# **Bulletin**

OF THE EUROPEAN COMMUNITIES

Supplement 4/81



A new impetus for the common policies

Commission of the European Communities

#### Supplements 1981

- 1/81 Report from the Commission of the European Communities to the Council pursuant to the mandate of 30 May 1980
- 2/81 The European automobile industry: Commission statement
- 3/81 European Union: Annual reports for 1981
- 4/81 A new impetus for the common policies; Follow-up to the mandate of 30 May 1980

Bulletin of the European Communities Supplement 4/81

A new impetus for the common policies

Follow-up to the mandate of 30 May 1980

#### This publication is also available in the following languages:

DA ISBN 92-825-2888-X DE ISBN 92-825-2889-8

GR ISBN 92-825-2890-1 FR ISBN 92-825-2892-8

IT ISBN 92-825-2893-6

NL ISBN 92-825-2894-4

Cataloguing data can be found at the end of this publication

e side igentuale espo ser i delle especialistica.

Luxembourg: Office for Official Publications of the European Communities, 1982

ISBN 92-825-2891-X

Catalogue number: CB-NF-81-004-EN-C

Articles and texts appearing in this document may be reproduced freely in whole or in part providing their source is mentioned.

Printed in the FR of Germany

4 4

Barrier Barrier Barrier

Programme Commence

#### **Contents**

,

•

The development of an energy strategy for the Community	7
Scientific and technical research and the European Community — Proposals for the 1980s	21
A policy for industrial innovation — Strategic lines of a Community approach	33
A Community strategy to develop Europe's industry	43
New regional policy guidelines and priorities	57
Guidelines for European agriculture — Memorandum to complement the Commission's report on the mandate of 30 May 1980	63

When it settled the issue of the United Kingdom's contribution to the Community budget for 1980 and 1981 on 30 May 1980, the Council also decided that structural changes needed to be made to resolve the problems from 1982 onwards and gave the Commission a mandate to bring forward proposals by 30 June 1981.

The Commission reported on 24 June, stating its conviction that the crisis would not yield to half-measures or short-term remedies and placing the solution to the problem in its true perspective—the strengthening and development of Community solidarity. In its report the Commission confined itself to making general suggestions in three main areas:

- developing new Community policies;
- reforming and adapting the common agricultural policy, without departing from its basic principles;
- providing such temporary solutions to budgetary problems as might be required until developments in the common policies produced a lasting solution.

Between July and October the Commission enlarged upon these suggestions, notably in the areas of economic policy,<sup>2</sup> energy, research and development, industry, industrial innovation, regional policy and the common agricultural policy.

S. 4/81 5

<sup>&</sup>lt;sup>1</sup> Supplement 1/81 — Bull. EC.

<sup>&</sup>lt;sup>2</sup> Foreword to the draft fifth medium-term economic policy programme. European Economy No 9, July 1981.

The development of an energy strategy for the Community

#### **Contents**

Introduction	9
The challenges to the Community	9
Forms of Community action	10
Operational priorities	11 13 13 14 15
Conclusions	16
Annex	18

#### Introduction

1. In the course of recent years the European Council has repeatedly declared the need for the Community to face up to the energy challenge.

This has led to two Council Resolutions — in 1974 and in 1980<sup>1</sup> — setting Community energy objectives whose main features are a reduction in oil dependence through the more rational use of energy and a broader diversification of energy supply.

But it has not led to the implementation of an overall strategy comprising action by the Community, Member States and producers and consumers. The inadequacy and inconsistency of the action taken in the wake of these expressions of political will can only be deplored.

Relatively slack demand between 1975 and 1980, combined with weak pricing and taxation policies, reversed the upward movement in real oil prices, leading to a certain complacency and slackening of efforts to use energy more efficiently and to replace oil. The events in Iran, which caused price tensions on the world market, gave rise to a new interest on the part of governments. The consequent vigilance displayed at a Community and an international level has helped to prevent any new pressures on the oil market in the short term. But the longer-term problems still await satisfactory solutions. It is inevitable in these circumstances that the scope for a sustained upturn in economic growth will be constrained once again by undue dependence on oil.

In stressing this situation the Commission does not intend to belittle the importance of the political commitments which have been made or that of the measures already adopted at national and at Community level. Its objective is to present — in the context of the follow-up work to its Report on the mandate of 30 May<sup>2</sup> — a framework for action allowing the Community to respond more effectively and without harmful delay to the serious challenges which the energy question raises now and for the future.

#### The challenges to the Community

2. Despite the success of efforts to reduce energy and oil demand since 1973 the Community is still the single largest oil importer in the world (8.7 mbd in 1980).

More than half of these imports come from three countries (Saudi Arabia, Libya and Nigeria).

The broader international picture is also far from comforting. It would be risky to count on a fall or even a stabilizing in demand for energy.

As far as the less developed countries (LDCs) are concerned a marked increase is a real possibility. At the same time world market supplies for oil will be derived from a diminishing number of oil exporters, with Saudi Arabia playing a more and more dominant role.

3. The Community economy has been badly hit by the effects of the doubling of oil prices in 1979. The challenge is to shield it from the risk of further pressure, both by reducing as rapidly as possible the Community's dependence on oil and also by taking effective measures to limit possible causes of increase in the price of its supplies.

To these ends measures need to be taken both on the energy demand side (energy saving and rational use of energy) and on the supply side (diversification). In the latter field efforts must be stepped up, particularly by increasing coal consumption, pursuing vigorous nuclear programmes and by developing renewable energy sources.

4. To bring about the necessary changes will require first and foremost action within the Community itself. But its success will depend heavily on what is done externally. The industrialized countries need to work together if they are to reduce their dependence on oil. Avenues for cooperation with the energy exporting countries to assure stable supplies while respecting their legitimate interests must be explored. Finally, the serious problems faced by a large number of developing countries as a result of their position as oil importers calls for rapid, vigorous and broad action by the world community. The European Community has at its disposal instruments which allow it to give technical and financial help to these countries so as to enable them to develop their resources.

<sup>1</sup> OJ C 153, 9.7.1975; OJ C 149, 18.6.1980.

<sup>&</sup>lt;sup>2</sup> Supplement 1/81 — Bull. EC.

5. But in other ways too the process of change poses new challenges and offers new hopes. The energy transition will have far-reaching consequences for Community industry, offering prospects for the development and application of new technologies to help revitalize the industrial base. This is underlined in the fifth medium-term economic policy programme. The challenge is to maintain the continuity of action required in the face of short-term economic fluctuations. Such continuity is essential both to give confidence and to ensure lasting changes.

#### Forms of Community action

6. To meet these challenges the first imperative is to ensure more rapid progress towards consistency between energy policies of Member States. All Member States have a common interest in the success or failure of energy policy throughout the Community. Differences of effort and achievement between Member States will not only mean widening divergences in the security of energy supply. They will also adversely affect the level of economic activity in the Community as a whole. Equivalence of effort does not require any substantial centralization of energy policy instruments; nor does it require the pursuit of uniformity in the diversification of supply, which must vary according to national circumstances. But it does call for collective discipline going beyond mere expressions of common agreement. The policies of each Member State must reflect a willingness to pursue common goals.

Every year the Commission presents a report<sup>2</sup> on the energy policies of Member States in the light of the Community objectives and after consulting national administrations. By drawing attention to progress made and to constraints and weaknesses this report must now become the instrument ensuring consistency. It will be submitted to the Council, together with appropriate proposals and recommendations, after examination by the Medium-term Economic Policy Committee and the Energy Committee.

- 7. In the second place specific Community action must be set in train where this is required by the provisions of the Treaty or where it will be more effective than the sum of national measures even when these are properly coordinated. This is true as much for action within the Community as in external relations, where solidarity strengthens collective security of supply.
- 8. Some action must be supported by financial means, whether from the Community budget or from the Community's lending instruments. Up to now recourse to these means has enabled significant support to be given, but this has been limited in relation to the total financing requirements of the energy sector. The tables annexed to this paper summarize the figures.

The necessary role for Community finance is already recognized in some areas, notably research and development, aid to LDCs and aid to certain kinds of investment. There are other sectors, such as technological demonstration and the encouragement of certain categories of investment, where spending is essential to meet common energy objectives and to improve collective energy security. Community financing measures in these sectors should also command general support.

It is of course true that the success of common action cannot be measured in terms of the amount of budgetary finance involved. Many of the objectives described above can and should be pursued through, for example, better coordination of national policies supported by a system of agreed analysis and recommendation. But the financial means available to the Community must be equal to the requirements for action determined by its strategic objectives. The amounts assigned to energy in the Community budget must therefore grow more quickly than in the past, reflecting the strategic priorities.

9. These principles of action will be applied to every sector of energy supply and demand.

It is generally accepted that coal should have a more important role to play in Community energy supply. The scope for possible reconversion to coal is considerable, especially in industry. Large expenditure is needed throughout the Community in this area and in coal transport, import and storage. The basis therefore exists

<sup>&</sup>lt;sup>1</sup> European Economy No 9, July 1981.

<sup>&</sup>lt;sup>2</sup> Bull. EC 2-1981, points 1.5.1 to 1.5.7.

for a re-examination of Community coal strategy and for common action to ensure greater consistency between the coal policies of Member States, and to bypass the sterile arguments between coal-producing and coal-importing countries in the Community. In its absence the prospects for coal within the Community will remain uncertain, damaging the morale of the coal industry and adding further uncertainties to the development of new technologies in the coal sector.

The development of nuclear energy is vital to ensure security of energy supply and one of the main ways of reducing dependence on oil. The pursuit of vigorous nuclear programmes is an essential element in an economic policy for Europe aimed at overcoming structural problems in the energy sector.

The Community can help to ensure the best possible progress in the nuclear sector not only by exercising its specific responsibilities in the field but also by setting the development of nuclear power within the framework of an overall energy strategy.

