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# “Wealth and knowledge should coexist”

Last month, the Cabinet approved the Public Funded R&D Bill, 2007, which lets academics patent their work and receive royalties. Dismissing concerns that academics will pursue patents at the expense of knowledge, RA Mashelkar tells **Sebastian PT** that India needs such a legislation

## What do you think of the draft Bill, which is modelled on the US Bayh-Dole Act?

The Bayh-Dole Act has been significant in spurring patent activity in US universities. The share of US universities in patenting prior to 1980 had remained stagnant for long at 0.003%, but it increased 10-fold within 15 years. It boosted technopreneurship in the academic community.

## But in India, the draft legislation has been opposed.

This is typical of any change in India. When we opened up the economy in 1991, many feared foreign multinationals would swallow Indian firms. On the contrary, we have the Tatas buying Corus, Jaguar and Land Rover; and so are other Indian companies. So, the legislation will boost the patenting culture here.

## Will the draft Bill's focus on financial gains distract researchers from their academic calling?

It is time we recognised that Saraswati (Goddess of knowledge) and Lakshmi (Goddess of wealth) should coexist. Let us learn from scientists like George M Whitesides of Harvard University and Richard Friend of University of Cambridge. They show us how to monetise work, while remaining leaders in science. For instance, Whitesides, who has been tipped for a Nobel Prize, has co-founded over a dozen companies (including Genzyme, GelTex, Theravance, Surface Logix and WMR Bio-



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medical), which have a combined market capitalisation of about \$20 billion.

## But won't such a patent culture affect the development of science by reducing the academic contribution to the general pool of knowledge?

There is nothing wrong in researchers going for patents. Even Nobel Laureates, who add to the global pool of knowledge, patent their

work. Karl Barry Sharpless, the 2001 Noble Laureate in chemistry, has the highest number of patents. I have analysed data through CSIR's Unit for Research and Development of Information Products. I found that some Japanese companies had brought out patents based on the original work done by some leading Indian scientists after their papers had appeared. Why should a poor country like India allow its scientists to publish those research papers, from which someone else creates patents?

## So, what should the strategy of Indian scientists be?

It's simple: move over from 'publish or perish' to 'patent, publish and prosper', just as we did at National Chemical Laboratory (NCL) in 1989. When

S Sivaram, the current head of NCL, made a breakthrough in solid-state polycondensation of polycarbonate, he did not go for a paper. He patented it in the US first and then published the paper. This resulted in NCL getting a licensing fee for a cluster of patents plus sponsored research worth over \$1 million from General Electric, US.

Had we not done it, as in the past, NCL would not have got the credit it deserved. For example, one of our eminent organic chemistry scientists published a paper that became the basis of patents for Bayer, and the company made millions. If our poor country invests its funds in Indian scientific research, the benefits must come to India, not to Germany or to the US. ■