

Indian universities 'in crisis' over government funding cuts

New Delhi. The vice-chancellor of Delhi University, Upendra Baxi, resigned last week in protest over government cutbacks which, he claims, have left him with insufficient funds for university maintenance, let alone for research.

Baxi's move has turned a spotlight on the acute financial crisis facing India's 144 universities. Many leading educationalists are worried that the quality of India's science and engineering education will suffer because of the financial pressures that the universities are now experiencing.

Of the 10 centrally funded universities that receive their budgets from the University Grants Commission (UGC), Delhi University gets the maximum possible government support. Baxi's departure because of the "economic bankruptcy" of his university has not only highlighted its own problems but also raised questions about the plight of universities who receive only meagre grants from the UGC.

Delhi University received Rs300 million (US\$10 million) from UGC this year, compared with the Rs450 million that Baxi claims is needed just to pay staff salaries and maintain existing services. Earlier this year a government-appointed committee decided that the university, which has 189,000 students, needed a minimum of Rs24,000 per graduate student. But the UGC funding provides only Rs6,000 per student.

The impact of the cutbacks is being widely felt. According to Baxi, for example, the science library subscribed to 795 foreign journals in 1992, but this year has only been able to pay for 275 subscriptions. Similarly, students found that there were no chemicals available when they came to take practical examinations.

About 4.65 million students attend 7,120 higher education colleges in India, accounting for 10 per cent of the government's total education budget (which is 3.5 per cent of the national budget). Increasing demands on the higher education budget from primary and secondary sectors have forced the UGC to freeze maintenance grants at 1991 levels since 1992, and vice-chancellors have been asked to find alternative sources of funding.

Tigers under threat

London. The continued use of tiger bones, skin and other body parts in traditional Chinese medical practices has produced a "catastrophic" loss of the animal and an urgent need of measures to save the species from extinction, according to a report *Killed for a Cure* due to be published next week by the World Wide Fund for Nature. □

To offset the government cutbacks, for example, the Indian Institutes of Technology (IIT) have raised tuition fees, particularly for foreign students. They have also carried out contract work for industry, and faculty members are allowed to offer consultancies on condition that they give a percentage of their earnings to the institutes.

But universities have been less successful than the IIT in generating income from non-governmental sources, in spite of the fact that, since 1992, private donations have been exempt from income tax. Raising tuition fees in the case of universities is a politically sensitive issue, and Baxi said

He was on his way to serve the drinks at a party on our lawns, when the official rickshaw had a puncture, and something must have finally snapped...



even such a move would not be sufficient to resolve the current crisis.

For example, the Bangalore University has reacted to its financial difficulties by diverting money from its student welfare fund, and reducing the intake of students on 'capital-intensive' courses such as microbiology and computer science.

One vice-chancellor in Bihar state commutes to work in a cycle rickshaw because his university cannot afford petrol for the official car. Magadh University, also in Bihar state, last year paid Rs1.5 million on interest payments on its bank overdrafts.

Some colleges in Delhi have been earning money by hiring out their lawns for marriage parties, while Calcutta University has decided to sell more than 950 gold and silver medals that have been lying unclaimed since 1906.

Baxi claims that if the financial situation facing Delhi University does not improve in the near future, "its soul will be lost for ever". Administrators of other universities, trying to survive in the face of the same pressures, hope that Baxi's sacrifice will not have been in vain. **K. S. Jayaraman**

Science loses its male image among UK schoolchildren

London. Survey results released in London this week show that most schoolchildren acknowledge that science and technology are important in their everyday lives — in particular, science's contribution to new technologies such as computers and television — but think that it should be more fun.

At the same time, while the majority of parents and teachers still perceive science as a male domain, with 80 per cent of female teachers believing this, pupils themselves (and particularly girls) are less likely to agree.

The survey was timed to coincide with the launch of the Institution of Electrical Engineers' 70th Faraday Lecture, and was commissioned by the telecommunications companies Motorola and Cellnet as part of a £1-million sponsorship of the lecture.

It showed that, as students embark on GCSE courses taken usually at the age of 16, their attitudes change; 32 per cent of 13-year-olds thought science was fun, and 72 per cent that it was useful, but these figures fell to 23 and 63 per cent respectively for those one year older. Conversely, the number of children who considered science boring and difficult rose between these two ages.

Commenting on the results, Jill Nelson, head of science promotion at the Royal Society, said they may reflect the process of pupils "getting down to serious study" associated with examination courses, and might also apply to other subjects.

But she welcomed indications that girls had not been turned off science and technology, and did not see science as a subject closed to them. This is despite evidence from Royal Society studies of "the damage being done much earlier", with many girls being put off science as early as primary school level.

The Faraday Lecture is held annually with the aim of encouraging schoolchildren to pursue careers in science and technology. The travelling lecture begins in Glasgow in September and finishes in Brighton next March, after visiting 18 cities in the United Kingdom and Ireland.

The findings are the result of a survey of more than 1,500 13–16-year-olds across the United Kingdom, 185 parents and 100 teachers of biology, chemistry and physics. The children answered a self-completed questionnaire, whereas parents and teachers were interviewed.

Teachers tended to assume that students would find science dull, and stressed the benefits of studying it for future career prospects rather than because it was enjoyable or fun. And 32 per cent of students said that science should be made more fun, with more emphasis on an interactive approach and less emphasis on textbooks. **Maggie Verrall**