Natural gas has become over the past fifteen years an important element in the energy balance of Member States, making a useful contribution to diversification of supply. Maintenance of this trend, however, poses a number of problems as regards security of deliveries, coordination of investments and coherence in pricing policy.

New energy sources have a great potential for growth, but there are problems of cost and of timing. A smooth entry onto the markets of all Member States will not be assured without action ahead of time (in research and technological development). Such action will not bear all its fruit — in the energy and industrial fields — without a Community approach taking account of the different possibilities in each Member State.

Oil is bound to remain a major element in the Community's energy balance, and the bulk of oil supplies will come from outside. There must be Community solidarity in measures to guarantee security of these supplies. The pricing of oil products must reflect both the need to reduce oil dependence and the objectives of economic policy.

On the demand side, structural change is already under way. This must be continued so

that consumers can adapt in the best possible economic conditions to the shift from oil to other energy sources.

Agriculture is a special case both on the supply and the demand side.<sup>1</sup>

It consumes directly and indirectly large amounts of energy. It has therefore an urgent need for new technologies and additional investment to reduce its energy consumption. But while increases in oil product prices set new constraints on agriculture, they also offer the possibility of new outlets for products of agricultural origin for use as raw material for energy production. The Community has every interest in promoting progress in both these directions and in using its financial instruments to that end.

Between now and the end of March 1982, the Commission will set out its views in each of these areas in more detail, together with proposals.

#### **Operational priorities**

- 10. There are five main priorities for Community action:
- ensuring an adequate level of investment both in alternatives to oil and in the more rational use of energy;
- the development of a common approach to energy pricing and taxation;
- the establishment of measures of Community solidarity to avoid instability on the markets;
- the reinforcement of common policies in the fields of research, development and technological demonstration:
- the further development of common approaches and initiatives in external energy relations.

#### Investment

11. Diversifying the sources of energy supply and the more rational use of energy (including energy saving) will require a major investment effort.

<sup>&</sup>lt;sup>1</sup> Supplement 6/80 --- Bull, EC.

- 12. At the present time energy investment is stagnating at around 1.6% of GDP. The most optimistic forecasts of Member States point to a possible rise to an average of 2.2% of GDP over the decade. Over the same period the United States expects energy investment to amount to above 4% of GDP and Japan to between 3 and 3.5%. The particular circumstances of these countries are not a sufficient explanation of this difference in order of magnitude. If the Community does not take the necessary decisions its overall level of investment could be too low, adversely affecting its ability to adapt to high energy costs and thereby its competitiveness.
- 13. There is, moreover, a real risk that the forecasts themselves will not be realized. Action must therefore be taken in relation to every factor liable to influence the level of investment:
- Many decisions are held up by the uncertainty of investors and consumers about future trends in oil import prices and about the energy pricing and taxation policies of public authorities. The action proposed by the Commission on energy pricing and taxation (see page 13) will have an essential role to play in this respect.
- There are risks inherent in the industrial application of new processes such as coal gasification and liquefaction or in the large-scale exploitation of solar energy and other renewable energy sources. The action proposed by the Commission in the field of technological demonstration (see page 14) is intended to help overcome the constraints on the behaviour of investors in this field.
- Public concern is another factor delaying certain projects. It is felt most clearly about the health and safety risks in nuclear programmes. More recently it has also been expressed in relation to the ecological impact of increased coal consumption.

The Community has a direct role to play both in presenting balanced information on the advantages and disadvantages of different ways of meeting energy needs and in developing common action to resolve specific problems. Community action in the fields of research on radioactive waste disposal, improving security of supply and safeguarding nuclear materials must be strengthened. The Commission will present proposals very shortly.

 The recession and the risk that it may persist also raise doubts about the profitability of certain investments.

This factor weighs particularly heavily on the development of investments in the more rational use of energy: in new energy-efficient equipment, the conversion of oil-fired heating and motive power to coal, and the application of new energy technologies in industry. These investments offer the best prospects for the regeneration of Community industry and for the direct and indirect creation of employment, and they have the most direct effects in reducing oil imports and helping the balance of payments.

- Two studies completed for the Commission have examined, respectively, the technical feasibility of rapid advances in the more rational use of energy1 and its investment and employment implications,2 concluding that the scope for and benefits of accelerated investment on the demand side are considerable. The upper limit of cost-effective investment of this kind amounts perhaps to as much as 250 000 million ECU over this decade. These investments are delayed, however, because they involve a large number of decision-makers households and companies — many of whom are affected in the present economic climate by problems of short-term profitability and access to external finance on acceptable terms.
- 15. There is already an active debate on how to accelerate these investments, and the Commission is conducting with the aid of Member States a detailed survey of the perspectives and problems associated with investment in the more rational use of energy. This survey will enable it to define the most effective ways of stimulating these investments and will serve as a basis for proposals in this area that will follow shortly from the Commission.

In the meantime the Commission will propose that the New Community Instrument should be used more in support of investment in the more rational use of energy with a specific tranche set aside for that purpose. The Commission will also use interest-rate subsidies financed from the ECSC budget to support the same kind of investment in the coal and steel sectors.

In favour of an energy-efficient society.

<sup>2</sup> Investment and employment in an energy-efficient society.

Investment in energy saving and in substitution for oil must be encouraged both as a means of reducing the share of oil in total energy consumption and because of its favourable effects on the level of economic activity and employment. The responsibility of the Community in this field is linked to that in the field of medium-term economic policy.

#### Prices and taxation

16. Through its impact both on energy demand and in the long term on energy investment, energy pricing has a fundamental role to play in the pursuit of energy policy objectives. But pricing policy also has wider implications, affecting industrial competitiveness and trade between Member States and with the rest of the world. A common approach to energy pricing is therefore a critical determinant of the coherence of the energy policies of Member States, supporting investment policy and enabling proper judgments to be made about the effectiveness of energy saving measures and the economics of alternatives to oil. Moreover, it is essential to the avoidance of distortions in intra-Community competition and in the encouragement of greater consistency between the pursuit of general macroeconomic or budgetary objectives, on the one hand, and energy policy objectives, on the other. Finally, it is important to the credibility of the Community in its encouragement of sensible pricing practices in the countries with which it trades and competes.

17. The Commission has already underlined these points in a communication on energy and economic policy,<sup>1</sup> and has developed some of them in its paper on oil taxation.<sup>2</sup> The Council has also been invited to adopt a recommendation on electricity tariff structures.<sup>3</sup>

In a separate communication the Commission has further developed the principles of energy pricing adopted by the Council in a Resolution of 9 June 1980. These principles emphasize the need for consumer prices to reflect in full the cost of development of alternative energy

resources and so to encourage investment, even when in the short run world prices for oil are stable or falling.

Within the Community there should be a common market in primary energy. Differences in the prices at which coal, crude oil and gas are made available to the energy industries should be limited to those arising from differences in transport costs. This does not, however, mean that consumer prices can or should be identical throughout the Community. On the contrary, it is right that prudent investment in energy transformation (refining, transport, distribution and - especially - electricity generation) within individual Member States should be reflected in advantageous consumer prices. However, consumer prices are determined not only by comparative costs, but also by important differences in policy, notably as regards taxation, price control and the financing of public utilities.

Consistency in energy pricing and taxation policies, in accordance with energy supply and demand objectives, requires first of all an improvement in transparency of energy prices and tariffs and a common effort to adapt oil taxation to the aims of energy and economic policy.

### A mechanism to avoid instability on the markets

18. The objectives of security and stability of supply apply to all forms of energy, and their pursuit is a key feature of Community strategy. They are of particular importance as far as oil is concerned given the dominant role played by oil prices and the less flexible nature of the oil market compared with the past.

19. The lesson of 1979 was that even very limited shortfalls in oil supply over a brief period — and even the risk itself of such a development — can have serious and disproportionate effects on oil price movements. A repeat of those events would have damaging consequences. The relative slackness of the market in recent months could mean that this danger will be underestimated even though the rise in the dollar has increased considerably the cost of the Community's imported oil.

The Community would be failing in its task if it did not manifest solidarity in the face of such

<sup>1</sup> Bull, EC 10-1980, points 1.2.2 to 1.2.4.

<sup>&</sup>lt;sup>2</sup> Bull. EC 9-1981, points 1.1.6 to 1.1.8.

<sup>3</sup> OJ C 214, 21.8.1980.

<sup>4</sup> OJ C 149, 18.6.1980.

difficulties. This solidarity would be more difficult to achieve if it were not established beforehand in a period of calm. A mechanism already exists to deal with serious supply difficulties. But it is vital that the Community should arm itself ahead of time with procedures and means to soften the impact of any future oil supply shortfalls, especially on prices.

20. The Commission has accordingly proposed a procedure to handle situations of limited shortfalls on the oil market, together with a series of measures from which the Council could choose the most appropriate in the light of circumstances.

To be effective the set of actions proposed would have to be closely coordinated in a wider framework involving the USA and Japan. But as the preparation of Western Economic Summits has shown — and especially those in Tokyo in 1979 and Venice in 1980 — the Community can helpfully give a lead to the other major oil consumers by virtue of its position as collectively the single largest buyer on world markets.

The Community is more vulnerable than other consuming groups as far as external oil supplies are concerned. It must therefore protect itself against the risk of fortuitous tension on the world oil market. Even if measures to that end are taken only on a contingency basis, agreement on the conditions and procedures under which they would be applied, without prejudice to the precise decisions required by particular circumstances, would be proof of the credibility of the Community strategy.

# Research and development; technological demonstration

#### Research and development

21. The logic of action at Community level on energy research and development is self-evident. It enables the Community to support large-scale activities beyond the financial reach of individual Member States (e.g. the development of controlled thermonuclear fusion); it avoids costly multiplication of effort; and it works as a catalyst in promoting the cross-fertilization of ideas and the more rapid diffusion of

results. In each of these ways, it helps the Community to make up for the natural benefits enjoyed by the USA and Japan.

