

Publication: The Economic Times

Date: 05 October 2009

Page: 01 & 04

Edition: Mumbai



QA

INDIA INC GETS A ROLE CALL

THEY ARE TWO OF INDIA'S leading intellectuals and the most eternal optimists around. And they are good friends who think alike on most topics. In an exclusive chat with ET, Infosys co-founder and chief mentor NR Narayana Murthy and former director-general of CSIR RA Mashelkar discuss Corporate India's role in education, on making academia-industry interface successful, the need for innovation and much more.

'Human capital building is the responsibility of cos'

Not just science & technology, India needs an innovation policy, besides a culture where companies join govt in nurturing talent, Narayana Murthy and RA Mashelkar tell ET



When Two Great Minds Meet: NR Narayana Murthy & RA Mashelkar — Nitin Sonawane

IT'S easy to figure out that both NR Narayana Murthy and RA Mashelkar are good friends; they think alike on most topics, often complete each other's sentence and are the most eternal optimists around. Both are extremely passionate about science, technology and innovation and believe that many of the solutions to India's ills can be solved using these. In Mumbai recently for "Future Challenges Summit" organised by the IITB — Monash Research Academy, the two intellectuals discussed academic-industry interface, innovation, and of course the IIT compensation issue with Vinod Mahanta, Vikram Doctor, and N Shivpriya in an exclusive interview.

In the early part of last century, the Tatas and others got into research and education and after that not much happened, but now there is a renewed interest amongst corporates to get into education. Why are we seeing resurgence in corporate interest and what lessons do we learn from Tatas?

NRN: It's a unique time in the history of India. For the first time after 300-400 years, India is getting global attention and admiration. Look at the past five years; the GDP has gone up, exports are rising, the forex situation is comfortable, Indian companies are making acquisitions abroad, NRIs are raising India's image and sports persons have done well. Of course, last year was an exception due to the global scenario. All these things have led to a higher level of confidence in people. When the confidence is high, you reach out and say we have these problems and we will solve it. In some sense, same-ness stems from the confident mindset. I believe that this is the time to start again what Tatas and all started.

Mashelkar: But for the Tatas, I wouldn't be sitting here. I was born into a poor family, my father died when I was six and my mother brought me up doing menial jobs. I walked barefoot till I was 12. There used to be Janjira Motor Works near Chowpatty. I used to study there under the streetlamps. After I did my SSC, and I was about to quit school, I got Sir Dorab Tata Trust scholarship of Rs 60 per month that made me study further. That Rs 60 added so much value to my life without subtracting any value from Tatas. That's what Tatas have done, they give you an opportunity. But for one Mashelkar who got help, they are millions of mashelkars who don't get help. I think the philanthropy that Murthy and the Tatas have demonstrated, needs to be demonstrated by corporates. Because human capital building is not the responsibility solely of the government, but of corporates too. There are four points that are critical for India: Talent, technology, tolerance and trust. The new higher education technology and infrastructure that we are building has to be built on these four pillars. The demand for the country is huge. We talk about six IITs, we need 60 for a country of 1.2 billion.

The research work done by most of the research institutes are too abstract and doesn't benefit the common man. Don't we require more action-oriented research?

Mashelkar: Science is not only unravelling the mystery of nature, blue sky research, and contributing to the pool of knowledge. There is a useful part of science in which you move from science to technology to innovation. That's what the rest of the world has done. What we haven't done in India is not followed the path of science, technology, and innovation. In 1958, we had the science policy resolution, in 1983 we had technology policy statement, and in 2003 we had science and technology policy. What we really require is science, technology and innovation policy. Innovation is mind to market, concept to commercialisation. In the rest of the world you see that happening. In Malaysia, there is a ministry of science, technology, and innovation, Spain has sci-

ence and innovation ministry, Argentina has science, technology and productive innovation ministry, and even UK that has given us 60 Nobel laureates, has ministry of innovation, university and skills.

NRN: Peter Drucker said marketing and innovation are only two of basic functions of a successful business. If you don't have strong marketing and strong innovation, you won't succeed.

Higher education is critical for India's competitiveness in the future. But then the government seems to be dragging its feet in the IIT compensation issue — what's your take on the issue?

NRN: I think that Kapil Sibal has said he was introducing the flexibility clause or something like that. I think he will definitely come out with a solution that will be good. But at the end of the day what we need to do is we have to create channels which will provide decent compensation to the faculty. It doesn't have to be compensation from the government. The only thing we should ask from the government is to give a sum to the institution and as long as they can raise funding legally and ethically, nobody should mind compensating the faculty. For example, at IIM-A, whenever a faculty member's paper is published in a journal, he is given a sum of money. I personally feel that the government should be open and give full autonomy to the institutions to raise funds through legal and ethical channels.

Mashelkar: I agree. For example, I am on the board of the Institute of Chemical Technology (ICT), and on this issue, the board there said we should be the first one to give six-figure salaries, this despite some internal opposition. We said we will not be a burden on the government. X is what they can afford to give, we will pay the rest ourselves with money raised in a legal way and compensation will be linked to performance criteria. What is important is that compensation be performance based, it just cannot be a right.

But experiments involving academia and industry haven't been a success in the past, for example, the Media Lab Asia initiative was a debacle.

NRN: I mean that just because one Media Lab Asia was not successful, we can't throw the baby out of the water. There are many examples of academic enterprise partnerships that have worked, and Mashelkar has been involved in many. We have to look at the glass as half full, not half empty. Also remember that India is just 62-year old and we are toddlers, we are learning a lot of things. All of us have to be positive that's the only way we can make progress.

Mashelkar: I will give you an example. Back in 2007, we celebrated our 60th independence, but we got our second independence in 1991 after the seeds of liberalisation were sown. I have spent 15 years in research labs in pre-liberalisation era and 15 years in post-liberalisation era. In the pre-liberalisation era, it was import substitution, copying. Anything we did, anything that was ahead of the world, the industry questioned have they done it. In 1989, I took over as the director of National Chemical Laboratory (NCL) and changed the business model. I said we will sell to the world. That's what led to the partnership with GE ultimately. People told me GE's R&D budget is more than India's R&D budget, what can we offer them. I said it's not the size of the budget that matters but the size of the idea. We created IP in polymerisation of polyethylene terephthalate (PET) and NCL formed a partnership with GE. Jack Welch said if India is that good, why aren't we there. So GE set up its R&D centre in Bangalore. So things can work.

BRAINS STORM

What we really require is science, technology and innovation policy. Innovation is mind to market, concept to commercialisation. In the rest of the world you see that happening

NR NARAYANA MURTHY
CHAIRMAN-RESEARCH ADVISORY COUNCIL, IITB-MONASH

Talent, technology, tolerance and trust are the four critical points for India. The new higher education technology and infrastructure that we are building has to be built on these four pillars

RA MASHELKAR
BY CHAIRMAN-RESEARCH ADVISORY COUNCIL, IITB-MONASH