

A PRESS RELEASE AND SPEECH

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WHAT CAN THE E.C. DO IN RESEARCH AND SCIENCE ?

Member States are of course already conducting a huge variety of research programmes of which I could give a long list. There is no point in the Community 'Europeanizing' these efforts. But there is a strong argument - and need - for a substantial improvement in Community research activity proper. Increased research effort at the European level would exploit the advantages offered by activity on a continental scale. By sharing research work and findings, Member States can tackle larger problems and face up to fierce international competition. It is significant that Europe has remained at the forefront of world progress in sectors such as nuclear energy and aerospace where cooperation between the Member States has been intense. It has lost ground in sectors where there has been limited research cooperation, such as computers, biotechnology, motor cars and chemicals.

It therefore follows that Community research should concentrate on objectives which may be beyond the reach of independent national action. This might involve schemes which need enormous financial or human resources or require a huge market to make them financially viable. On the other hand, it might involve programmes which have, of their very nature, to be tackled internationally, such as action to combat sea pollution. But other justifications for joint Community efforts can be found. Member States often face identical problems and it clearly makes sense to tackle them jointly. Common research programmes could also assist the development of Community policies.

Up to now, it cannot be denied, Community efforts in this direction have been pathetic. It is certainly true that the Community has taken an interest in research from the outset. This involvement began with the 1951 Coal and Steel Treaty and continued with the Euratom Treaty of 1957. It eventually led to the creation of a joint research centre. In 1974 new research programmes were launched in a variety of areas, including industry, the environment, energy and health. The work is carried out either at the joint research centre or in national laboratories with coordination and partial financing by the Community. Useful results have been obtained but these efforts do not amount to a genuine European science and research policy.

The share out of Community funds in 1982 - just under 600 million ECU or about 2% of public research spending in the Member States - shows that Community scientific and technological activity is heavily concentrated on energy problems, such as reactor safety, a long-term project on thermo-nuclear fusion and new forms of energy and energy saving. There has also been a certain amount of activity in the field of industrial competitiveness, notably in the steel sector and new technology industries, such as computers. But these efforts fall well short of matching up to the importance of the issues involved. Other areas where work is in progress are health and safety and the environment (where 20% of research in the Member States is coordinated by the Community). On the other hand, far too little attention has been given to assisting the Third World and promoting better use of raw materials and agriculture. The latter omission is striking.

The Commission has therefore proposed a new scientific and technological strategy to build the foundations for a Community research policy. As a first step, it sought the assistance of numerous experts who helped to define the

objectives. These objectives are to be approved and periodically re-examined by governments. The Commission stated that 3,750 million ECU (at 1982 values) should be devoted to this strategy between 1984 and 1987. 4% of the Community budget would be devoted to research by 1987, compared to 2.6% at present. Community research policy would then make real strides in improving agricultural, scientific and industrial competitiveness and assisting development cooperation. New initiatives could also be taken to achieve specific objectives in the more efficient use of energy and raw materials and the improvement of living and working conditions.

I cite now some key examples in this programme.

In the agricultural sector, studies and research are needed to reduce surpluses by identifying new markets or encouraging the production of crops in short supply, such as maize, tobacco, animal feedstuffs, timber and other potential biomass energy fuels. The potential of less-favoured areas, especially the Mediterranean region, must be exploited to the full. Research can also help farmers to generate energy from waste products, to combat animal and crop diseases and to improve food quality and safety. At the same time, the Community should foster advanced technologies, such as genetic engineering and teledetection and encourage a wider dissemination of research findings.

In the fisheries sector, efforts should be concentrated on the identification of potential new resources, especially in the open sea. Action could also be taken to improve fishing methods, grading, processing and conservation, notably with the aim of saving energy. There is also scope for

work on the animal and human food potential of smaller species of Mediterranean fish, the development of aquaculture and the investigation of the impact of pollution on the food chain.

The development of standardized measurements, specifications and certification to ensure product quality, cleanliness of materials and standard chemical analysis. Harmonization along these lines will foster the development of a Community-wide market for industrial goods.

The modernization of traditional industries, through developing the application of new technologies such as lasers, new materials and computerized construction methods in a variety of sectors. The overriding aim should be to widen the range of technologies and products in sectors which still constitute the greater part of the industrial fabric of our society.

The promotion of new technologies, such as information technology (IT), which will be the largest sector in manufacturing industry by 1990. If the Community is to keep up with its competitors, it must coordinate its national research programmes and collaborate in joint efforts to master basic technologies. Attention should be concentrated on microelectronics, especially integrated circuits, software engineering, office automation, computer translation systems and industrial robots. At the same time, the Community should attempt to create an information exchange system, linking collaborating laboratories in all the Member States. Esprit is now launched at long last.

Raw materials and energy are important areas. The

Community depends on imports for three quarters - and in some cases the whole - of its non-energy raw materials. Known resources are often concentrated in a small number of countries. To reduce this degree of dependence, efforts must be made to improve techniques for prospecting for minerals at great depth and to develop offshore exploration. Advanced technologies must be developed for the extraction and treatment of minerals from marginal deposits and for the exploitation of lean and complex ores. Efforts are also needed to promote silviculture and to improve paper-making methods. The foreign trade deficit on wood is the Community's second largest, after oil. Finally, research is needed into the recycling of raw materials, particularly into ways of improving and sorting and processing of household and agricultural waste and the recovery of strategic metals. The Community must attempt to shake off the constraints imposed by dependence on oil for about half its energy needs. Community research programmes can no longer concentrate on energy alone but the potential benefits justify the continuation, even the extension, of existing research, development and demonstration activities.

The Community can make an important contribution to vital work on the development of nuclear fission energy, especially the crucial efforts to increase nuclear safety. Community work on reactor safety, including research into light-water and fast-breeder reactors, the management of waste, the decommissioning of nuclear plants and methods for protecting workers and the general public against radiation, have been valuable in their own right. The impartial character of Community work in this field should also exert a positive influence on the nuclear debate. The Community countries have already pooled their research

efforts on thermo-nuclear fusion into a single programme employing 1,000 research workers, employed mainly on the construction of the powerful JET experimental reactor at Culham in the United Kingdom. The project holds out the long-term promise of abundant energy supplies but research efforts will be long and costly. This is being officially dedicated this summer.

The development of renewable energy sources could increase Europe's independence from imported energy and at the same time promote industrial competitiveness and agricultural productivity. It could also provide a new means of aiding developing countries.