

become the key determinant of wealth creation. Knowledge capital is what will increasingly drive the wheels of the national and global economy and eventually determine the prestige and position of any country in the comity of nations. India is determined not only to be a participant in the IT Revolution, but also to be in its vanguard.

India's successes in IT are already well known. We now must aim to replicate them in all areas of science, technology, and enterprise. The Government would welcome your ideas on how we can create world-class facilities and conditions in India for world-class achievements.

A number of important measures are needed to translate the vast potential of Indian science into winning performance. As we embark on a new voyage for Indian science in the new century, the broad vision I commend to all of you is: 'Developed Indian Science for India's Accelerated and All-Round Development'. This vision mandates that we together pledge to accomplish some urgent tasks:

- Let us pledge to further improve the standard of science education at all

levels. Let us especially turn our attention to our children and facilitate their natural creative energies to develop into top-class capabilities when they grow up. While sustained public funding for primary and secondary education is a necessity – indeed, it is an obligation – we need to open new avenues for private sector support for higher and technical education.

- Let us pledge to increase collaboration between our universities, industry and R&D institutions, including defense R&D. By world standards, India's investments in R&D are wholly inadequate and sub-critical. I would like to see a hike in investments in R&D from the present 0.86% of the GDP to 1% this year, and to be further increased to 2% over the next five years. Apart from increasing financial investments, we should increase the synergy among our existing institutions and assets, with the aim of making India a global R&D platform.
- Let us pledge to strengthen our S&T institutions through competent and inspiring leadership – both scientific and administrative.

- Let us pledge to promote India's considerable wealth of traditional knowledge by bringing it into the mainstream of our national S&T establishment.
- Let us pledge to fully benefit from the new Intellectual Property Rights regime that is now evolving worldwide.
- Let us pledge to spread the culture of Venture Capital and other forms of support for the new knowledge-driven enterprises in India.
- Let us pledge to nurture an atmosphere of innovation, adventure, high ambition, and high achievement in every area of Indian science.

As we enter the new century, I recall to you the stirring words of the first Prime Minister of India, Pandit Jawaharlal Nehru, who said: 'Scientists are a minority in league with the future'.

We have set for ourselves to make the 21st Century India's Century – *Ikkeesvin Shatabdi, Bharat ki Shatabdi*. It is also essential for the realization of an even higher goal: To achieve peace, progress, and happiness for the entire humanity in the new century.

Aatre succeeds Kalam as DRDO chief

Vasudeva K. Aatre succeeds A. P. J. Abdul Kalam as Scientific Adviser to the 'Raksha Mantri' and Director General of DRDO. Born in 1939 at Bangalore, Aatre received his BE in electrical engineering from University of Mysore in 1961 and ME (Electrical) degree from the Indian Institute of Science in 1963.

Awarded the Ph D by Waterloo University in 1967, Aatre worked at the National Research Council of Canada as Research Fellow. He later joined the Technical University of Nova Scotia in

Halifax, Canada, rising to become Professor of Electrical Engineering there. He returned to join DRDO's Naval and Physical Oceanographic Laboratory, Cochin in 1980 and became its Director in 1984.

Aatre is a Fellow of the National Academy of Engineering, the IETE, the Acoustic Society of India and the Ultrasonic Society of India, and is a Senior Member of IEEE. He has to his credit several national awards including DRDO Scientist of the Year Award (1986), Vasvik Award for Electronic Sciences

and Technology (1990), IETE Ram Lal Wadhwa Gold Medal for Electronics and Telecommunication (1993), and DRDO Technology Leadership Award (1998).

Aatre inherits India's largest and most-lavishly funded R&D organization at a time of transitions in a post-nuclear, post-Kargil, strategic environment, with an ageing DRDO scientific cadre, and a declining interest in young people to opt for hard science and engineering as career options.