

S&T in India: Present Scenario and Thoughts for the Future



In his illuminating NAL Foundation Day Lecture, delivered on 12 August 2000, Dr V K Aatre, SA to RM, appeared cautiously optimistic. His basic message appeared to be: "we haven't done badly at all in S&T, but we can (and should) do much better".

"We understand the technique of technology as well as anyone else, but we lack the ability to convert technology into successful application products", Dr Aatre said before starting his "walk through five decades of Indian S&T". The walk-through featured statistics on population, food production, GDP, finished steel and electricity (which suggested -- and Dr Aatre remarked as much -- that the decade of the 1990's was easily independent India's

best so far).

Dr Aatre then talked of Indian S&T's strengths and weaknesses: "we are formidable in computer software, textiles, mass communication, quality education and even pharmaceuticals, but our basic weakness can be traced back to a technology strategy revolving around licence production". This strategy, Dr Aatre argued, has left India with very few core technologies (because of "no know why") and, in most cases, with technologies of low quality (because of "no competition").

Dr Aatre's prescription includes: moving from government S&T funding to corporate funding; moving from imitative to innovative, and even inventive, technology; and moving from the captive customer to the demanding customer. "R&D in India", he said, "will succeed with synergy and interlinking, country-specific applied research, mission-oriented R&D, industry-oriented R&D and optimal utilization of India's rich human resources".

One particularly liked the speaker's reference to "velocity of R&D". Indeed, Dr Aatre's lecture was laced with several thoughtful observations: "The LCA programme is getting delayed because we lacked mature technologies to start with"; "making money is now no longer obscene"; "our R&D labs don't just need independence, they also need inter-dependence"; "Indian S&T has still not produced wealth"; "solar energy still makes no dent on India's energy sector".

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