



## India: A World-Class Country Without World-Class Higher Education

NDIA IS RUSHING HEADLONG TOWARD ECONOMIC SUCCESS and modernization, counting on high-tech industries such as information technology and biotechnology to propel the nation to prosperity. India's recent announcement that it would no longer produce unlicensed inexpensive generic pharmaceuticals bowed to the realities of the World Trade Organization while at the same time challenging the domestic drug industry to compete with the multinational firms. Unfortunately, India's weak higher education sector constitutes the Achilles' heel of this strategy. India's systematic disinvestment in higher education in recent years has yielded an academic structure characterized by mediocrity, producing neither world-class research nor very many highly trained scholars, scientists, or managers to sustain high-tech development.



### **INDIA**

#### **HISTORY**

India has one of the world's oldest civilizations dating back to 2500 B.C. Aryan tribes from the northwest invaded about 1500 B.C.; their merger with the earlier Dravidian inhabitants created the classical Indian culture. Arab incursions starting in the eighth century and Turkish in the twelfth century were followed by those of European traders, beginning in the late fifteenth century. By the nineteenth century, Great Britain had assumed political control of virtually all Indian lands. Mohandas Gandhi and Jawaharlal Nehru helped end British colonialism through nonviolent resistance. India achieved independence in 1947.

tive acts; accepts compulsory ICJ jurisdiction, with reservations; separate personal law codes apply to Muslims, Christians, and

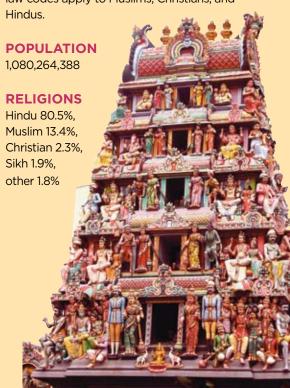




India's official country name is the Republic of India. Its government is a federal republic. The voting age is 18. India's legal system is based on English common law; limited judicial review of legisla-



ALL INDIA PHOTOS: ISTOCKPHOTO



India's main competitors—especially China but also including Singapore, Taiwan, and South Korea—are investing in large and differentiated higher education systems. They are providing access to large numbers of students at the bottom of the academic system while at the same time building some research-based universities are able compete with the world's best institutions. The recent *London Times* Higher Education Supplement ranking of the world's top 200 universities included 3 in China, 3 in Hong Kong, 3 in South Korea, and 1 in Taiwan, and 1 (an Indian Institute of Technology at number 41—the specific campus was not specified) in India.

These countries are positioning themselves for leadership in the knowledge-based economies of the coming era. There was a time when countries could achieve economic success with cheap labor and low-tech manufacturing. Low wages still help, but contemporary large-scale development requires a sophisticated and at least partly knowledge-based economy. India has chosen that path, but will find a major stumbling block in its generally poor university system.

#### **Higher Education Realities**

India has significant advantages in the twenty-first century knowledge race. It has a large higher education sector—the third largest in the world in student numbers, after China and the United States. It uses English as a primary language of higher education and research. It has a long academic tradition. Academic freedom is respected. There are a small number of high quality institutions, departments, and centers that can form the basis of quality sector in higher education. The fact that the states, rather than the central government, exercise major responsibility for higher education creates a rather cumbersome structure, but the system allows for a variety of policies and approaches.

Yet, the weaknesses far outweigh the strengths. India educates approximately 10 percent of its young people in higher education, still a rather low number by international standards—compared to more than half in the major industrialized countries and 15 percent in China. India's academic system has an unusually small high quality sector at the top-most of the academic system is of modest quality at

#### **LANGUAGES**

English enjoys associate status but is the most important language for national, political, and commercial communication; Hindi is the national language and primary tongue of 30% of the people; there are 14 other official languages: Bengali, Telugu, Marathi, Tamil, Urdu, Gujarati, Malayalam, Kannada, Oriya, Punjabi, Assamese, Kashmiri, Sindhi, and Sanskrit; Hindustani is a popular variant of Hindi/Urdu spoken widely throughout northern India but is not an official language.

#### **GEOGRAPHY**

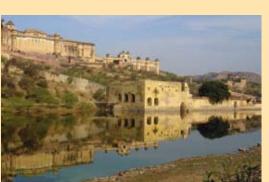
India dominates southern Asia. It is slightly larger than one-third the size of the United States. India is home to 17% of the world's total population accommodated in an area that is 2.4% of the world's total area.

#### **ECONOMY**

India has the world's twelfth largest economy-and the third largest in Asia behind Japan and China—with total GDP of around \$570 billion. Services, industry and agriculture account for 50.7%, 26.6% and 22.7% of GDP respectively. The United States is India's largest trading partner. Bilateral trade in 2003 was \$18.1 billion.

#### **EDUCATION**

Ancient Indian records testify to the search of the Rishis and sages for higher knowledge (para vidya). Since its independence in 1947, India



has had a 14-fold increase in the number of colleges and a 33-fold increase in the number of universities. Today there are 329 universities and 203 state universities. The Indian Higher Education System comprises 18 central universities, 90 deemed universities, five institutions labeled established under States legislation acts, 13 institutes of national importance established by Central legislation, nearly 16,885 colleges, including approximately 1,798 women's colleges.

