## Self-analysis at Research Council

THE fourth annual report of the Natural Environment Research Council, published earlier this week (HMSO, 10s 6d), includes a careful statement of the council's strategy for the years ahead. Although the report has nothing explicit to say about the inquiry into its activities by the House of Commons Select Committee on Science and Technology, the policy statement seems to be as much an answer to some of the criticisms then raised as an attempt to justify the rapid growth of the annual budget and to define the relationship between the council and other bodies.

The council explains that the first four years of operations have been spent on consolidation. During this period, growth has been "as fast as is consistent with adequate planning", but the council considers that it has now reached a point at which criteria for the formulation of forward policy can be defined. The guiding principle is unashamedly utilitarian, with expenditure justified by "potential value".

According to the report, the first step in the inclusion of an investigation in the research programme is an economic assessment of the possible benefits of success. There follows an attempt to define the feasibility and the cost of the research programme most likely to succeed. The council unbends a little when it says that "subjective judgment may be unavoidable or it may simply be a matter of responding to what is indisputably in the national interest", particularly when it goes on to explain that "the natural environment and its resources are a priceless heritage and their rational conservation, using that term in its widest sense, is a national need which can hardly be assessed in monetary terms alone".

Among the projects embarked on after a formal assessment along these lines is the stimulation of coastal research at various institutes on the council's books. The potential benefits include better forecasting of sea-levels, and understanding of the movement of coastal sandbanks and of the mechanisms by which pollutants are dispersed in the sea. In the same way, the programme of geological exploration of the continental shelf is, in the council's view, justified by the possibility of oil and gas discoveries. The council also explains that it is prepared to modify its view of the balance between applied and fundamental research, citing as an example the way in which the search for minerals on the sea-floor is supplemented by a programme of more fundamental research in geophysics.

On the division of responsibility between the Natural Environment Research Council and other bodies, the policy statement suggests that there should be comparatively little difficulty in forming constructive relationships with potential users of environmental "We have established the right kind of research: consultative framework to enable our policy to respond as it should to practical needs while safeguarding our legitimate scientific independence". The council acknowledges its responsibility for supporting university research but says that it will be a discriminatory and not a passive benefactor. The report promises that universities will be more closely involved in the formulation of policy, and that deliberate attempts will be made to strengthen links between research institutes and the universities.

The most perplexing problems are evidently those by means of which the Natural Environment Research Council must be distinguished from other government departments-those with responsibility for environmental pollution, for example, and the Ministry of Technology, with its interest in what is called oceanology. The report suggests that the council will probably be best employed in providing the long-term research which may make possible solutions a "short-term answer to an environmental problem". On the relationship with technology, the report says that "it becomes clearer that there is a logical boundary" and welcomes the creation of the tripartite Committee on Marine Technology on which the council can settle its claims with the ministries of defence and technology.

During the current financial year, the total budget of the research council is estimated to be £11 million, a substantial increase over the £9.19 million spent in 1968-69, itself 18 per cent more than in the previous year. One unexpected feature of the council's operations is what seems to have been a steady decline of the direct support for university research by means of research grants. New research grants in the current academic year will work out at £896,000 compared with £1.16 millionin 1967-68 and £1.76 millionin the previous year. The council says that it intends to "maintain the growth of funds for university research", especially in marine and terrestrial sciences, and that it is convinced that "no really important project has so far failed to receive support through lack of funds".

Net Expenditure of Natural Environment Research Council	
British Antarctic Survey Culture Centre of Algae and Protozoa Institute of Geological Sciences Institute of Hydrology National Institute of Oceanography Nature Conservancy Research Vessel Unit	$\begin{array}{c} \pm\\ 1,356,412\\ 13,323\\ 2,028,379\\ 219,484\\ 928,622\\ 1,383,514\\ 312,869\end{array}$
Freshwater Biological Association Marine Biological Association Scottish Marine Biological Association, Edin- burgh Scottish Marine Biological Association, Mill- port and Oban Fisherics Biochemical Research Unit Marine Invertebrate Biology Unit Fisheries Helminthology Unit Fort Erin Marine Station Insect Pathology Unit Dove Marine Laboratory	$\begin{array}{c} 6,242,603\\ 249,483\\ 237,517\\ 121,277\\ 271,651\\ 51,792\\ 25,143\\ 16,658\\ 37,244\\ 11,471\\ 4,749\\ \end{array}$
Headquarters Seals Research Unit Research Grants Training Awards and Fellowships Outside Research International Subscription I.U.C.N.	$\begin{array}{r} 4.143\\\hline 1,026,985\\\hline 410.297\\9,601\\932,819\\531,744\\35,627\\1,666\\\hline 1,921,754\end{array}$
Total	9,191,342