

## VIEW POINT

## What ails scientific research in the State?

**I**N a State like Kerala, where politicians, artists and writers rule the roost, science and people who pursue science do not get much attention.

This general apathy towards science and a lack of scientific temper in a 100 per cent literate State is appalling. Recently, I happened to read some articles written by senior school students on solar eclipse. Although the purpose behind the whole exercise was to make them think scientifically, most of the students seemed to justify old superstitious fables about solar eclipses.

It is difficult to explain the split personality of a Malayali: A revolutionary outside and a renegade inside. Notwithstanding the efforts of the Sastra Sahitya Parishat and other organisations, the outlook of an average Malayali continues to be anti-scientific. Nor are they interested in the amazing developments that happened in science recently. Unless we break out of the obsession with the mofusil politics, our people will continue to be denied enjoyment of the wonder that is the universe.

While we keep boasting about our universal literacy, our average mental makeup continue to be warped. What is more interesting is that our neighbouring States, which are branded with derision as uncultured, are forging ahead not only in education but in R&D efforts as well.

The rapid strides made by Tamil Nadu and Karnataka in R&D should open our eyes. These days even the Americans have started comparing Bangalore with Silicon Valley in California.

Where did the Malayalis go wrong? Although we made so bold steps in the scientific field in the late 1970s, after the initial steps, we faltered. We can cite several sociological factors that led to this shoddy state of affairs — our political leadership which lacks a sense of destiny, other than nominating each other for different offices, unimaginative bureaucracy which refuses to see anything beyond its self-interest and the man on the street, living on the edge of depravity and wants, who thinks that securing a white-col-

lar job is an end in itself.

What happened to our spirit of adventure? Does this spirit end with climbing the Sabarimala hills once every year? Why does our much-acclaimed social milieu keep on churning out clerks and stenographers. Why do we wallow in this sea of mediocrity?

Why do even our rich parents insist their bright sons and daughters to get a job in a bank near their homes, instead of encouraging them to reach the proverbial star? Why did we not try to understand the implications of Dr Sebastian's research (last year's Bhatnagar award winner) in chemistry, instead of writing about his favourite movies and movie stars?

My contention is that in order to understand the low achievement in scientific research in our institutes and university departments, we have to understand the level of our social evolution. An analogy may be made to the flowering of human mind in Europe and the period of the Renaissance.

Our research centres remain what they are because society at large has not been able to appreciate the role of scientific research in human progress.

The only concerted effort to promote scientific research in Kerala in recent history was during the tenure of Achutha Menon's Ministry. He was also ably assisted by an excellent group of officials. That was a bold and innovative step and in many respects a unique experiment. A couple of research institutes were set up during that time.

In one of the most enlightened policy statements ever made by a State Government, it justifies setting up of institutes because "promotion of science and technology requires institutional framework which can attract the best available talent in the country and is free from interference and restrictions of the kind that would be inevitable within the usual government set-up."

That was back in 1977. What is the status of the scientific research and the institutes in the State today? And who, because of the lack of vision, miserably defeated the initial objective of

preserving the autonomy of these institutes and stifled the flowering of scientific research in the State?

The last 20 years which would have witnessed a massive surge of meaningful scientific research in the State had been wasted because of our misplaced concepts of scientific management.

There are several mundane reasons why the overall quality of research in these institutes has not been able to break the barriers of mediocrity, even though there is an excellent pool of researchers in all of the scientific institutes (the universities as well).

One of the primary reasons is the political and bureaucratic interferences. These two groups always think it is their prerogative to dictate the roles of the institutes. I think it is high time that we left the academic establishments to the people who are qualified to handle them.

Another reason is our undue emphasis on the utilitarian aspect of science. There is a view that research in basic sciences is an idle luxury that a poor State cannot afford. But this is not a right attitude, because many breakthroughs in the technological field have come from unexpected discoveries in the basic science. A right blend of excellence in basic research and applied aspects has to be evolved within the institutes, rather than imposed from outside.

I heard a strange argument the other day that doctoral theses should be socially audited. I am aware of the fact that science cannot be divorced from the socio-economic conditions of society and the obligations of the scientist towards society. But social auditing of a doctoral thesis is going too far.

The important thing to remember here is that the scientist should be free to decide for himself what he can do for society, free from outside compulsion. The policy statements rightly emphasise that "the government shall endeavour to help scientific institutes under its jurisdiction to develop an internal functioning system which would enable the scientists and technologists make their full contribution and perform their

accountability without being stifled in the process".

Have we been able to stick to this cardinal rule over the years? For this state of affairs, scientists also should accept part of the blame. There are some moments when foot should be put down firmly and not to show ideological elasticity to suit the whims and fancies of the political leadership of the day.

Over the years these institutes have been downgraded to mere departments under the government. These are the days when everybody, irrespective of their political colours, shout at their top of their voices about decentralisation of powers. But when it comes to their own backyards they pretend as if no problems exist. This applies to politicians as well as bureaucrats.

There are institutes which don't have a proper library. Despite these difficulties, there are individuals in these institutes who manage to get recognition for their work outside their State and the country.

The people who pay for this — the ordinary taxpayers, should know that their money is put to a good cause and it is not wasted. These institutes are not considered as white elephants, rather they should be developed into cultural beacons showing light of wisdom in the growth of society.

Finally, if science has to succeed, the scientist must be given respect and recognition. Our colonial mindset puts the administrator above the academic. This situation has to change. This is what a literate Kerala is expected to do.

If the government is serious about revitalising science education in the State, it is important to use these institutions in reinforcing the training of students in the universities and colleges. It is common knowledge that the science departments in the colleges are completely marginalised due to want of good teachers, good students and proper motivation. These institutes are to be linked with the universities which will help to pursue each other's goals in a much better way.

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