

The council has the last word

Brasília

It is a mean trick to arrive at the headquarters of the National Research Council (CNPq) after several weeks of accumulating complaints from Brazilian scientists about their parent research organization. CNPq is too cumbersome, they say, it is supposed to handle import procedures but everything takes years, travel grants arrive after conferences are over, foreign collaborations founder in paperwork, and grants are spread too thin, or go to foreign scholarships so that nothing is left for those at home.

And yet more, CNPQ swallows you up complains one University of São Paulo researcher, "if you criticize them, they say 'come and help us', and you end up being involved in all those difficulties too".

Guilherme Brandão, Special Assessor for International Cooperation at CNPq, is a pipe-smoking meditative type who only occasionally shows signs of mild irritation at some of the more unreasonable behaviour of scientists. CNPq is not, in any case, a complete master of its own destiny, but has to weather all kinds of political storms and bureaucratic meddling.

Science lives in a difficult environment. "Science and technology are not thought of as a high priority", says Brandão, "we are pressured by so many other things we need to solve, we have immediate problems in health and nutrition and so on". And because there is no tradition of research and development by industry (expenditure on research by industry is just 5 per cent of the total), science is totally dependent on the government. "When there is a government financial crisis, we suffer badly", says Brandão. One of those crises arrived earlier this year when budgets were cut by half and, for a short while, it seemed that some 40 per cent of the staff of CNPq's research institutes might be without a job.

To summarize, CNPq is a research council just like others elsewhere, except that along with its grants programme it has eleven research institutes (see page 357) and a large scholarship programme. It has been very powerful, with full responsibility for science and technology policy. But that responsibility went to the Ministry of Science and Technology (now the Special Secretariat for Science and Technology) in 1985. CNPq has never really relinquished its claim to the area and despite lacking an official mandate, continues work at its Centre for Policy Studies.

If scientists complain of tardiness, they are perhaps insensitive to CNPq's scale. Each year, 40,000–50,000 applications for grants come in to CNPq's offices (including travel grants and so on), along with over 100,000 applications for scholarships. Suitable reviewers have to be found

for each application, CNPq can provide for a third of the applicants in each category.

CNPq employs 1,000 staff but even so Brandão says that sometimes "the amount of paperwork drives us crazy here". The system is to be rationalised next year. Instead of four fixed decision periods a year, a system which can never generate a decision in less than 4–5 months, CNPq will deal on a once-a-year basis with some things (scholarships, for example) and continuously with others that need immediate decisions (such as travel grants). That change should do away with a substantial fraction of the complaints of CNPq's inflexibility.

CNPq's scholarship programme is big, too big says critics, who think more of the resources should be directed to ongoing research rather than training. Ten years ago there were just 5,000 research scholarships in total. Today there are 30,000 inside Brazil and 3,500 overseas, part of a definite policy that top priority should go to human resources. But the number abroad will lessen next year as people return and efforts are made to save foreign currency. Inside Brazil the number will increase to provide 44,500 places. A scholarship is not riches — a doctoral student receives around \$600 a month — but thanks to "a very great joint victory of CNPq and CAPES", the amounts are tied to staff salaries so providing compensation for inflation.

On the extraordinary difficulty of
CAPITAL CITY

Back to the future

BRASILIA, the futuristic city of the 1950s, is laid out in the shape of a gigantic bow with its central arrow an enormous, thousand-yard wide avenue that, at its tip, juts out into an artificial lake. Along it, at great intervals, are the television tower, various monuments, the cathedral, the double row of identical, rectangular blocks containing the ministries, and then Congress and the Supreme Court.

The bow is a curving set of parallel roads along which are organized the city's 'sectors': the hotel sector, the banking sector, the cultural sector, the hospital sector, the embassy sector, the sector of individual housing . . . and so on. The great unifying architectural plan continues to inspire in areas of astonishing simplicity of design, where traffic flows swiftly past rows of simple, white concrete apartment blocks raised on stilts to allow clear sight lines. Elsewhere, the road plan remains but the city has filled in a medley of styles. CNPq has its offices in the sector of "autarquias" — autonomous organiza- tions. □

importing equipment and reagents for research, Brandão wearily says, "Yes, we understand the community's complaints. But sometimes they complain in the wrong place". CNPq is caught up in a much vaster bureaucracy.

All imports must pass through CACEX, and CACEX is essentially an instrument of foreign policy. It is necessary to show that no similar Brazilian product exists but 'similarity' is often a "complicated business", says Brandão. Next a pro-forma invoice is necessary, then "when you send this to CACEX they may have a problem with foreign currency and freeze everything".

While the difficulties are undoubtedly real, some problems may remain at CNPq. According to the World Bank, FAPESP, the São Paulo-state research council (see opposite) takes from "six months to a maximum of one year to import equipment", while CNPq takes "one and a half to two years". And CNPq took "at least 45 days to log in importation requests" (it has since improved).

CNPq has to spend a lot of time fighting off arbitrary decisions from elsewhere. Brandão relates how in January the government suddenly decided that money sent abroad for training grants should be exchanged at the tourist rate rather than the official rate, immediately cutting the grants' value by more than half. In the ensuing havoc, many students decided not to take up their scholarships. The decision was reversed only a few weeks ago.

One complaint which Brandão clearly feels unfair is that Brazil is trying to shut out foreign researchers or limit their access to the Amazon. Brandão says that 99 per cent of foreign expeditions (of which there are 30–40 a year) are approved, but there have to be formalities to ensure that an expedition will not intrude on Indian or private land and so on. Collaborative programmes, of which there are thousands, are organized through Brazilian counterparts. Brandão says the system ensures that Brazil obtains some benefit from research conducted here.

CNPq is looking to the future and looking for innovative ways to boost research investment by industry. It is not easy because in many industrial sectors a foreign licensing agreement captures a sure product while home development involves risk. But in other, newer sectors, foreign companies do not want to license their technology. CNPq is trying to get Congress to adopt flexible tax incentive strategies. In the meantime it is introducing a new programme of human resources in strategic areas (biotechnology, new materials and the like), to support the training of personnel in any institution, private or public, provided it is tied to a long-term research and development programme. The goal is to have 3,500 people in the programme by next year. □