#### LITERACY RATE

Total population: 59.5% Male: 70.2% Female: 48.3% (2003 est.)

SOURCES: THE CIA WORLD FACTBOOK,
GOVERNMENT OF INDIA DEPARTMENT OF
EDUCATION, U.S. DEPARTMENT OF STATE
BACKGROUND NOTE: INDIA.



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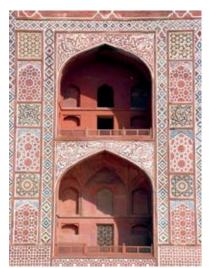
best. Almost all of the world's academic systems resemble a pyramid, with a small top tier and a massive sector at the bottom. India has a tiny top tier. None of its universities occupy a solid position at the top. A few of the best universities have some excellent departments and centers, and there are a small number of outstanding undergraduate colleges. The University Grants Commission's recent major support of five universities to build on their recognized strength is a step toward recognizing a differentiated academic system—and fostering excellence. At present, the world-class institutions are mainly limited to the Indian Institutes of Technology (IITs), the Indian Institutes of Management (IIMs) and perhaps a few others such as the All India Institute of Medical Sciences and the Tata Institute of Fundamental Research. These institutions, combined, enroll well under 1 percent of the student population.

India's colleges and universities, with just a few exceptions, have become large, underfunded, ungovernable institutions. At many of them, politics has intruded into campus life, influencing academic appointments and decisions at all levels. Underinvestment in libraries, information technology, laboratories, and classrooms makes it very difficult to provide top-quality instruction or engage in cutting-edge research.

The rise in the number of part-time teachers and the freeze on new full-time appointments in many places have contributed to a decline

in the commitment and morale of the academic profession. The lack of accountability at any level means that teaching and research performance is seldom measured. The system provides few incentives to perform to the highest standards. Bureaucratic inertia hampers change. Student unrest and occasional faculty agitation sometimes disrupts normal operations, delays examinations, and foments tensions. Nevertheless, with a semblance of normalcy, faculty administrators are able to provide teaching, coordinate examinations, and award degrees.

Even the small top tier of higher education faces serious problems. Political pressures on the IITs to alter admissions and other policies have jeopardized the generally effective meri-



tocracy that has characterized those institutions. Many IIT graduates, well trained in technology, have chosen not to contribute their skills to the burgeoning technology sector in India. Perhaps half leave the country immediately upon graduation to pursue advanced study abroad—and most do not return. A stunning 86 percent of students in science and technology fields from India who obtain degrees in the United States do not return home immediately following their study. Another significant group, some estimate as many as 30 percent, decide to earn MBAs in India because local salaries are higher—and are lost to science and technology. A corps of dedicated and able teachers work at the IITs and IIMs, but the lure of jobs abroad and in the private sector makes it increasingly difficult to lure the best and brightest to the academic profession.

Few in India are thinking creatively about higher education. There is no field of higher education research. Other countries with vibrant academic systems collect data and focus analytic attention on their universities. No independent research or policy centers focusing on higher education exist. Those in government as well as academic leaders seem content to do the "same old thing." Academic institutions and systems have become large and complex. They need good data, careful analysis, and creative ideas. In China, more than two-dozen higher education research centers, and several government agencies are involved in higher education policy.

#### Why Does This Matter?

India has survived with an increasingly mediocre higher education system for decades. Now, as India strives to compete in a globalized economy in areas that require highly trained professionals, the quality of higher education becomes increasingly important. So far, India's large educated population base and its reservoir of at least moderately well-trained university graduates have permitted the country to move ahead. But the competition is fierce, with other countries rapidly upgrading their universities and research facilities. China in particular is heavily investing in improving its best universities with the aim of

making a small group of them world class in the coming decade, and making a larger number internationally competitive research universities. Other Asian countries are also upgrading higher education with the aim of building world class-universities. Taiwan, which is a major designer and producer of IT hardware, is considering merging several of its top technological universities to create an "Asian MIT."

To compete successfully in the knowledgebased economy of the twenty-first century, India needs enough universities that not only produce bright graduates for export but can also support sophisticated research in a number of scientific and scholarly fields and produce at least some of the knowledge and technology needed for an expanding economy. India's recent decision to stop producing generic pharmaceuticals to conform with WTO rules underscores the need for the country to have an independent research capacity to develop, manufacture, and market scientific products, including medicines.



#### Paths to Success

How can India build a higher education system that will permit it to join developed economies? The newly emerging private sector in higher education cannot spearhead academic growth. Several of the well-endowed and effectively managed private institutions maintain reasonably

high standards, although it is not clear that these institutions will be able to sustain themselves in the long run. They can help produce well-qualified graduates in such fields as management, but they cannot form the basis for comprehensive research universities. This sector lacks the resources to build the facilities required for quality instruction and research in the sciences, nor can enough money be earned by providing instruction in the mainstream arts and sciences disciplines. Most of the private institutions do not focus on advanced training in the sciences.