22. The Community has been involved in support for energy R&D since its inception, first in coal under the ECSC Treaty, then in nuclear fission and fusion under the Euratom Treaty, finally in energy conservation and new energy sources under the simulus of the first 'oil crisis' of 1973-74.

The result is that energy already absorbs some 70% of total funds in the Community's R&D budget. The annexed tables show how much has been committed under the various heads. The Community budget provides thereby the equivalent of some 10% of total public support (Member States and Community) for the financing of R&D in the energy and related fields, and the overall effort coordinated within the Community framework is still greater.

23. An increased research effort is needed to help reduce more rapidly the Community's dependence on oil (energy saving and substitutes) and to make it easier for Community industry to adapt to changes in the energy market. This will mean a need for increased financial resources. Community intervention will enable expenditure to produce the maximum possible benefit, to avoid waste of resources and to ensure the widest dissemination of research results.

Against this background the Commission has begun to reorganize its services involved in research and is examining the different programmes. It will make proposals to intensify research on the more rational use of energy and renewable energy sources, not only in its own interests but so as to meet the needs of the LDCs.

It will do the same in the field of coal research to reflect the growing importance of coal.

#### Technological demonstration

24. The involvement of the Community in coordinating and financing support for projects to demonstrate the industrial and commercial viability of new methods and technologies is more modest than that in R&D and now requires renewed attention. The demonstration phase provides the essential bridge to the full-

scale commercialization of new techniques, thereby supporting industrial as well as energy policy in encouraging the launching of new industries, processes and products.

It has been clear for some time that the Community's multiannual programmes of support for such projects in energy saving and in alternative energy sources which began in 1979 would be insufficient to meet demand. In 1980 therefore the Commission made precise proposals to the Council involving a doubling of the financial ceilings. The Commission's reports on the existing programmes underline the positive experience of the operation of the existing Regulations to date. The Commission will take all the steps necessary to ensure effective dissemination of the results of the programmes so as to maximize the benefits throughout Community industry.

25. As a further element in the encouragement of innovation in and through the energy sector, the Commission intends also to help ensure that those involved in the development and exploitation of new energy technologies are able to secure the full benefits of the common market, and in particular that markets for high-performance but relatively high-cost equipment can be fully developed. Particular attention will be paid to the development of common standards so as to avoid the creation of non-tariff barriers to trade.

Innovation is a necessary part of energy strategy. Financial action and coordination at the level of the Community are vital to the achievement of the most effective results in research and development and in technological demonstration. The potential in this field must be better exploited and exploited to the full.

#### External relations

26. Community energy strategy must inevitably be pursued within a wider international framework involving the other main consuming nations, the energy-exporting (and especially the oil-exporting) countries, and the oil-importing developing countries. The Community alone offers a credible basis for the expression of the interests of Member States vis-à-vis each of these groups, developing relations with each

as far as possible in a balanced way and making use of a variety of methods and frameworks for action.

The benefits of Community coordination have already been amply demonstrated in the preparation of Western Economic Summits, meetings of the International Energy Agency (IEA) and most recently in the UN Conference on New and Renewable Sources of Energy. The Community must build on this experience, both to enhance Community cooperation in the fields of hydrocarbon supplies, the international coal trade and supplies of nuclear fuels, and, most importantly, cooperation with the developing world.

- 27. Cooperation among Member States in securing supplies of natural gas from outside has been less than satisfactory in the past. It can and should be enhanced. The negotiation and conclusion of new contracts should be pursued within the framework of a common approach to Community requirements and objectives, and the Commission has put forward to the Council specific proposals to this end.<sup>1</sup>
- 28. In the fields of coal and nuclear fuels the aim of the Community must be to develop a framework of relations with the exporting countries which can likewise ensure stable and secure supplies. This cannot be achieved satisfactorily by individual Member States acting alone. The essential need for Community action in securing supplies of nuclear fuels is already well established and has led to the satisfactory conclusion of cooperation agreements with the main suppliers, notably Australia, Canada and the United States. This position must be maintained and developed so that new negotiations of renegotiations that may prove necessary in the light of changing circumstances can follow a similar course.
- 29. The Community and its Member States have already made a substantial contribution to the development of energy resources in the developing world, with total aid (grants and loans) amounting to over 700 million ECU in 1980 alone. Of this total nearly one third (over 200 million ECU) was accounted for by loans from the European Investment Bank, which is one of the main sources after the World Bank

<sup>1</sup> OJ C 280, 30,10,1980.

<sup>&</sup>lt;sup>1</sup> Bull. EC 9-1981, point 2.1.122.

in the provision of loan finance for energy development. In addition to direct support for the financing of energy investment by this means, the Community has also helped with the evaluation and planning of energy supply and demand in a large number of developing countries.

- 30. The Commission proposes the following approach to intensify energy cooperation with developing countries. Firstly, there must be closer coordination between the aid programmes of Member States and those of the Community. Secondly, more use must be made of the specific means available to the Community by virtue both of the Lomé II Convention and of agreements with non-associated countries. It should be noted in this respect that Lomé II emphasizes projects involving regional cooperation and increases the aid available to projects developing alternative energy sources in the associated countries.
- 31. There must be a global approach to energy cooperation with developing countries, taking full account, however, of the particular situation and priorities of each country concerned and of the nature of its relations with the Community. This approach should cover the following areas in particular:
- (a) development of guidelines for aid in energy programming (the evaluation of resources and requirements):
- (b) assistance in the form of information required for investment decision-making (project evaluation; specialized techniques, for example in prospecting; R&D, including more recourse to the Joint Research Centre and association between research centres in the Member States; access to data banks):
- (c) technical and professional education;
- (d) exchanges of information on techniques that might be applied in developing countries, especially as regards the rational use of energy, and the encouragement of their use in these countries:
- (e) extension of the practice of cofinancing which has already been used with other institutions such as OPEC, the Arab Funds, the World Bank, etc;
- (f) encouraging industry to adapt a constructive investment policy towards LDCs, with recourse as necessary to the possibilities offered by Lomé II in this respect;

(g) encouraging the use of new and renewable sources, especially linked to programmes of rural development and environmental protection.

The Commission will present proposals to the Council covering the whole of this approach.

The Community alone provides the necessary dimension for the expression of the interests of Member States on the world stage. It must establish, with those countries which supply its energy imports, a framework of relations which ensure stable supplies, particularly of coal and natural gas, just as it has already done in the nuclear field in general. Priority must also be given to energy cooperation with the developing countries both to meet their own needs and to help reduce pressure on world oil supplies. To that end the possibilities offered by the Lomé Convention must be fully exploited and efforts must be increased towards the other developing countries, especially those with whom the Community has contractual relations.

#### Conclusions

32. (a) The adoption of common objectives, the pursuit of these objectives by means of coordinated action by Member States and the acceptance of collective discipline are the basis for the Community policy proposed above. In the absence of such an approach the Community will not be in a position to meet the energy challenge.

The essence of this approach lies in efforts at Community level to anticipate developments. Instead of simply reacting to events in the energy field we must prepare the way, in the best possible conditions, for the changes that are most likely to be required by future developments on the energy markets, while minimizing the economic and social consequences of those developments. Such a forward-looking approach has the added advantage of supporting the objective of economic revival and increasing employment.

(b) Energy objectives have already been adopted by the Community. This development will remain of use only if the objectives are constantly brought up to date and if there can be a regular examination of how far they are

reflected in national policies, followed as necessary by an adjustment of those policies. The first role for the Commission in developing energy strategy is therefore one of guidance and monitoring.

The Commission can also take action on its own account in certain fields: those prescribed by the Treaties; those where no other means exist to meet common objectives; and those where to exploit the Community dimension is likely to bring results that go beyond those that can be achieved by Member States acting alone or even in coordination.

In some cases Community action will require financial resources. These must be adequate for the tasks involved. Various instruments already exist which need to be refined or developed in the light of the Community's needs and other objectives.

- (c) There are five priorities in what must be done to reduce the Community's dependence on oil by a better use of all available resources and a broader diversification of supplies. These are: investment; pricing and taxation policy; stability of supply; development of the potential for technological innovation; and relations with third countries. The Member States and the Community have taken a number of steps in some of these fields. But these have been inadequate or uncoordinated. The Commission has already made a number of proposals to increase the Community commitment. Others will follow. Such an increased commitment would be a major step forward in the development of our common strategy.
- (d) The Commission requests the Council to approve the strategy described above; to agree on the objectives; and, on that basis, to state its position on the various proposals already put to it and on those that will follow.

#### **Annex**

Five tables follow setting out the Community's financial interventions in the energy sector.

Tables 1, 2 and 3 show the loans granted to the energy sector between 1974 and 1980 by the Community's various financial instruments.

Table 4 shows the amounts committed to energy in the budget for 1978 to 1981.

Table 5 shows budgetary resources in support of energy development projects for 1978 to 1981.

