.'
