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## **The Other IITs: India's intellectual treasures**

A popular misconception now taken as fact is that Pakistan decided to develop its atomic bomb following India's first nuclear test in 1974. Actually Pakistan's decision to go nuclear predated the Indian test; it was an outcome of its defeat in the 1971 war. According to authoritative accounts, on January 24, 1972, within weeks of losing the country's eastern wing, then Prime Minister Zulfikar Ali Bhutto invited hundreds of Pakistani scientists from all over the world to Multan – where the first cricket test is now underway. Among the scientists was Dr Abdul Qadeer Khan.

It was at this meeting that Bhutto made his now famous statement: If India builds the bomb, we will eat grass or leaves, even go hungry, but we will get one of our own. Of course, in fairness it must be said that India was not exactly sitting on its haunches at that time. Work on the "Garib" bomb (since it was the "Garibi Hatao" season), aka the Buddha bomb, had been going on for some years following the Chinese going nuclear.

The Multan meeting Bhutto convened sprang to mind during a recent tete-a-tete with a Canadian researcher of Pakistani origin. Dr Naweed Syed is a brilliant scientist whose work at the University of Calgary of growing nerve cells on a microchip – a meeting of machine and biology -- has galvanized the world of neurobiology. It is an effort with profound implications, including having artificial limbs react in a neural rather than mechanical manner.

Dr Syed's long years abroad have hardly dimmed his ardour for the sub-continent and its well-being. Recently, he said, he was again in Pakistan at the invitation of Gen. Pervez Musharraf to provide inputs on Pakistan's course correction. Evidently, the practice of periodically inviting Pakistani scientists from across the world for consultations is very much on to this day.

In that sense, it would appear Pakistan makes much better use, or more purposeful use, of its offshore intellectual resources than India. To the best of my knowledge, despite all the poompheting about pravasis and NRIs and PIOs, there is no concerted effort in India to tap its formidable sci-tech diapora. The Indian government is largely clueless about India's intellectual treasures (which is the title of a recent coffee table book on the IITs) abroad. There is no data base and no specific effort aimed at tapping these assets.

Indians are now prominent in a staggering range of sci-tech, medical and engineering activities in the west, especially in the United States. They are arguably the largest intellectual workforce in the world besides Americans. You can't attend a conference on nanotechnology or life sciences without tripping over Indian names and faces.

In the academic world, especially in disciplines such as electrical engineering, computer sciences and lately management studies, there is a disproportionately large Indian presence. The US alone has at least 100,000 engineers and 50,000 physicians of Indian origin, in addition to huge numbers in research labs both private and government.

So should the Indian government try and tap this rich mother lode of knowledge and success, I once asked a high government official. He nodded sagely and said, "Let sleeping Gods lie." Apparently, soliciting knowledge is not the Indian style. Whatever happens should happen in the private domain, without government interference. So despite the DRDO's recent claim that it has begun attracting a reverse brain gain and is signing up several NRI scientists and engineers, the treasure trove will remain largely untapped. *Karmanye Va Adhikaraste Ma Phaleshu Kadachana*. It's the Indian way.

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