

international news

EIGHT THOUSAND million francs in the French budget for scientific research means a growth of 13% over 1974—barely enough to keep pace with inflation. It has been described as a marking-time budget, and hardly more could have been expected in the present economic climate. Moreover the new government, coming after a long period when no decisions were taken, has not yet put forward a definitive policy on all aspects of science. Bernard Gregory, director of the Centre National de la Recherche Scientifique (CNRS), recently summed it up in an interview in *Le Monde*: "it won't do much harm to future prospects as the money has been distributed with a view to keeping open all options . . . but it is not a situation which can go on for many years".

The *enveloppe recherche*, as the budget is called, is only concerned with interministerial projects (which fall within the province of the Délégation Générale à la Recherche Scientifique et Technique (DGRST)). Military, telecommunication and aeronautics expenditures are the concern of their own ministries (in 1973 they came to 6,230 million francs). In 1967 2.2% of GNP was devoted to all research, now it is 1.7%. The increase in public expenditure between 1969 and 1973 was only 33%, compared with 69% in Italy and

Changes due in French science

from the staff of La Recherche

95% in Germany.

There will be very few new jobs; this is of particular concern to government laboratories for which the budget gives authority to take on permanently people of specific skills. In 1971, 432 research jobs were created, in 1973, 200; for 1975 only 156 are projected. The Minister of Industry and Research M d'Ornano, criticised for this running down of manpower, replied that one should add to this figure 194 technicians and 264 *vacataire* posts (research workers on short term contracts).

A controlled budget means a restriction on non-current expenditure for new projects. The public sector has not suffered too much in this way—construction of new laboratories or purchase of new equipment can be postponed—but private laboratories living on state funds will feel the pinch; many scientists could find themselves out of work. This was already happening in mid-1974 in the social sciences sector.

There are priority areas, mainly in

the fields of production and distribution of energy. After several stagnant years, the atomic energy commission starts to grow again by 26.7% in current francs. Most of this will go to reactor safety, treating of fuel elements and the storage of nuclear waste. The rest of the energy expenditure (up to F178.4 millions from F116.1 millions in 1974) will go mainly on thermonuclear fusion research and to a lesser degree on energy conservation, solar energy (F12 million) and geothermal energy (F5 million). Nobody contests the high priority for energy; even so, some deputies have qualms about the overwhelming and unthinking emphasis on electricity production.

Other priorities are biology and certain parts of the social sciences. Research with socio-economic ends (environment, urbanism, transport, pollution) still grows but less than it did in previous years. After much hesitation the launcher *Ariane* is kept thanks to deft budgetary transfers and since *Ariane* is interlocked with other projects, space is relatively well supported financially.

Fundamental research, however, as practised at CNRS and in the universities stagnates; there will only be a 7% growth in current francs, and this is causing much worry.

IN France, as in most western countries, the role of scientists in determining the major issues of science policy has been declining since the late 1960s. The large research institutions are, it is true, in general directed by scientists, but these people are so deeply involved in management that they act more as scientific administrators than as practising scientists. The 1958 reforms in these institutions led to the creation of two key bodies, the Délégation Générale à la Recherche Scientifique et Technique (DGRST), having an interministerial coordinating role in science policy under the Prime Minister and the Comité Consultatif de la Recherche Scientifique et Technique charged with advising the government on matters of research policy. This latter consists of a dozen members, *les douze sages* nominated by the government for periods of four years. *Les douze sages* was a lively and important body to start with. In particular, it prepared the research budget in liaison with the DGRST, and although its advice was not always followed it had an active

Wise but powerless

from the staff of La Recherche

role in the first years of the Fifth Republic, a time when many research bodies were constituted or reformed.

French science policy changed after 1965 under M Pompidou. The priority that research had possessed early in the Fifth Republic was no longer there, and ministers for research after 1965 had less political clout than their predecessors. The influence of *les douze sages* waned and that of administrators grew accordingly.

At present the committee has practically no influence and now that the government has announced a reform of science policy machinery, and particularly of the coordinating body of the DGRST, the role of the committee has come into question. The Minister for Industry and Research, M d'Ornano, said in a recent debate on the research budget in the National Assembly "maybe it is time to start those who are involved in research policy thinking about a problem which

has so far passed them by but to which they should not be indifferent: that of society's control over technological development . . . One of the first things we could do is bring non-scientists, elected politicians and consumer representatives into closer touch with the implementation of new technologies and the definition of new programmes". The president of *les douze sages*, M Brams, has received the mandate to think about possible reform of the committee and to make proposals relevant to d'Ornano's plan. The problem is that of non-scientists being involved in science policy decisions and this issue had already been aired in Mitterand's presidential campaign, when the idea had been put forward of a high ranking consultative committee on science policy whose members would include non-scientists.

The big question is, if twelve becomes fifteen or twenty will the scientific community and even the whole nation be better represented and will the committee have more power and authority than at present?