Table 1 — Distribution of loans signed by energy sector (EIB, Euratom, NCI)

EUR9 (million ECU) 1974 1975 1976 1977 1978 1979 1980 Electricity 271.8 161.9  $183 \cdot 7$ 392 - 19 622 - 24 1 092 - 6 967 - 24 618 - 14 Nuclear 123 - 3 126.5 111.3 366.59 322 - 44 453.4 Thermal power stations 29.4 30.4  $12 \cdot 8$ 128.7 141.0 125.4 Hydro, geo. power stns, etc. 99.6 42.0 64.8 313.0 180.2 19.5 35.4 106.3 185.2 43.5 Distribution, transport 12.8 11.7 26.6 Solid fuels  $24 \cdot 6$ 3.3 Hydrocarbons 187.0 189 - 3 167.5 276.9 128 - 7 39.2 180.3 Production 54.2 39.2 50.0 25.7 42.3 41.6 80.5 87 · 1 171.7 Transport 106.5 135.1 130.3 141.8 62.9 Refining 20.9 Energy saving 6.2 5.5 134.5 Urban heating 11.4 59.2 Rational use of energy in industry  $6 \cdot 2$ 5 · 5 9.5 75.3 Total 406.7 373.5 376 - 3 808 - 04 431.39 1 292 - 7 1 405 - 24 Total lending by ECSC 160.87 179.85 216.85 297.56 275.33  $323 \cdot 22$ 73.45

Table 2 — Percentage breakdown of the distribution of loans signed by energy sector (EIB, Euratom, NCI)

EUR 9							(97
	1974	1975	1976	1977	1978	1979	1980
Electricity	66 · 8	43 · 3	48 · 8	90.9	77 · 0	84.5	68 · 8
Nuclear	30 - 3	33.9	29 · 6	85.0	39.9	35 · 1	44.0
Thermal power stations	$7 \cdot 2$		8 · 1	3.0	15.9	10.9	8.9
Hydro, geo. power stns, etc.	24 · 5		11.2		8.0	24 · 2	12.8
Distribution, transport	4.8	9 · 5		3.0	13 · 2	14-3	3 - 1
Solid fuels		6.6	0.9			0.9	1.9
Hydrocarbons	31.6	50 · 1	50.3	9 · 1	22.3	13 · 0	19.7
Production	10.2	21.6	14.4	9 · 1	6.2	$2 \cdot 0$	3.0
Transport	21 - 4	28 - 5	35.9		16-1	11.0	12.2
Refining							4.5
Energy saving	1 · 5				0.7	1.6	9.6
Urban heating						0.9	4.2
Rational use of energy in							
industry	1 · 5				0.7	0.7	5 · 4
Total	100 · 0	100.0	100.0	100.0	100.0	100.0	100.0

Table 3 — Loans to the energy sector by the financial organs of the Community

EUR9 (million ECU) 1974 1975 1976 1977 1978 1979 1980 EIB 406 - 7 373.5 376-3 338 - 5 737 - 8 991.6 1.115.9 Euratom 92.9 70.2 151-6 181-3 NCI 149.5 108.0 **ECSC** 73.5 160.9 179.9 275.3 216.9 297.6  $323 \cdot 2$ Total 480.2 534 - 4 556.2 648 - 3 1 105 - 6 1 568 - 0 1 728 - 4

Table 4 — Commitments to energy research from the Community budget

#### Direct and indirect action 1 Coal research 2

			(million ECU
1978	1979	19803	19813
158	205	323	228

General budget. ECSC budget.

Table 5 — Amounts committed from the general Community budget to the support of energy development projects

(This covers technological development in the hydrocarbons sector, demonstration projects in energy saving and new sources of energy and uranium prospecting within the Community)

			(million ECU)
1978	1979	1980	1981
55	57	96	106

The major increase in 1980 followed by a fall in 1981 reflects principally the launch of the second programme of indirect action

# Scientific and technical research and the European Community

Proposals for the 1980s

#### **Contents**

The challenge	23
Towards a common R&D policy	23
Guiding principles and the objectives of a common strategy	25
Defining the common R&D strategy and getting it off the ground .	28
Structures and procedures	30
Finance	31
Conclusions	31

#### The challenge

1. The Commission, as it has already emphasized in its response to the 30 May mandate, has shown its willingness to confront the challenges of the 1980s.

It is clear that due recognition must be given to the part which scientific research and technological development can play in any strategy for regeneration, arising from its capacity to anticipate the long term and because of the inescapable links between growth, technological innovation and social change.

#### Towards a common R&D strategy

#### Community activity up to now

2. The Member States of the Community have long recognized the importance and value of joint action in science and technology. The Council therefore approved Community involvement in the whole field on 14 January 1974,<sup>2</sup> and the Commission was given the task not only of progressively coordinating national policies but also of undertaking R&D programmes itself where there was a Community interest.

On the basis of this, after the phase of developing various specialized research activities under the auspices of Euratom and the ECSC, the Commission has progressively defined and carried out a series of research programmes. In adopting this pragmatic approach to what it has devised, put forward and carried out, the Commission has treated each proposal on its merits. The overriding consideration was that each should contribute to the establishment of the various appropriate Community sectoral policies (particularly energy, raw materials and the environment).

It is in this way that, since 1974, the Commission has been able to create a sophisticated mechanism for evolving R&D activities, and for carrying out, evaluating and exploiting them. Its use of this mechanism has given rise to an extra dimension of European scientific and technical cooperation in many sectors. Community R&D is clearly here to stay: several

thousand researchers from all the countries in the Community are working together now and for the foreseeable future in pursuance of Community objectives in the major sectoral programmes.

The budget devoted to these R&D activities has grown steadily from 70 million ECU in 1974 to more than 300 million ECU in 1980. The finances are distributed as follows:

Priority areas	% of the total R&D budget
1. Energy	72.0
2. Raw materials	2.3
3. Environment	8 · 4
4. Agriculture	1 - 1
5. Industrial sectors	9.7
Total $1 + 2 + 3 + 4 + 5$	93 · 5
6. Other	6 · 5
Total (R&D budget 1979)	100.0

Although it might appear that Community R&D spending has built up rapidly, it should be said that it is still relatively feeble compared to what Member States spend on their own programmes (about 1.5%), to what Member States devote to international cooperation (about 16%) and to the general budget of the Community (about 1.8%).

# The value of the Community's experience

3. Given that both the available resources and the areas covered have been limited, it is remarkable that most of the work undertaken has led to significant results. In some cases Community work has had a worldwide impact.

Taking energy as an example, the work done in the field of new and renewable sources served as a stimulus and catalyst for national efforts. This was especially true of solar energy, where the work laid the foundation for cooperation between industrial companies and for fruitful collaboration between European laboratories. This provided Member States with the chance to acquire a scientific and technical capability in the field more quickly than if they had been limited to isolated or dispersed initiatives.

<sup>&</sup>lt;sup>1</sup> Supplement 1/81 — Bull, EC.

<sup>&</sup>lt;sup>2</sup> Except for areas covered by military or industrial secrecy.

The same combination of catalysis and promotion can be seen at work in the environment sector, where Community R&D activities in support of selected priorities, such as the examination of the effects of pollutants like lead in petrol, have been a direct stimulus to national efforts in the field. They have also led to coordination which now applies, directly or indirectly, to 20% of the research undertaken in Member States.

In the case of raw materials it was the national experts themselves who proposed a major extension of Community involvement, ranging from metals and minerals (locating seams, methods of extraction and treatment) to recycled materials such as paper and board.

Again, with steel, the Community can take the credit for many measures which have reduced production costs and improved product quality.

Fusion is another case in point. It is a fine example of the benefits of joint working for long-term benefits; in JET the Community will have a facility which will keep it on a par with the United States, the Soviet Union or Japan.

Programmes dealing with nuclear fission, such as reactor safety, the management and storage of radioactive waste products, control of fissile materials and radioprotection, make up a joint response to problems which Member States have in common. The quality and scope of the programmes together with the availability of major experimental installations means the Community is well placed for international cooperation. This has been underlined by treaties signed with the IAEA, the United States and Canada.

Other programmes have proved their worth in spite of their restricted scope. The first medical research programme demonstrated the effectiveness of joint action focused on subjects such as the extracorporeal oxygenation of blood, and cellular ageing. The agricultural research programme, in its turn, has had considerable success in the field of animal health and soil fertility.

The recognition earned by the Central Bureau for Nuclear Measurements and the Community Reference Bureau (BCR) emphasizes the need to undertake specific actions (such as on reference materials and techniques) and to provide a public service for laboratories and European

industry so far as norms and standards are concerned.

Community activities of a more general character which should be mentioned include:

- actions to do with information and with scientific and technical documentation, particularly in the context of the Euronet Diane network:<sup>1</sup>
- the training of researchers and measures to promote their job mobility (which applies particularly in the context of the fusion programme).

As a final point one should note:

• cooperation with European non-member States in the framework of COST.

Although the levels of quality and effectiveness which Community research has attained up to the present are widely recognized, factors such as Europe's falling behind its main competitors, the scale of the problems to be faced and the urgent need to make the best use of its financial resources compel the Community to set its sights considerably higher.

#### The need for an overall approach

4. It is the experience which past achievements have brought to the Commission which gives it both the right and the justification to suggest a new stage in the progress of European R&D. It must be said that the pragmatic approach, which has, up to now, been a matter of undertaking successive research programmes in separate sectors, has not been particularly helpful in enabling the Community to make the best use of the whole range of its resources (financial, fiscal, regulatory, support for innovation) with a view to achieving specific socioeconomic objectives. In particular the approach has made it difficult to articulate certain actions and integrate them into an overall strategy. Whatever the value and effectiveness of the programmes and the coordination which the Community has carried out to date in the field of science and technology, it would seem that they are no longer adequate to make a sufficient response to the challenges which confront

<sup>&</sup>lt;sup>1</sup> Community telecommunications network specially designed for the diffusion of scientific and technical information (it gives more than 2 000 users direct access to 120 data bases and data banks).

the Community or to rally national efforts in the light of that response.

Better than any amount of theorizing, a table

brings out the fact that Europe's deficiencies in this field are not due to any lack of manpower or resources.

19801

	Total gross spending on R&D (million ECU)	Public spending on R&D (million ECU)	Total R&D spending as % of GNP	Total R&D staff	Scientists and engineers	Population (millions)
EUR 9	39 500	19 405	2.0	1 100 000	370 000	260
Japan	15 160	6 560	2.0	619 000	363 000	113
USA	43 370	22 030	2 · 3	1 520 000	659 000	230

<sup>1</sup> Comparison based on data collected by the statistical working group of CREST and the scientific services of OECD and UNESCO.

