

# INDIA: TOWARDS A KNOWLEDGE-BASED ECONOMY

**K**NOWLEDGE-based economy is going to be a highly competitive economy. India has opted to go high-tech. India's economic success and modernization is now directly linked with its advance in Information, Bio, and other diverse Technologies. Recently, it had to bow to the World Trade Organization [WTO] and discontinue unlicensed production of inexpensive generic pharmaceuticals. India's domestic drug industry is now forced to compete with the multinational corporations. This compliance with WTO norms points to a highly challenging future, not only in the pharmaceutical sector but also in all other spheres.

India's economic advantages so far have resulted from low wages and low-tech manufacturing. Cheap labour will remain an advantage for some time more, but the days of low-tech manufacturing are over. Large-scale development now demands expansion of knowledge and high-tech skills. Are India's Educational System, its Universities and Institutions of Higher Learning, capable of meeting the demands of a knowledge-based economy? London Times Higher Education Supplement has published a list of 200 top-level world-class universities. It includes three Chinese, three Hong Kong, three South Korean universities, and only one Indian Institute of Technology at number 41. These countries are India's Asian competitors. They are positioning themselves for a leadership role in the impending economic era.

Despite lacking world-class institutions of higher learning and research, India is not without its advantages for entering the 21st century knowledge race. It has a vast educational sector—third largest after China and the USA. It has a deeply entrenched academic tradition. Indian society craves higher education and values academic freedom. It uses English as a primary medium of higher learning. There are islands of academic excellence in various parts of the country. Indian education, being the responsibility of the States, lacks uniform standards but allows scope for a variety of approaches and policies. The University Grants Commission's assistance to five major universities to build on and develop further their strong areas is a step toward recognizing the need for a differentiated academic system for fostering excellence. India's colleges and universities, however, remain under-funded and ungovernable.

Compared to China's 15%, India educates only 10% of its youth. Major industrialized nations send more than 50% of their young population to higher learning institutions.

India's premier Institutes of Technology [IITs], Management [IIMs], Medical Colleges, Tata Institute of Fundamental research and similar better-recognized institutions enroll under 1% of student population. Politics perverts academic life and debases educational institutions all over India. Top quality instruction is impeded for paucity of investment in libraries, laboratories and classrooms. Students and teachers play truant and evaluative systems for teaching and learning are shoddy or non-existent. Miraculously, with all these disadvantages, the spirit of individual competition survives; even remote and neglected institutions are able to produce learners who migrate to advanced countries and excel academically, in spite of average performance at home. Indian industry has developed no direct stake in Indian higher education though it harvests a rich crop of talent raised at public expense.

From the 19th through 20th century, Indian higher education has survived as a mediocre system of higher learning. In the 21st century, India will have to compete in the globalized economy. It will need increasing number of highly trained professionals. India's multitudinous population has the largest number of illiterate masses, but then, it also has the largest number of literate people in the world. Even a small proportion comparatively translates into big reservoir of highly qualified elite. But now China and other countries are investing heavily into higher research and education. For competitive needs, India will have to produce top-notch professionals in diverse fields, not only for export but also for its own needs. India cannot depend upon private sector to fill this widening gap. Only public universities have the capability and potential to become world class. Sustained funding, higher salaries, sizeable fellowships and scholarships are needed to attract and stimulate world-class teachers, trainers, learners and researchers. Our universities will need to develop a culture of competition among them, in order to claim higher allocation of funds and resources to maintain their individual identity and distinctive character. For this purpose, they will need to make bold departures and avoid duplication of programmes. Indian universities rarely compete for institutional distinction. They must develop confidence and distinctive culture to pursue different missions, resources and purposes. Since this will be a long-time endeavour, the time to start is now. Let us aim at building a dozen or so world-class universities and let the rest compete with them for future excellence.