

Gap in funding among universities

The Honourable Prime Minister's statement at the Indian Science Congress (ISC) on increasing funds for higher education is a one step closer to the goal of allocating resources equivalent to 6% of the gross domestic product¹.

Higher education and scientific R&D have long been recognized as major contributing factors to the social, cultural and intellectual life of society by improving the level of human capital. In recent years, competition for greater share in the global economy has led governments around the world to think strategically about the economic significance of higher education, knowledge production and dissemination. With higher education becoming an international service, there is growing concern about quality, standards and recognition around the world. The assessment and accreditation of the universities and national laboratories are important for each country to meet high standards in global competition.

At present, there are 353 universities in India (Table 1) and over 16,885 colleges, including around 1800 women's colleges. Apart from this there are 1173 polytechnic institutes. Further, there are nearly thousand industrial research and development laboratories in private and public sectors².

Setting up of National Assessment and Accreditation Council (NAAC) has sent the right positive signals for generating and promoting awareness of the urgent need for quality upgradation of colleges and universities. However, only around 130 universities and 3000 colleges have been accredited so far. Thus, there is a need to identify effective ways (including outsourcing the work) and strategies to expedite the completion of assessment, accreditation and re-accreditation by NAAC within a stipulated time-frame.

In most developed countries a significant proportion of the population (up to

50%) takes up higher education at some time in their lives. The current enrolment in India (below 9%) is less than the average of the lower middle-income countries in the world; this is not adequate for a country that aims at transforming itself into a developed country. India has 7.80 scientists per thousand population compared to 180.66 in Canada, 139.16 in the Russian Federation, 53.13 in Korea and 21.15 in USA³.

In terms of scientific output, the Indian contribution is 2.7% of the world share¹. However, the number of publications from India had been stable around 15,000 papers per year until 2000. In the five years (2001–06), it has increased to nearly 25,000 papers per year (60% increase)⁴.

Currently, India has Science and Technology cooperation agreements with 57 countries. Amongst the developed countries the list includes the G8 countries such as France, Germany, Italy, Japan, UK and USA. Amongst the emerging economies are China and Brazil⁵. However, State universities like Madras and Mysore have only 2–6 international academic linkages^{6,7}. While comparing with other countries, these points also need to be considered.

Within the State universities there is a huge variation in funding, for example,

Table 1. Types of universities in India

Type of university	Number
Central universities	20
Deemed universities	105*
State universities	203
State legislated universities	05
UGC recognized private universities	07
Institutes of national importance	13
Total	353

*Including KAHE, Belgaum.

in the oldest and high performing southern State university namely the University of Madras, the total research funding is around Rs 14 crores, while in case of Mysore it is less than five crores^{6,7}. Similarly, departmental projects in Madras number 20 while Mysore has only nine. Hence, there is a gap in funding not only between national laboratories and State universities, but within the State universities as well. Efforts should be made to reduce this gap, as faculty appointments are made using the same criteria in all universities. Even though credentials of a faculty play a major role in obtaining research grants, looking at other possible influences some remedial measures have to be adopted at least in funding departmental projects to avoid discrepancy.

1. Jayaraman, K. S., *Nature*, 2007, **445**, 134–135.
2. University Grants Commission; <http://www.ugc.ac.in>; Retrieved on 17 January 2007.
3. NSTMIS, 2005, <http://www.nstmis-dst.org/>.
4. Miyairi, N., *Essential Science Indicators*, 2006.
5. Seethapathy, R. and Johnston, D., *S&T Report, Canada–India S&T mapping study*, 2004, p. 25.
6. University of Madras, 2006, *Annual Report*, 2006.
7. University of Mysore, 2005, *Annual Report*, 2006.

B. H. MURIGENDRA
R. B. NERLI*
S. P. NANDESHWAR

*KLES Hospital & MRC,
Nehru Nagar,
Belgaum 590 010, India
e-mail: director@kleskf.org