If Member States, despite the importance and worth of the scientific effort they can muster, seem frequently poorly prepared to respond in isolation to the scientific needs which have arisen or are about to surface through the changes in European society, this is mainly due to the fact that their potential for R&D and for technological innovation is weakened by the following factors:

- the slowness of public research particularly in the universities to adapt its structures to changing circumstances;
- Member States are each trying to tackle too many of the same topics — this leads to dissipation of effort;
- there isn't a favourable climate for pursuing research bearing simultaneously on several sectors of activity or for the exploitation of the results of both fundamental and applied research;
- lack of sufficiently close relations between public research and industry.

These factors reduce the effectiveness of the European research system and mean that, often, the response offered by science to the demand (whether from industry, government or society at large) is inadequate. At the same time there are clear gaps in the research continuum, where some activities are considered to be too much like applied research by the universities and too much like fundamental research by industry. The validity of this diagnosis is confirmed by the need felt by some large industrial companies to get their basic research carried out in institutions outside Europe.

These circumstances call for the setting out of an overall strategy, the general conception and guidelines to be agreed between all parties, which would constitute the framework in which the objectives and priorities for Community research and development activity could be established in clear continuity with actions already undertaken.

# Guiding principles and the objectives of a common strategy

- 5. Working closely with Member States the Commission intends to set out the identifying features of this next stage in the light of two guiding principles:
- getting the best out of Community activities while ensuring that they are integrated into an overall strategy,
- exploiting to the full the benefits conferred by the European dimension.

# Getting the best out of the Community's experience

6. The Commission expects to be able to develop its action along the lines laid out in its report on the 30 May mandate, aiming particularly at new possibilities of growth and an improvement in the employment situation. This will mean building on the evaluation work which has already been done in connection

with common R&D activities and upon the results of the FAST<sup>1</sup> programme in order to:

- consolidate and strengthen some of the existing programmes,
- select guiding themes for choosing R&D actions to pursue in the longer term.

#### Adapting ongoing or forthcoming activities

7. Over and above its scientific value, joint R&D activity must be seen in terms of what it can contribute to the Community's overall strategy, and the way it can underwrite various Community activities.

Seen in this light a number of new priorities and orientations could be applied at once to ongoing or forthcoming programmes.

- In the energy sector it would be possible to strengthen the research connected with economizing on energy or to do with alternative fuels. This could be achieved in such a way as to ensure more coherence between Community scientific activity in this field and the Community's policy objectives (management of resources, energy, employment).
- At the same time the links between environmental research, energy research (e.g. coal) and agricultural research (e.g. agricultural waste) would be reinforced.
- Activities aimed at supporting certain traditional industries which are now in difficulties would be extended so as to be of real help in making the changes which are necessary and to give a fillip to their competitiveness (e.g. steel, textiles and clothing).
- Steps would be taken to encourage the greatest practicable exploitation of the bases of modern biology and the development within Europe of applications where the US and Japan have gained a lead (taming genes and what they can produce).
- In an attempt to improve Europe's competitiveness in the medium and long term more will have to be done in the realm of new technologies for information handling, communications and automation. To this end the Commission will suggest the rapid implementation of an

R&D programme firmly aimed at the long term, with the object of increasing Europe's capacity to produce microprocessors and optoelectronic equipment designed to transmit, handle and process information.

• An improvement in the Commission's capacity to analyse and evaluate likely developments in the future would be made so that priorities for the Community can be assessed in a consistent way. For this reason it is suggested that a regular and systematic review of the strengths and weaknesses of the Community's scientific and technical potential be undertaken by a structure for 'perception and evaluation'.

### Priority themes for an even more significant R&D action

8. The effectiveness of Community action is bound up with the extent to which it is formulated in terms of jointly agreed general objectives.

Agricultural research should, as a matter of priority, be encouraged to make a contribution to alleviating the problems experienced by the common agricultural policy. On the one hand it should help to relieve some of the shortages which Europe suffers (oil, proteins, wood, tobacco) and at the same time contribute to reducing the surpluses. On the other hand it ought to open up new markets for certain food products or even energy sources. Lastly, it should lead to the identification of new production techniques which are less costly in terms of input and less damaging to the environment.

This renewed research effort in agricultural research should preferably be directed towards those areas which have benefited the least to date from technological innovation. Top of the list of these is the Mediterranean region, which needs a real technological renaissance. The development of agricultural research is also consistent with the desire of the Commission to make the best possible use of the resources already available to it before seeking any more.

It is most important that industries of strategic importance which are undergoing drastic changes, such as the chemical and motor vehicle industries, continue to be generators of wealth, foreign currency and employment for Europe. To this end it is important that Com-

Forecasting and assessment in the field of science and technology.

munity research programmes be undertaken with the object of coordinating efforts already made and increasing their effectiveness, especially where they correspond to wishes expressed by the industries themselves.

The Community, in the spirit of the Lomé Convention and in the framework of cooperation agreements made with Mediterranean countries, could make a much greater contribution with its science and its technological potential to the pressing problems (nutrition, energy, health) of a large number of southern hemisphere countries. As well as actions such as remote sensing, wide-ranging programmes are needed from this point of view (agricultural research, research into nutrition and renewable sources of energy).

Through this research programme, the principal objective must be the development of the national and regional capacities of the associated countries in the field of scientific research.

In this context, the Commission intends to give deeper thought to a more general issue: mastering the relationship between technological progress and social change. The move towards a new world energy order, the battle against inflation and unemployment, the problems of coming to terms with modernization and change, call for just as much innovation in the social sphere as in the technological. It is clearly necessary to be much more aware both of the preconditions and the likely societal impacts before, for example, introducing robots into factories, electronic office technology into administrative organizations, computers into schools and information technology into the home. It is plainly not enough simply to develop the technology; one must be careful to pave the way for its acceptance.

## Exploiting the benefits conferred by the Community dimension

9. Whilst it might well be said that the Member States can no longer afford to spend enough to achieve their ambitions, it is equally true that the Community to which they belong needs to develop ambitions to match the resources it could deploy.

The Community is both a large-scale organizational framework and a market in which Euro-

pean R&D activities as a whole can be put to the most effective possible uses.

Research and development call for a scale of investment in the medium to long term which is often substantial. In a period of budgetary constraints and high rates of interest, one is entitled to ask how it is possible to bring about the necessary conditions of stability and continuity. The Community must be given the means to achieve this aim through binding undertakings made by the Council. The Community is uniquely well placed to take the lead in joint activities carried out at the least cost for each participating Member State (e.g. nuclear safety, new energy sources, the environment), or to promote activities of a scope which one Member State on its own could scarcely contemplate (e.g. thermonuclear fusion). The Commission should also make it its business to do all that is necessary to make sure the Community's overall scientific and technical capacities do not run the risk of suffering from any damaging weaknesses or defects.

The Community must see that preparations are made for actions in the long term, and ensure that they are properly integrated with what is being done in the medium term (e.g. new technologies of information, biotechnology, as well as their long-term consequences for Community policies).

The Community should become the forum for a regular review process which would enable Member States to hammer out the preferred options, and to choose the approach (i.e. national, international or Community) most suitable for implementing scientific and technical actions of joint concern and which contribute to Community solidarity. In order to ensure a satisfactory outcome to this discussion the Commission will obviously have to provide an evaluation of Community-level actions, as part of furnishing the necessary assurances that funds are being well spent, that the quality of scientific work is high and that the objectives which have been set are being fulfilled.

Even if, from time to time, Community action costs more that it might have done had it been carried out exclusively at a national level, it is clearly almost always far more fruitful in terms of scientific results and socio-economic impact. By setting out research actions in the context of an overall strategy, the Community can ensure

their continuity from the economic point of view (the market), the industrial point of view (innovation) or the regulatory point of view (financial incentives, standards, competition). This is how the best can be made of R&D action at the earliest stage.

Finally, alongside the work that needs to be done on behalf of developing countries the Community ought to play a greater part in international cooperation, both in respect of the major trading partners (such as the US and Japan) and international organizations such as the ESA, EMBO and ESF.<sup>1</sup>

The Community, because of its size, has considerable negotiating strength. It ought to make more use of this *vis-à-vis* major third countries. (The case of fusion is a good case in point, where a sharing out of work and risk between Member States and various other countries has been possible.)

So far as international scientific and technical organizations are concerned, the Community could not only play a part in the development of their work but also support or promote actions which would make theirs more complete in terms of interest to the Community. Thus in the case of the ESA, the Commission considers that the activities of this Agency need to be reinforced on the basis of an objective examination and analysis which the Community could make.

# Defining the common R&D strategy and getting it off the ground

The basic theme — A general framework programme

10. What the Commission intends to develop is an overall framework programme embracing all Community research, setting out against the options put forward for the Community as a whole those actions and initiatives which are already being undertaken on the basis of the three treaties and those which are likely to be carried out in the future. Building upon this basis the Member States and the Community institutions will be able to:

- discuss national policies and bring them together! (making the necessary choices between national, international and Community-level action);
- rearrange priorities to take account of changes in the medium and the long term;
- decide what *joint* actions and initiatives should be selected.

The framework programme will need to be regularly revised and readjusted to take account of observed changes. In this way the Community will have at its disposal exactly the sort of concertation mechanism which has been missing up to now, amounting almost literally to a control panel for Community R&D. This will give an overview making it much easier to plan activity in a dynamic and responsive as opposed to a rigid and inflexible way. The existence of the mechanism will make it possible to take account of the necessarily varied time spans of R&D programmes -- something which is inevitable given their specialized nature. Some, for example thermonuclear fusion, need a much longer programme than others do. And some of the 'service'-type activities (notably scientific and technical information and documentation, and the Community Reference Bureau) are by definition almost permanent.

At the same time intersectoral programming guidelines, spelling out the main priorities, could more easily be put to those responsible for individual R&D programmes. They in turn could thus make sure that the necessary adjustments were made in their activities.

New projects which proved to be necessary could be more convincingly justified and above all more effective if they were more closely linked to the Community's overall objectives in this way.

