

Sarthak edit

While India aspires to build top-class universities—world-class institutions or institutes of eminence, what have you—China, where higher education wasn't faring any better than India's as recently as the early-2000s, has decisively stolen a march. A report in *The Economist* talks about the meteoric rise of Tsinghua University—on maths and computing research impact, it was ranked 66th in 2006-09 and 1st in 2013-16. While Tsinghua had the largest individual share for number of papers in the top 1% of the most highly cited ones in maths and computing in 2013-16, the top 15 universities were from just four jurisdictions—the US, China, Hong Kong and Singapore—and, crucially, the Chinese share of the pie was larger than the US's, even if just so. Meanwhile, the number of Indian institutes/universities that break into the top-100/300 universities globally has steadfastly remained in a low-single digit one.

For China, a concerted effort by its government to catapult Chinese universities into the global elite has worked. Pumping in billions of dollars into, first, Project 211 that was aimed at bringing 100 Chinese institutes/universities ready for the academic demands of the 21st century and, since 2015, the Double First Class Plan that aims to nurture two groups—one, leading universities, and the other, specific departments in a larger pool of institutions—could soon see Chinese universities dislodge Western universities.

Funding for academics has played a key role in the stellar growth Chinese universities have seen—for instance, payments for a paper published have risen from \$25 paid nearly three decades back, as per a research cited by *The Economist*, to as much as \$165,000 for a paper published in the journal, *Nature*, depending on the institution. For STEM research in Scopus, the world's biggest catalogue of abstracts and citations, China's share has risen from 4% in 2000 to 19% in 2016, beating the US. Research originating in China has been cited 39.2 million times between 1996-2017; Indian research has been cited less than a third as much in that period.

The spending by the private sector in China as well as its universities on R&D far outstrips that in India. The Chinese pipeline for research, in terms of gross enrolment ratio (GER) in tertiary education, too, has seen massive growth leaps—China's tertiary GER in 1995 actually

lagged India's (4.48% of the school-leaver age cohort in the respective national population vs 5.5%) but is now close to 50% while India's is a much lower 26%. China's focus on encouraging research has brought back home Chinese talent educated in top-rung Western universities.

India, on the other hand, is yet to tackle obsolete higher education regulation, to begin with. It has only now begun to talk about autonomy for its top institutions, and with policies like reservation in faculty posts, that may remain just lip service. No wonder, much of top Indian talent is lost to 'brain drain'—evident in the fact that there is no dearth of Indian-origin academics in foreign nations winning laurels. India must take a leaf from China's book if it can even hope to create the world-class institutions that it so often talks of.