tempted to invest in reprocessing and fast breeders.

Supplies from the United States were held up pending a review of US policy on nuclear exports: a total of almost 2,900 pounds of uranium, for various destinations around the world, was involved. Canada, Europe's other main supplier, has held up supplies too, pending full agreement on safeguards and nuclear exports.

Preparing for 1979

The ten members of the Committee on Science and Technology in Developing Countries (COSTED)—a grouping established within ICSU in 1966—gathered in London for a couple of days last week for their annual meeting. Among other things, they are understood to have discussed their position in relation to the forthcoming United Nations Conference on Science, Technology and Development, taking the view that a non-governmental group of scientists ought to participate in their individual capacities. COSTED also

hopes to help in the preparation of papers by developing countries.

UK vacancies

During 1976 the British Civil Service had vacancies for about 340 scientific officers at grades up to Senior Principal Scientific Officer. About 11,000 applications were received, but even so only 250 appointments were made, the Civil Service Commission says in its annual report. It seems that recruitment of scientists is a particularly tricky business; as many as 50% of those made offers decline to take them up.

Public expenditure cuts obliged a number of major departments to withdraw entirely from recruitment in the second half of the year.

Concorde's noise

A gloomy report on Concorde noise levels has emerged from a working group of the Noise Advisory Council (HMSO, 50p). So gloomy in fact that the Secretary of State for the Environment, who is chairman of the council,

specifically states that the views expressed are those of members of the council only and not of the Secretary of State.

The first operational figures for Concorde noise at Heathrow were obtained in the summer of 1975. They showed take-off noise to be on average several dB above Heathrow's statutory day-time limit of 110 PNdB at certain monitoring points. The working group were told that an improvement of a few dB could be expected in cooler weather and when pilots became more experienced.

Operational figures for eight months of commercial operations are now available. The working group consider there has been little or no improvement on the 1975 figures, and suggest that the only way to improve Heathrow's noise climate would be to ban Concorde at night and in the evening and early morning, to restrict other jet flights at night still further, and to require Concorde operation to balance its increased noise with reductions in flights of other noisy aircraft.

DURING the past ten years many writers have suggested that global pollution is the most serious hazard facing mankind. They say that if we insist on economic growth and further industrialisation and on using more energy, catastrophic environmental degradation is inevitable. This was the message of *The Limits to Growth* and *A Blueprint for Survival*. It would be foolish to deny that pollution is a problem, or that new industries may give rise to serious damage. We should welcome attempts to regulate developments such as those set out in "Suggestions for the development of a hazard evaluation procedure for potentially toxic chemicals", a memorandum from the Monitoring and Assessment Research Centre (MARC) at Chelsea College, London. But we should also recognise that many new techniques are much less polluting than those which they replace, and that any alleged correlation between the use of energy, or a rise in GNP, with pollution, is spurious.

In fact, changes are often in the other direction. London's air is cleaner in 1977 than it was in 1877, though the population has increased and far more energy is consumed. In their recent book, *The Next 200 Years*, Herman Kahn and his colleagues of the Hudson Institute suggest that vastly increased economic growth and energy consumption will be needed to ensure global cleanliness. The same view is, in effect, held by

the British government. Thus drastic measures are set out in the Control of Pollution Act passed by Parliament in 1974 which was intended to activate the law to reduce all types of environmental pollution. However,

Pollution economics

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many of the most important sections of the Act have not yet been brought into operation.

It is generally agreed that, in Britain as in most industrialised countries, river pollution is the most serious problem. We know how our fresh waters could be improved, and we have the methods to do so. Yet it is just those provisions which would

most affect our rivers which are in abeyance, and this is because our economic record is so dismal and our growth so slow. Mr Denis Howell, on behalf of the Secretary of State for the Environment, confirmed this in *Hansard* on 17 February, when he informed Parliament that "Implementation of the remaining provisions [of the 1974 Act] has been delayed because of present constraints on public expenditure but will take place as soon as possible".

This lack of legislative progress is disappointing, but is it important? All the evidence suggests that, during recent years, our dirtiest rivers have continued to improve even without the force of the new law. Every year more species of fish return to the Thames, and we now have a report that there is a healthy population of three-spined sticklebacks in the River Clyde off Glasgow Green—the first instance of fish breeding in this area for over a hundred years. Even with their limited resources authorities with the will to succeed have found a way to improve the situation. To restore salmon and trout to the Thames and the Clyde will take time, and the expenditure of a great deal of money for more and better sewage treatment. Only industrial growth or a drastic reorganisation of our economic system can supply the funds. To try to enforce regulations for which money is not available is a recipe for chaos, not for a clean environment.