#### Methods

11. The implementation of a common R&D strategy calls for the optimum use of the Community's scientific and technical instruments. To this end it will be necessary to:

<sup>&</sup>lt;sup>1</sup> European Space Agency, European Molecular Biology Organization, European Science Foundation.

<sup>&</sup>lt;sup>1</sup> After all, it is not worth trying to bring policies together if the context in which they are going to unfold has not been clarified in advance.

- give preference to the development of scientific and technical activities which are both of interest to, and to the ultimate benefit of, the Community, in national centres where they are being undertaken now or where they could be undertaken, which is to say give assistance to laboratories, whether public, semi-public or private, where work is being carried out which is of interest to the Community;
- give a boost to those centres of collective research which would be capable of developing programmes of interest to the Community. The sort of intervention proposed would be intended to strengthen, widen and coordinate national activities.

In thus seeking to optimize the scientific and technical potential of the Community, the adoption and regular review of clearly stated strategic priorities, based on recognized mutual interest, would make it possible to give an initial boost or lend support to certain actions where only a few Member States take an active part, with a beneficial effect for all. At the same time particular attention should be paid to the actions and instruments of the Community itself.

#### Community actions and instruments

12. When talking about consolidating the Community's accumulated experience it is not intended to imply that current actions will simply carry on as before. New 'centres of gravity' will have to be considered. Again, the Commission will see whether some of the work which is being done might not be drastically revised or even abandoned altogether. The internal coherence between programmes will be closely studied from time to time with a view to tightening up existing linkages as often as it proves to be necessary, particularly those with other Community actions.

The Joint Research Centre is already being examined with a view to a programme adjustment of this kind. Without wishing to prejudge the outcome of this review, one might venture to map out some of the major future lines of action for the JRC, namely:

• to concentrate the work now being done on nuclear fission questions (which now predominate) on the priority areas concerning the acceptability of this form of energy — for example, the handling and storage of radioactive waste, the safety of reactors and the control of fissile materials:

- to develop short- and medium-term scientific and technical support activities as a back-up to the system for formulating and implementing priority Community policies, and to involve the JRC much more closely with the management of all the various types of research action and pilot projects — for example, the study of how hothouses could make better use of solar energy for heating and ventilation;
- to establish a long-term research activity where the CCR will be pre-eminent for example, in the field of fusion technology;
- make the Ispra Establishment freely available for scientific and technical activities of benefit to developing countries, either for training purposes (courses, trainee posts, etc.) or for developing research projects biased towards their particular needs (e.g. remote sensing from the air, new forms of energy) and in which they could play a part;
- improve the links between the JRC and the national research environment in particular industry by giving preferential treatment to research contracts placed by outside bodies. As a first stage at least the idea would be to include some form of financial incentive, such as charging only the direct costs of the research, the overheads being met by the JRC.

#### Increasing the scope of activities

13. The policy of individual programmes which has been followed up to now — comparable in many ways to the basic policies followed by national technical ministries — is circumscribed by its own limits. In order to be sure that the Community's potential is fully realized, the Commission feels that this way of working must be made stronger and more well rounded by introducing a strategy geared to stimulating the efficacy of European science and to developing specific major projects of particular interest to the Community.

#### Stimulating the efficacy of science

All efforts to promote R&D must depend on people, on teams, and on the creative potential,

29

or the potential for exploiting research results, which they embody. The pool of scientific and technical knowledge subsists in them and can only be renewed by them. So it would be a good thing for the Community to put its weight behind research exchanges and schemes to enhance team mobility, and to give a boost to those 'advanced' teams within the Community specializing in various aspects of research from the most fundamental to industrial innovation. It would also be necessary to do something about halting the decline of scientific publications in Europe. It is more and more the case that reviews of other countries are the medium for European results. This cannot be healthy for European scientific research.

#### Developing scientific and technical projects

To keep abreast of the tide of worldwide scientific innovation it is necessary to be able to formulate and implement specific projects in a manner which is genuinely flexible and speedy, projects which:

- respond to changes in world competition (e.g. space),
- serve to demonstrate technical feasibility and economic viability (e.g. aquaculture),
- hold out the prospect of particular scientific or technological benefits by virtue of likely spin-off effects (e.g. labelling micro-organisms to safeguard industrial property rights in the field of genetic engineering).

The implementation of this sort of 'policy of stimulation and of projects' would make it possible to make better judgments of opportunities and of which multiannual actions to pursue, judgments which would be based on tangible experiments. Such actions would, as appropriate, be integrated into the general framework programme. The policy would equally well make it possible to carry out those projects of major interest which arise from time to time out of work done as part of the multiannual programmes but which, by virtue of their cost or the way they would have to be implemented, cannot be considered in that context.

Efforts joining together activities related to programmes on the one hand and to stimulation on the other would guarantee coherence between the various Community initiatives,

and would be the manifestation of a permanent willingness to adapt programmes in the light of changing scientific and socio-economic circumstances.

More generally, the necessary corollary to the implementation of a common R&D strategy of this kind will be:

- the strengthening and systematization of the way in which Community R&D results are evaluated.
- the development of a policy aimed at making the most of these results, diffusing and exploiting them.

#### Structures and procedures

# Assessing, adopting and carrying out the common strategy

14. The Commission feels that it would be desirable for the Council of Ministers (research) to meet on a regular basis, at least twice a year, in order to guide choices and make the necessary decisions.

#### Consultation at the scientific level

- 15. With a view to benefiting from the help it could receive in the preparation of its proposals and making sure that the necessary but complicated linkages are established, the Commission intends to:
- equip itself with a mechanism capable of perceiving and judging the scientific and technical needs of the Community. As a first stage it could be built up around CERD (the European Research and Development Committee), the scope of whose terms of reference would be expanded, and by making use of the existing FAST team, which would be strengthened and made more permanent;
- arrange that it can call for ad hoc advice from a team of scientific and industrial advisers of high quality and world standing, giving the Commission the benefit of direct advice from the best experts from all countries of the Community.

# Consultation at the level of those responsible for national R&D policy and with government experts

16. Without wishing to throw open the whole basis of the present consultative machinery for debate, it would be advisable to make the most of it, seeking above all to shorten the time it takes to prepare proposals. The Commission intends to make recommendations to the Council and to take immediate action of a practical nature in areas where it is itself responsible, in order to improve the operational qualities of the system.

The European Scientific and Technical Research Committee (CREST), the main consultative body for the Commission and the Council for R&D matters, plays a particularly important part in the Community's decisionmaking processes. The Commission therefore considers it extremely desirable that the governments of the Member States mandate their representatives on the Committee to take a position on all aspects of items placed before them, particularly on the financial resources needed for Community R&D programmes.

The Committee's role in the process of coordinating national policies will similarly have to be spelt out in the context of the proposed strategy, as well as that of those consultative committees involved in the management of programmes.

#### Consultation with the social partners

17. The Commission intends to review and restate in a clearer fashion the methods and the work programmes of the various committees — in which the social partners take part — which have the task of advising it (CORDI, for example).

It is also intended to improve its links with the Economic and Social Committee and in a more general way to make its contacts with the industrial and union worlds more systematic. The fact is that the information available from industry and the unions is still inadequate so far as research and development at the Community level is concerned.

#### **Finance**

18. The common R&D strategy which is needed in the years to come implies an increase in the financial resources required to effect it. It is the Commission's intention over the next few years to seek this increase both in the framework of Community budget resources which are already available (particularly by making more use of existing funds) and by asking the Council for additional resources.

Because it is so difficult to appreciate and define the new needs which are likely to surface in the coming years, it is difficult, and in many cases highly risky, to set down precisely what budgetary provision is going to be needed. Nevertheless, a preliminary estimate has been made of what would be required to correspond to a development of an R&D strategy as set out in this document; this estimate does not take into account decisions which might give the Community responsibility for the development of major new programmes such as is already the case for fusion. From this exercise it would appear that from now until 1986 one is talking in terms of a doubling, in real terms, of the amount of money from the Community budget devoted to research and development. This sum, although in absolute terms not insubstantial, still constitutes only a relatively insignificant sum by comparison with the total of the public R&D budgets of the Member States and with the total budget of the Communities.

#### Conclusions

19. Facing profound changes in society and in the economy, the European Community must remain the nucleus around which national policies are brought together.

The risk is real of not preparing adequately for change and, because of this, of not having available instruments sufficiently capable of having an influence on the future and of reaping the social and economic benefits of scientific discoveries.

The autonomy of Europe, the demands of our society, the needs of the economy and industry as well as the aspirations of the scientific community all call for a true Community R&D strategy.

Advisory Committee on Industrial Research and Development.

Such a strategy presupposes the establishment of objectives for the medium as well as for the long term, and then the selection of the means to realize them.

At a time of budgetary constraint, the Community dimension must be used in order to:

- provide extra guarantees of effectiveness and of continuity,
- allow for the realization or the stimulation of actions or programmes on a European scale with a special degree of excellence,
- · make it easier to set priorities,
- assure a continuous and more widely based scientific evaluation of the results obtained and the choices made.

• associate the scientific community with action undertaken in order to improve the mobility of research workers and to speed up the diffusion and assimilation of knowledge.

The strategy proposed implies a Community-wide desire to obtain Community-wide results. It also facilitates the better integration of national, international and Community action, to the ultimate benefit of the Community.

The successes of the past, the deficiencies of the present and the demands of the future are thus the main elements which justify the ambitiousness of the programme which the Commission now proposes to the Community.

# A policy for industrial innovation

Strategic lines of a Community approach

#### **Contents**

The challenge	3.5
Social acceptability of innovation	36
Bottlenecks	36
The European dimension	37
Proposed action	37

### The challenge

- 1. In its communication 'Industrial development and innovation' the Commission drew the attention of the European Council to the urgent need to improve industrial innovation in Europe and to some of the associated problems. As a result of its discussions, the European Council:
- considered that, in the necessary adjustment of their industrial structures, Community undertakings must aim resolutely at applying and developing activities based on an innovatory approach. This effort must be undertaken in conjunction with both sides of industry as a necessary component of an active policy on employment;
- hoped that the efforts made in this direction by the Member States will be better coordinated in order to improve the competitiveness of European products by making the best use of the dimension afforded by the common market:
- requested the competent authorities of the Community to examine ways of eliminating the fragmentation of markets and improving incentives to innovation and the dissemination of knowledge.

