

South Africa reforms university funding

[CAPE TOWN] The South African government has proposed a number of mechanisms for bringing the growth in student numbers into line with the country's manpower requirements. They include completely restructuring the government's formula for calculating university subsidies.

In particular, the government wants to separate the state funding of universities' research and teaching components. Research funds will be earmarked, as will funds for student financial support and those for redressing past imbalances between institutions.

The government's plans, contained in a draft white paper (policy document) published last month, also suggest that funding for undergraduate teaching should be allocated on the basis of fixed subsidies per degree place in each discipline, varying according to the costs of training a student in that discipline.

But it is unclear whether places will be allocated at faculty level or at the level of the particular programmes set to replace the current system of major subjects.

The state will set a national total for the number of subsidized places in each discipline, and individual institutions will negotiate their share of places for a three-year cycle through a Council on Higher Education (CHE). Research funds will be linked to the allocation of postgraduate places, and will be commensurate with training costs.

These funds will be allocated on the basis of existing research capacity and on the need for institutional development. But it is unclear how these two criteria will be assessed.

The new proposals contrast sharply with the present funding system, set up in 1982, which allocates funding using a formula incorporating student enrolment and success rates, but with different weighting for arts- and science-based courses, and for undergraduate and postgraduate students.

The current formula also includes a measure for research output. This will not feature in the new formula, but will be taken into account when student places are reallocated at the end of each three-year cycle.

With no limits on student numbers in the various disciplines, the present system has led to undirected growth, particularly in the arts and social sciences. The government acknowledges the resulting imbalance in the qualifications of graduates, but indicates that, although future growth will attempt to increase enrolment in science-based programmes, cuts are not envisaged in other disciplines, as an overall growth in student numbers is anticipated.

The draft white paper does not provide for the incorporation of colleges of education, nursing and agriculture into universities and technikons, as suggested last year by the

National Commission on Higher Education (see *Nature* 384, 13-14; 1996), although it does propose that they are administered under one system.

Universities are relieved that they will be allowed to retain their own admissions criteria, and not be required to work through a central admissions office. Hugh Amooore, registrar at the University of Cape Town, describes the draft white paper as a "great improvement" on the green paper (consultation document). In particular, he welcomes the concept of a three-year funding cycle, as that will help planning.

But Amooore and others warn that the success of the changes is predicated on competence at ministerial, civil servant and CHE level. They express concern, for example, that the senior post responsible for higher education in the Department of Education is vacant.

A draft Higher Education Bill, providing for the establishment of the CHE, has also been published, and should be put to parliament during this session. Institutions have until 23 May to respond to both, and it is hoped that the council will be appointed by October.

Universities are likely still to be funded according to the old formula in 1998, although this may be combined with the distribution of some earmarked funds. The new system is destined to be in operation from 2000.

Meanwhile, the continued reduction in South Africa's university subsidy under the old formula, announced in March, has led to further student unrest. Four universities, including the Universities of the North and Fort Hare closed down, with students protesting at a decision to exclude those who were unable to pay fees.

Michael Cherry

Researchers pin hopes on international sources

[CAPE TOWN] As access of university researchers in South Africa to government funds declines, many are hoping that their salvation lies in international sources of funding.

This month, the European Union (EU) agreement on scientific and technological cooperation with South Africa, which was signed last December, takes effect, and several United Nations agencies have recently established offices in South Africa and are assisting with research development.

The agreement with Europe enables South Africa to participate in the union's fourth Framework research programme, where it is classified as a developing country. Europe provides 50 per cent of the costs of joint research programmes by groups with participants from two of its member states and at least one developing country.

One of the first South Africans to receive EU funds, Karen Esler of the botany department at the University of Stellenbosch, says that this will provide "a tremendous boost" to her research on arid ecosystems.

The United Nations Educational, Scientific and Cultural Organization (Unesco) last year established an office in Pretoria to serve southern Africa. According to its science and technology adviser, Benjamin Ntim, it is particularly interested in developing a programme to address the problem of inadequate laboratory equipment in schools, and it may enlist the help of other international agencies.

South African researchers are now eligible to apply for funds from Unesco's regular programme, in any field of science, or for specially earmarked funds for research on biotechnology, man and the biosphere, and hydrology. As a result of South Africa joining the organization's Intergovernmental Oceanographic Commission, its researchers are now eligible for sponsorship to attend its meetings and training workshops.

The World Bank has also recently opened an office in Pretoria, and is encouraging research projects that coincide with its mission of "a sustained attack on

poverty". The bank's deputy representative, Junaid Ahmad, emphasizes the need to engage local researchers in programmes focusing on economic issues and behavioural changes.

The Global Environment Facility, administered by the bank and the United Nations Development Programme, is considering several applications from South African research groups.

Last month the Benefit project was launched (Benguela Environment Fisheries Interaction Training), with substantial aid from Norway and Germany. This is concerned with developing an understanding of the Benguela fisheries on the west coast of South Africa, Angola and Namibia, and of procedures for stock assessment.

Among the benefits for scientists from these countries will be access provided by the European partners to ships' time, which is expensive. "Nothing much has happened yet, but at last things are starting to happen," says John Field, president of South Africa's Scientific Committee on Oceanic Research.

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