Brazilian science searches for new direction

São Paulo. Three separate studies of the state of science and technology in Brazil have provoked soul searching among the country's scientists. The studies all call for increased financing of applied research, and for increased links with private enterprise.

But doubts still linger about the wisdom of dumping a model based on state-sponsored basic research that has achieved good results in the recent past, even though it is recognized that this model may no longer be appropriate in a world characterized by lower trade barriers and increased pressure to achieve international competitiveness.

The studies were commissioned by the Ministry of Science and Technology at the request of international agencies such as the World Bank. Published in May, near the end

of the current government's term (elections are in October), they set a framework for the science policies of its successor.

"We need to stop the decline in resources, stop the brain drain, make efforts to work with private enterprise, and stop big projects that have not worked, such as the nuclear energy deal with Germany," says Simon Schwartzman, a researcher at University of São Paulo and Getlio Vargas Foundation, who coordinated one of the studies.

There are already signs that the government acknowledges the dangers of cutting back support for research. In one of its last acts before the election, it has increased funding for the Ministry of Science and Technology by 6 per cent next year, at a time when almost all other ministries have exper-

ienced cuts of between 16 and 20 per cent.

The largest of the three studies, costing US\$1.6 million and spawning a 6,000-page document, focused on the competitiveness of Brazilian Industry, and was coordinated by economist Luciano Coutinho, of the State University of Campinas (Unicamp) in São Paulo State.

The second study, coordinated by Schwartzman, dealt with the current status of several areas of science and technology in Brazil, notably in universities and research institutes. The third, dealing with the institutional framework for financing research, was compiled by Francisco Biato of the Ministry of Economy.

Speaking at a meeting organized by the Getlio Vargas Foundation — a ▶

Universities in bid to take over research institute

London. A consortium of three universities this week unveiled plans to take over the Natural Resources Institute (NRI), a major government research institute, just a few months after the government's multi-departmental efficiency scrutiny recommended that transfer of research institutes to universities should be considered "routinely" (see *Nature* 370, 89; 1994).

Under the proposal, put to the Overseas Development Administration (ODA) earlier this month, the NRI's active research arm and the laboratories at Chatham, southern England, would be taken over by the University of Greenwich. The marketing and business side of the NRI would become a separate non-profit company jointly owned by the three colleges making up the consortium, the University of Greenwich, the University of Edinburgh and Wye College, part of the University of London.

The announcement comes as the University of Greenwich is in the process of moving its School of Earth Sciences to NRI's site in Chatham. The NRI had been seeking a sub-tenant since 1992 to rent excess office

and laboratory space. The university and NRI will offer joint courses from September.

Other research institutes are watching this move, and any subsequent developments on the ownership of the NRI, with interest, in light of the recommendations by the scrutiny team, which are in a four-month consultation period until November.

Earlier this month the ODA, the current owners of NRI, announced Phase

II of a special ownership study to investigate further the options for ownership of NRI. Phase I of the study, commissioned by the ODA in January, included the possibility of the transfer of NRI to a university.

The NRI, which specializes in research in natural resource management in developing countries, including resource assessment and pest management, was formed in 1987 by the amalgamation of the Tropical Development and Research Institute and the Land Resources Development Centre. It was made an agency of the ODA in 1990 as part of the government's plans to prepare some public-sector research institutions for privatization.

Rob Black, who is chairman of the ODA branch of the Institution of Professionals, Managers and Specialists (IPMS), the main union of the 530 NRI staff, said that union members had yet to be consulted on the plans put forward by the consortium, which were only made public this week. But he did expect that NRI staff would be asking the ODA for assurances that job losses would be kept to a minimum and that there would be

some continuity in terms of the naming of the institute, which has undergone several changes in its recent history.

Staff are right to be sceptical, according to Valerie Ellis, assistant general secretary of the IPMS. Although the union is in favour of university links, there may be hidden dangers because universities are not as close to research institutes as may be imagined, she says.

"The major problem is that NRI's mission is about helping developing countries, including technology transfer, and that's why its a government laboratory and not a university department already," argues Ellis.

Despite claims by Sir Peter Levene, head of the efficiency scrutiny team, that rationalization does not necessarily mean job cuts, staff are concerned that phase II of the ownership study will mean more redundancies on top of the 47 already this year.

"I think everybody accepts that NRI will diminish in size, [but] I still think most people probably would prefer to remain in the civil service as an agency, that they do their job best in that way," says Black.

Lady Chalker, minister for overseas development, will ultimately make the decision on ownership, probably by the end of this year. But NRI is quite sure of its preferred option. "I think there's no doubt at all that it's going to be quite difficult to find an ownership option which has as many of the attractions of merging with a university," says Anthony Beattie, chief executive of NRI.



The University of Greenwich will share NRI's site at Chatham in Kent.

Maggie Verrall