In response, the Commission, in its report on the 30 May mandate<sup>2</sup> and in the proposed fifth medium-term economic policy programme,<sup>3</sup> has emphasized the introduction of a Community policy for technology and innovation based on the internal market.

2. Reinforcing innovation and the technological strength of the Community should be one of the cornerstones of a longer-term-oriented economic and social policy which should set the basis for the creation of secure jobs based on productivity gain, competitiveness and growth in our economies. It is the innovation process that converts potential technical progress into economic and social fact.

Industrial innovation is difficult to seize in orthodox economic terms. It principally means the introduction of new products, services, production methods or marketing and management techniques throughout the economy. Rad-

ical innovation creates new infant industries, incremental innovation revitalizes traditional branches. Innovation may be heavily research-based, and/or it may depend on ingenuity in production and marketing. It may depend on the spontaneity of small entrepreneurial units or be based on the economies of scale available only in large organizations.

However, beyond the specifics of economic units and industrial branches, innovation is carried by the dynamics of our market, social and scientific systems. It needs as essential inputs or elements: enterprises capable of innovating; an efficient research and education infrastructure; an economic and social climate which accepts and encourages innovation.

- 3. During the last decade, industrial innovation has come to show a twofold pattern:
- It has grown in importance for all sectors of industry and the economy. There are many hundreds of thousands of products on world markets. Their average product life cycle is declining. Consequently, the innovation pressure is constantly increasing. Because of the multitude of management tasks involved, it is obvious that coping with the innovation process must be primarily a matter for the enterprises themselves. Only decentralized decision-making and efficient competition in the market can yield the best economic and technical solutions.
- Certain technologies have come currently to play a key role in the evolution of our future industrial pattern and to act as vital sources of innovation; most prominently the new information technologies, with the emergence of the microprocessor and, more generally, telematics (see 'European society faced with the challenge of new information technologies: a Community response'1); and biotechnologies which will have their full impact in the more distant future. The application of these new technologies will contribute substantially to innovation in other sectors vital to our economies: energy technologies in both supply and use (see 'The development of an energy strategy for the Community'2); food and agricultural technologies; space technologies; flexible manufacturing systems. Beyond this, all our more traditional branches will be deeply affected.

<sup>&</sup>lt;sup>4</sup> Bull. EC 12-1980, points 1.1.8 and 2.1.141.

<sup>&</sup>lt;sup>2</sup> Supplement 1/81 — Bull. EC.

<sup>3</sup> European Economy No 9, July 1981.

<sup>&</sup>lt;sup>1</sup> Bull. EC 11-1979, point 2.1.21.

<sup>&</sup>lt;sup>2</sup> Pages 7 to 20 of this Supplement.

A strategy for industrial innovation therefore should address both: the general factors which are vital for market pull and the broad wave and diffusion of innovations throughout our economies which we need; and the requirements for building a strong position in key sectors and providing for technology push where required, in order to avoid the development of a new dangerous dependence on foreign sources.

- 4. That innovation needs strengthening in the European economies is emphasized by numerous indicators:
- decline in the rates of European productivity increase and growth, as compared with those in Japan and other countries;
- reduced competitiveness of European products because of growing technical and operational cost advantages elsewhere, with a dangerous impact on the Community's external balance:
- a diminishing share of the world markets for advanced technological products, in contrast with the growing shares of our principal competitors.<sup>1</sup>

The introduction of new products and production techniques is required to open up new markets and to induce and justify investment by our firms. Innovation will be essential to revitalize our industries and our socio-economic structures.

Europe needs a continuous reinforcement of its innovation potential. What has been done so far is insufficient.

### Social acceptability of innovation

5. European economic recovery will quite clearly depend on our capacity for innovation and creativity, which must be nurtured at all levels in the working population — in large and small companies, in national and local administrations, in the trade unions and in the teaching profession. The necessary spirit of entrepre-

neurship and imagination must come largely from within the education system of the Member States and will require not simply a greater emphasis on technology within the curriculum, but also a greater commitment to making a consistent link between the acquisition of knowledge and skills and their application by the individual in the economic system.

There is the fundamental problem of social acceptability of innovation and new technology, which requires careful analysis and discussion.

Negative or cautious attitudes about innovation centre around the uncertainty of its effect on overall employment levels. This will depend in particular on the success of innovation in revitalizing European industry and the degree to which it gives a new dynamism to demand in the Community market and also in other markets. Whatever the direct and indirect results for employment, however, employment cannot be considered the sole measure of social progress. The wider social consequences of innovation should also be beneficial. Thoughtfully applied, innovation can and must make a major contribution to the improvement of living and working conditions in the Community countries. Indeed, this is in itself an important objective of the process.

### **Bottlenecks**

6. The innovation capacity of our economies appears to be jeopardized by bottlenecks occurring at numerous points in the long journey from the original invention to the sale of a new product, especially at the stage where the capacity and willingness of the entrepreneur to invest is concerned.

The detailed situation differs between Member States, regions and industrial branches. In this context, it may be recalled that the Commission is currently preparing a report on the competitiveness of European industry.

Bottlenecks may include the following: the research and development potential may not be fully exploited (hidebound structures, lack of flexibility, ageing of research staff, insufficient funds, unsatisfactory management); contacts between basic research, applied research, industrial firms, the social partners and the general public may be inadequately organized; access to research and development results abroad

<sup>&</sup>lt;sup>1</sup> e.g. the specialization index characterizing the Community's export position in advanced technology products is at 0.9 (1979), compared to 1 for the average of industrialized countries, and to Japan and the United States, each at 1.4; see statistics prepared for the fifth medium-term economic policy programme.

may be lacking; investment activity of firms may be hampered by lack of management talent, but also by bureaucratic and time-consuming procedures; availability of risk capital may be inadequate; fiscal systems may discourage risk-taking; investment may be insufficient due to unfavourable general economic conditions; an appropriately trained workforce may be unavailable in the right place and at the right time.

Bottlenecks must be eliminated where they are found, and appropriate policy choices made.

### The European dimension

7. The Community and the Member States must ensure that Europe's enterprises, within the Community, encounter at least as favourable an environment for innovation as that which has been created, in different ways, in the other two major market economies.

A general requirement is the creation of more favourable economic framework conditions and, above all, the establishment of a true Community-wide internal market which should act as the solid home-market base for world-wide strategies of European enterprises.

Concerted efforts are needed in the key technology sectors on the same scale as the US and Japanese strategies in these fields.

Sustained efforts are needed to build a strong infrastructure in education and basic research at all levels for the knowledge-based industries of the 1980s: not only to promote a climate and attitudes favourable both to acceptance and to stimulation of innovation, but also to provide for the training of a qualified and creative workforce.

An intense promotion of the dialogue between the social partners is also needed, in appropriate bipartite and tripartite frameworks and at its right timing, and support for the necessary transformations in the working environment and in working skills.

8. The major part of these tasks falls to the Member States. But, given that all Member States are facing these problems and that coherence of Member States' actions is essential, the Community can add substantially:

Firstly, in pursuance of its task to promote ... a harmonious development of econo-

mic activities... and closer relations between the States belonging to it' (Article 2 of the EEC Treaty), by analysing and discussing, within the Community framework, the economic policy options which should create a stable basis for economic development and the investment climate in the Community.

Secondly, where the vigorous application of the Treaty and the further development of the regulatory framework can contribute in a decisive way to the innovation environment, the rapid completion of the internal market and a constructive competition policy will exert a most significant market pull on innovation.

Further, as regards technology development projects of international size, the Community alone is able to provide the strategy, market and political framework which can give to these projects their full weight and impact on the European innovation potential even if, in certain cases, they are developed outside the Community framework.

The Community can play a more direct part where the European dimension allows more efficient new ways to stimulate, such as the promotion of more European cooperation groupings and joint ventures at enterprise level in key sector technologies, or the promotion of new-technology-based firms with a European market perspective.

The Community should give support, where national resources are insufficient, for reasons of scale, to develop key technology programmes and where disadvantages for smaller Member States, or regional imbalance, must be avoided.

### **Proposed action**

9. At this stage, the Commission emphasizes the following issues and proposals:

Policies are needed which favour long-term investment, risk-taking and entrepreneurial activity. Revived investment depends on the control of inflation: inflation creates profound uncertainties which undermine the prospects of economic stability in which soundly based demand can expand; high nominal interest rates discourage investment. Revived investment also depends on the availability of long-term capital, and the willingness of companies

and savers to channel available funds into productive investment and innovative activity; this means reviewing tax and other systems which can unduly favour investment in property or public bonds instead of productive investment.

The Commission proposes to undertake:

- a careful scrutiny, together with the Member States, of financial and tax measures affecting investment to identify the most effective techniques;
- the development of common criteria for innovation incentives and their field of application, taking account of Member States' experience; innovation incentives must become more transparent, more stable and leave more flexibility for entrepreneurial decisions. They should be more efficiently oriented to serve coherent ends and thus have greater impact at minimum cost in favouring sound investment in competitive activity.

With regard to the Community's lending instruments and the Regional and Social Funds, it must be ensured that they play the stimulating and incitatory role which falls to them: both by more coordinated use, together with national means, and by giving priority to innovation within their operations; and by combining the lending instruments and budgetary means in new imaginative ways, such as budget guarantees and flexible interest rebate schemes, targeted specifically upon strategic elements of the innovative framework where a European dimension is involved.

