

Canberra on 12 September 1983. An application from Brazil was approved at the same time. So India is now part of the treaty system that it has heavily criticized in the past. The two expeditions can be seen in retrospect as attempts to satisfy criteria for membership of the Antarctic club.

Why has India confounded the experts, and apparently caused a serious rift in the anti-Antarctic Treaty camp? While disclaiming any territorial ambitions, India has been reticent in referring to the wider political aspects of its Antarctic policy. In 1982 Dr Qasim told *The Tribune* (published in Chandigarh) that "India considers Antarctica to be the common heritage of mankind and not a preserve of a few nations". It is clear that the Indian Government believes that a seat at the consultative party sessions will provide a better opportunity to influence developments in the southern continent, particularly in promoting the "common heritage" concept.

Qasim also conceded a more selfish motive when he said that India had ensured that it would not be left behind in any international race to exploit the hidden resources of Antarctica. The potential marine resources are viewed with particular interest in India, and it is probably significant that the Department of Ocean Development has been the main agency behind the Antarctic expeditions.

Scientific research has proved the chief beneficiary of the Antarctic Treaty system, and science will continue to benefit as long as the treaty survives. It is therefore ironic that, at the very time when the treaty system has been reinforced by recent additions to its ranks — 1982–83 saw not only the admission of Brazil and India as consultative parties but also the accession of Spain and China — it should face its most serious test yet. Internally, there have been difficulties surrounding the Antarctic mineral regime negotiations, which were begun in Wellington in January 1983, and continued at Bonn last July, while externally there is the Malaysian campaign to replace the treaty by a regime led by the United Nations, perhaps modelled on the International Sea-Bed Authority. Indeed, many countries feel that the principles underlying the Law of the Sea should be extended to Antarctica.

Scientists need to watch future developments closely, for any United Nations intervention in Antarctic affairs will be oriented towards resources rather than science. The recent enhancement of the Antarctic Treaty system — and the fact that it may soon be further strengthened by the addition as consultative parties of China, Spain and East Germany — encourages the view that the treaty will survive, so that any intervention by the United Nations will occur only within the parameters established by the 1959 treaty. If so, Antarctica may remain the "continent for science" advocated by Sir Vivian Fuchs in 1973. **Peter J. Beck**

British universities

Survival by questionnaire

SIR Peter Swinnerton-Dyer, the new chairman of the University Grants Committee, has set out to alter the committee's reputation for secretiveness. Encouraged by Sir Keith Joseph, Secretary of State for Education and Science, to conduct an "open and wide-ranging" debate on the future of the British university system over the next ten years, the committee has published in full a circular letter sent to universities.

The letter takes the form of an all-embracing series of Catch-22 questions on what changes the universities would like to see — or be able to tolerate. Although the questions are addressed to vice-chancellors, Sir Peter expects many of them to be answered by particular groups within universities, to avoid delay and "answers with the consistency of babyfood".

On the central question of how resource per student will change, universities have been asked to consider a number of options specified by Sir Keith. They range from level funding, in real terms, to a 2 per cent annual decrease. In response to a request from Sir Peter's predecessor to find places for an extra 5,000 students, next year and in the year following, at no extra cost, universities have submitted proposals for 2,500 more science students and 1,000 more humanities students for each of the years in question. But Sir Peter was unable earlier this week to give any clear idea of how resources might change in future, and observed that the Department of Education and Science is unlikely to have a master plan that it is working towards. Universities' responses may in part determine future policy.

Despite the long term uncertainty, the fact that resource per student will certainly not increase, together with the fact that student demand seems certain to decrease later this decade, must imply a substantial contraction of the university system. If the present balance between universities and the public sector is maintained, the universities must shrink by 15–20 per cent during the early 1990s. Against this background, universities are asked for their views on changes in organization and subject balance.

Sir Peter refused to rule out the possibility of closures, but observed that there would be serious constitutional difficulties in such a course. To revoke a Royal Charter is without recent precedent (although this was apparently done by James II of England before he was deposed in 1688). But Sir Peter pointed out that several universities are now as small as is economic — about 4,000 students for a university offering a full range of courses. The most likely scenario is that some universities might merge with polytechnics or other colleges, and cease to be supported mainly by the University Grants Committee.

Whatever happens, there will certainly

be a blurring, if not a disappearance, of the "binary line" between universities and other institutions of advanced further education. And any plans for the universities must be reconciled with plans now being drawn up for the public sector.

The government is also keen to encourage universities to find other sources of funds than the public purse, and financial links with industrial companies seem likely to increase. One of the questions now asked of the universities is disarmingly frank: do you think that the dual support system can survive, and would you wish it to do so? But Sir Peter conceded that there may be difficulties in asking some universities to find all their support from industry, although he observed that there are excellent universities in Japan supported in this way.

One major problem taxing the committee is the age distribution of academic staff. As most universities coped with the 1981 cuts by encouraging early retirement, the present distribution is very unbalanced. The replacement rate now in prospect is below that considered desirable by the Department of Education and Science a year ago. One possibility is that the "New Blood" scheme for recruiting extra academic staff might be extended beyond the three years planned. But some researchers are fearful that the scheme could be used as an instrument to force unwelcome change: after the first year of an appointment under the scheme, allowances are subsumed within universities' recurrent grant. The question of security of tenure is also raised in this context. The inviolability of tenure has still not been fully tested, but the question cannot be put off indefinitely.

Universities are also asked to consider whether the research component of their recurrent grant should be "earmarked". This controversial proposal has been made several times recently, and is favoured by some researchers. But, although the University Grants Committee is exercising "positive self-restraint" in not pre-judging issues before universities have replied, it was made clear that the committee sees unusual and difficult problems in this course, chief of which is the difficulty of accurately costing the time of someone who is both a teacher and a researcher.

Many of the questions could be fairly described as speculative — for example, how would universities react to a replacement of the present system of sixth-form education by a broader alternative? And universities are encouraged to add any further comments of their own on whatever subject they wish. Answers are requested by 31 March 1984, and will be marked by the following October. Results (not, apparently, graded) will then be sent to the Secretary of State. But this will be only the first stage of the debate. **Tim Beardsley**