

So far the studies have been desk bound, and have not involved detailed engineering or geological work. Moreover, the consultants were asked to consider only the problems of water and not those of communications, power generation and amenity. Their conclusions are therefore tentative, but they suggest that both schemes are feasible. Certainly some action will have to be taken, for the river authorities foresee a shortage of about 425 m.g.d. (million gallons per day) by 1981, and 1,200 m.g.d. by 2001.

The Morecambe Bay barrage should have priority, the report concludes, because the need for water is greatest in the North West, and because the barrage would free the Lake District water for use in other areas. The storage capacity of Morecambe Bay would be 55,000 m.g., and if the barrage were built it could be supplying 500 m.g.d. by 1977-79. Inland schemes will therefore have to meet the demand until the late seventies, but a decision on barrages must be made in the early seventies if not before. The total cost of the Morecambe Bay scheme would be between £54 and £69 m, including a dual two-way highway across the barrage and full treatment works, and it is estimated that the cost of fully treated water would be between 6.7 and 8.4 pence per 1,000 g.

The water initially enclosed would of course be saline, but the consultants believe that this could be removed by filling and emptying the reservoir while the road was being built. The draining and re-filling cycle, repeated four times, would reduce the chloride content to about 100 p.p.m., and ordinary filtration equipment could be used for final purification.

European Exchanges

THE most tangible result so far of the expressions of interest by the Royal Society in European collaboration is the announcement of a new programme of grants for financing visits by working scientists between European institutions. In a statement published a week ago, the Royal Society said that it has received "substantial financial support for the programme from several donors", and that the intention is "not only to benefit science but also to strengthen the European community as a whole". Although it is expected that a "large fraction of the funds" will be used to help British workers to travel abroad, it is also intended that they shall be used to enable scientists from the mainland of Europe to visit Britain.

The funds so far available will be spent in three distinct ways. First, there will be postgraduate fellowships, ideally for people wishing to stay a year or more at a laboratory in some other country, and with a financial basis sufficiently generous to enable recipients to live without discomfort in the places at which they settle, and even to buy modest amounts of equipment if their host laboratories cannot provide them. The Royal Society says that it has funds to enable seven or eight British scientists to go abroad under this part of the scheme, and for roughly a third as many people to stay in Britain. The programme also includes provision for what are called study visits, on which junior and senior people will spend between a week and six months at laboratories abroad, and it is thought likely that there will be money enough for 50 British scientists and 20 from abroad. In addition, there is a plan to sponsor between six and ten research confer-

ences a year, with between 25 and 100 participants and with some provision for inviting a small number of participants from outside Western Europe.

Chrysler in Britain

THE Ministry of Technology announced on January 17 its approval of an agreement by which the Chrysler Corporation gain control of Rootes, the British motor manufacturer. In a Europe increasingly sensitive to charges of technological domination by the United States, the British Government seemed surprisingly cheerful about the takeover. There are two reasons for this; first, the Government has probably decided that only those industries using the newest technologies are worth protecting, and second, there was nobody else who would touch Rootes with a bargepole. Chrysler was committed to Rootes by its partial takeover in 1964; at present it owns 45 per cent of the ordinary voting shares, and 66 per cent of the non-voting "A" shares. A rights issue, underwritten by Chrysler, will now be made, giving shareholders the opportunity of obtaining five shares for each four held at present. This will raise £10 m, and an additional £10 m will be raised by a 15 year loan from Chrysler.

The agreement is hedged around with some splendid sounding but somewhat symbolic safeguards. The most significant is probably the involvement of the new Industrial Reorganization Corporation, which will purchase a seat on the Board by investing £3 m. Since the I.R.C. is also arranging an export consortium arrangement for the whole of the British motor industry, it will have to be very careful to ensure that participation in Rootes does not interfere with industrial security. The other safeguards agreed to by Chrysler are that the corporation will maintain a majority of British directors on the board, continue expansion at Linwood in Scotland, put no obstruction in the way of the export of Rootes products to all "practicable" markets, and exchange directors between Chrysler International, Simca and Rootes. These safeguards are unlikely to interfere with the way Chrysler runs Rootes. Markets already controlled by Chrysler or Simca may well be considered "impracticable", but similar limitations do not seem to have affected Ford, one of Britain's best exporters, while Simca is the leading French motor exporter.

Alternative solutions, in any case, were singularly unappealing. Outright takeover by the British Government was one possibility, but Rootes has been losing money for some time—£3 m before tax in the year to last July, and nearly £5 m since then. Inevitably Chrysler had to step in to protect its earlier investment; any attempt to stop it would have been futile—and costly as well.

The British market is now divided almost equally between companies under British and American control. The British Motor Corporation and Standard Triumph Leyland make up about 48 per cent of the market, and Vauxhall, Rootes and Ford split between them an almost exactly equal share. The remainder is made up of imported vehicles, largely from Europe.

Survey for History

THE Indian Census of 1961 included a special count of scientific manpower which has recently been published