Only public universities have the potential to be truly world-class institutions. Institutions and programs of national prominence have already been identified by the government. But these institutions have not been adequately or consistently supported. The top institutions require sustained funding from public sources. Academic salaries must be high enough to attract excellent scientists and scholars. Fellowships and other grants should be available for bright students. An academic culture that is based on meritocratic norms and competition for advancement and research funds is a necessary component, as is a judicious mix of autonomy to do creative research and accountability to ensure productivity. World-class universities require world-class professors and students—and a culture to sustain and stimulate them.

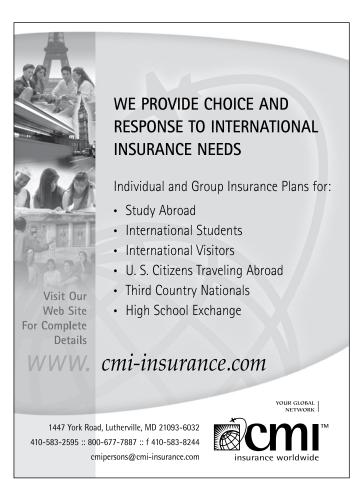
A clearly differentiated academic system has not been created in India—a system where there are some clearly identified elite institutions that receive significantly greater resources than other universities. One of the main reasons that the University of California at Berkeley is so good is that other California universities receive much less support. India's elite universities require sustained state support—they require the recognition that they are indeed top institutions and deserve commensurate support. But they also require effective management and an ethos of an academic meritocracy. Funding institutions that are incapable of managing resources is a wasteful investment. At present, the structures are not in place to permit building and sustaining top-quality programs even if resources are provided.

A combination of specific conditions and resources are needed to create outstanding universities.

- Sustained financial support, with an appropriate mix of accountability and autonomy.
- The development of a clearly differentiated academic system—including private institutions—in which academic institutions have different missions, resources, and purposes.
- Managerial reforms and the introduction of effective administration.
- Truly meritocratic hiring and promotion policies for the academic profession, and similarly rigorous and honest recruitment, selection, and instruction of students.

India cannot build internationally recognized research-oriented universities overnight, but the country has the key elements in place to begin and sustain the process. India will need to create a dozen or more universities that can compete internationally to fully participate in the new world economy. Without these universities, India is destined to remain a scientific backwater.

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Interview with DR. CHRISTIAN BODE, secretary general of the German Academic Exchange Service (DAAD). Dr. Bode spoke at the Conference Symposium entitled "International Education: A Public Diplomacy Imperative" during the NAFSA Conference in Seattle, Washington.

**IE:** From your perspective as an international educator from Europe, why should "public diplomacy" be important to international educators in the United States?

**BODE:** The issue is of major importance for all of us, including international educators in the United States—a nation that seems to be more endangered than its sheer military power might suggest. Given the leading, almost overwhelming role of the United States, the way in which it deals with this issue will very much set the tone for foreign policy worldwide.

## **IE:** And why should U.S. politicians care about international education?

**BODE:** Allow me to provide an anecdote from a recent experience. When I met this year's Nobel Peace Prize winner—and the most prominent DAAD alumna in Africa-Professor Wangari Maathai, I asked her what lessons she had learned form her international education (she did her bachelor's degree in the United States and later did work for her Ph.D. in Germany). She answered in just three words: "Commitment, patience, and persistence." She added that without this international experience, she would never have dared to engage in her miraculous "Green Belt Movement." This is a good message for international educators and politicians who want to listen: a modest investment in education has changed a life, which in turn has changed the world for thousands, if not millions, of Africans.

# **IE:** Do you think this argument is strong enough to encourage the development of an international education policy?

**BODE:** It is just one example that stands for thousands of similar cases. And if it sounds too idealistic you might also advocate the economic or security

impact: those who study engineering in the United States will most probably buy American equipment for their factories at home. And as for national security: you may win a war with your own soldiers, but you need good friends to achieve peace. There is enough opportunity to learn this lesson again. NAFSAns should not hesitate to use the argument of national interests for their good case. Altruism sounds better but, unfortunately, doesn't sell as well in political debates.

## **IE:** How has your personal experience shaped your views of international education overall?

**BODE:** I grew up in the Russian Zone in post-war Germany in midst of ruins, faced with Germany's responsibility for devastation and crime unparalleled in human history. Thus "never again" became the imperative of my generation and that might explain why Germany has been so reluctant about any new military intervention whatever "good reasons" might have been argued for it.

## **IE:** Has the United States played a role in your personal or professional development?

**BODE:** Very much so, and it has been a positive one so far. My first experience with America, when our family moved to the West, was an unexpected series of CARE packages that helped us, the defeated enemies, in a situation of existential need and great distress. This initiative of public or private diplomacy symbolized perhaps most impressively the generosity and the far-sightedness of the United States, which we will never forget. On a larger scale, the United States became the decisive power to help Germany build an effective and prosperous democratic welfare state. That was a fabulous example of how to win a lasting peace.