In addition to this general role, Community financial instruments can of course make a more specific contribution in their particular fields, in particular the Social Fund in the realm of training.

10. Although the need to strengthen innovation capacity applies to firms of all sizes, the particular opportunities and problems of small and medium-sized enterprises deserve special attention. The great contribution they make in the United States and Japan to improving innovation strength, drive and flexibility and to increasing employment is well known. In the Community this potential has been up to now exploited to varying degrees; in particular, in spite of special measures in some Member States, new research-intensive firms often suffer

from unsatisfactory access both to venture finance and to public incentives.

Provision of finance to small and medium-sized new-technology-based ventures in Europe is insufficient, especially as regards the financial resources necessary to operate on, and take advantage of, the whole Community market in an early stage of the life cycle of new products. This puts the Community's new small ventures at a basic disadvantage as compared to their counterparts in the United States and Japan. The Commission considers that the sources of venture finance, and the channels through which it flows, must be encouraged in the Member States by developments which draw on the best experience both within and beyond the Community; a possible role for the Community's own instruments should be investigated.

Small and medium-sized enterprises also suffer because they do not have satisfactory access to technical, scientific and market information, and sometimes lack appropriate management guidance.

In this field, too, there is substantial scope for Community activity.

11. The prospects of innovative enterprises depend on their ability to penetrate the market. Initially, they are dependent, for their success, on a home market of sufficient size which can only be, in Europe, the Community's large domestic market.

With this priority in mind, the Commission trusts that the increased effort demanded by the European Council for the establishment of a European internal market will be successful (see recent communication to the Council on the state of the internal market.<sup>1</sup> Proposals in relevant fields such as technical norms and standards, government procurement, intellectual property rights and company law are presently before the Council. Other proposals will be brought forward.

The Commission cannot, however, ignore the danger resulting from the workings of national industrial policies geared to purely national aims in the Member States. Where these industrial policies are supported by the use of State aids, be it in the field of innovation or any

<sup>&</sup>lt;sup>1</sup> Bull. EC 6-1981, points 1.1.6 and 2.1.11.

other, they are subject to the application of Article 92 et seq. of the EEC Treaty. The Commission examines the compatibility of such aids with the common market from the point of view of the common interest as expressed in the derogations contained in Article 92(3) of the EEC Treaty. When examining proposed aids for innovation, the Commission will evaluate their contribution to Community objectives, determine how the project concerned relates to programmes of other Member States and of the Community and give its agreement, if necessary, under the condition of appropriate coordination with these other programmes.

12. The weakest point in the construction of a European internal market is public purchase (some 10% of GDP) and, more generally, all procurement which is influenced by the Member States either directly or indirectly through the institutions dependent on them. As this tendency increases, a large part of economic activity in the Community is walled off in this way, with contracts placed essentially within national boundaries.

In fact, public authorities are often in the position of dominant buyers as regards introduction of new technologies (for example, in large areas telecommunications, data processing, energy, transport, health and education). Given the effective fragmentation of these markets which unfortunately persists in spite of Community efforts and directives, the virtual exclusion, in this way, of introductory purchases of new technologies, and especially of pre-production series, from a single Community-wide competitive market is a painful and crippling burden to the development of innovation. It is likely, unless conditions are improved, to render it impossible to catch up with the Japanese and American lead in some key areas for many years in most, if not all, Member States.

The Commission proposes to investigate means to take positive action in this field. One possibility to be considered could be stimulating the formation of *ad hoc* groupings of European firms in these areas, by giving preference in Community technology programmes to such groupings, and by providing special incentives, in the framework of the working of the Community's financial instruments, to public purchasers from such groupings.

13. In view of pressures arising from the difficult state of public budgets in the Member States concerned, a too nationally oriented defence procurement constitutes a special problem.

It leads to a waste of scarce resources and, as far as innovation is concerned, to a loss of those benefits which industry could otherwise derive from technological spin-offs.

As a matter of fact, it cannot be overlooked that defence technology is often interwoven with civil applications as, for example, in aerospace. The economic cost which results from excessive fragmentation of markets in this area is significant. This cost could be reduced by more intense and longer-term cooperation in defence procurement in suitable bodies. Experience over the past twenty-five years suggests that such an attempt need not be unsuccessful.

14. In relation to international technology development projects outside the Community framework, an area of considerable importance to the Community's innovatory potential, both in its own right and through its spin-offs, is the cooperation of Member States in space technologies in the framework of the European Space Agency.

Regardless of whether or not it would be appropriate to associate the activities of ESA with the Community's own research efforts, the Community can contribute, in contact with enterprises at European level, a new market and strategic perspective to technology development in this area.

Better coordination of the European partners, both as regards private enterprises and Member States' governments, would be desirable in such projects, to provide for a firm political basis and for coherent strategic objectives.

15. Developing consistent strategies for key sectors of our industrial structure will be central to our innovation potential, additional to the creation of the general framework conditions.

Member States have recognized this and have initiated national programmes. What is needed in addition, given that these technologies are often heavily research-based and depend on long lead-time development and economies of scale, is more focus at the European level, matching in a European way the focus which is provided, in different ways, in the United States and Japan. The Community must also

ensure that these new technologies are effectively available to all Member States, independent of their size.

The Community has already developed the first elements of the strategies which are needed:

- by considerably streamlining and concentrating the Community's own research and its research coordination activities on priority areas (see recent communication on scientific and technical research and the European Community<sup>1</sup>);
- by the establishment of demonstration project programmes in the energy and informatics field which should help to bridge the gap between research and industrial application;
- by implementing exemplary public new-technology projects in the telematics field, such as Euronet and now the planned INSIS and CADDIA networks.

The Commission develops this approach further in its recent communication. It also draws attention to proposals presently before the Council which will form important elements of future strategy: the proposals concern microelectronics and the opening of the telematics markets, energy demonstration projects, and research on biotechnological engineering.

16. Innovation is a market-determined process and the challenge must be taken up first of all at enterprise level. Therefore, new mechanisms involving cooperation of enterprises at European level could help substantially in the thinking out of strategies in key sectors.

To create a 'platform' for European industry in the information technology field, the Commission has initiated a 'round table' of representatives of industry. To develop the exchange of views further, the Commission is currently discussing with industry details of a joint planning exercise in information technologies which would define areas of needed long-lead-time precompetitive research in detail.

Cooperation groupings and joint ventures of enterprises at European level in areas of longlead-time precompetitive research, set up in ways compatible with competition rules, would considerably contribute to the cohesion of the internal market and should assemble the resources needed in large-scale long-lead-time research. The Commission proposes that a Community role in stimulating such cooperation should be considered and the possible use of the Community's instruments to provide incentives be investigated.

- 17. The Community and the Member States must make determined efforts to create a better interface between research and industry Europe-wide and to develop collective industrial research systems further, especially for innovative small and medium-sized enterprises. The Commission will continue to work for a European orientation of national information, valorization and consultancy services and thus to strengthen the transnational innovation infrastructure which is essential for an efficient European market in innovation.
- 18. An area demanding special attention and efforts at the Community level is the need to work out a social consensus which would not be limited to the acceptance of innovation, but which would actively stimulate it.

Some of the problems and the possible scope for action at the Community level are discussed in a forthcoming communication from the Commission to the Standing Committee on Employment on new information technologies and social change in the areas of employment, working conditions, education and vocational training.

The Commission's approach rests on active cooperation between the social partners in managing change to bring about a balanced social and economic development and in promoting a social and educational climate favourable to creativity.

The climate necessary to the success of this programme can only grow out of active discussions between those involved at all levels. The Commission will develop discussions with the social partners and governments of the Member States at a European level on the existing basis, while at the same time encouraging extension of these discussions to the national level.

The Community should develop the use of the Social Fund, in conjunction with its other funds and instruments, particularly enhancing its role in stimulating policy development, in the search for solutions to social problems and

<sup>&</sup>lt;sup>1</sup> Pages 21 to 32 of this Supplement.

in preparing the working population for actively coping with change. The Member States are called upon to make use of existing provisions by proposing suitable programmes.

19. Finally, a general awareness is needed that we must again turn towards investment

into our future as compared to consumption now. We must have the courage to take new avenues to stimulate the entrepreneurial potential and the social strength of our societies. We must evolve consistent concepts for our industrial future and abandon passive attitudes. We must set a new trend in motion. A start must be made now.

A Community strategy to develop Europe's industry

### **Contents**

Introduction	45
The need for a European response	46
Reviving productive investment	47
• Energy	48
Research and development	49
• Innovation	49
• Training	50
• External investment	50
• External support measures	50
• Supporting investment	51
Towards a European industrial continuum	51
A European industrial continuum	51
Preferences with regard to public procurement	52
• Preferences given by the Community in its own actions	53
- Treferences given by the Community in its own actions	"
Guaranteeing coherence and continuity	54
Conclusions	55

### Introduction

1. A permanent function of the Community is to make it possible to bring about change when it is needed. If we are to succeed in this today, we must work out an industrial development strategy linked to the measures proposed in the fields of energy and research.

For this reason, the Community's role in the development of Europe's industry is a central theme in the current discussion on the future of Europe prompted by the May mandate. The industrial strategy of the public authorities, like that of the major companies and industrial complexes, must now be formulated with a complexity, a breadth of scope and a time-span which in Europe are feasible only at Community level. The aim must be to recreate a climate of confidence that will encourage innovative and expansionary investment, both by the major industrial groupings and by the small and medium-sized businesses, whose contribution to the creation of productive employment is well known. This confidence must be shared by governments: as they try to restore balance to public finances, they must show more practical faith in the growth potential that can be

Manufacturing — Gross rates of return<sup>1</sup>

released by business's capacity for innovation rather than rely on taxation, which stunts this capacity.

The strategy must be in line with the preliminary draft fifth medium-term economic policy programme.<sup>1</sup>

The crisis has shown that European industry, faced with the same challenges as its trading partners, has found it more difficult to adjust to the changes taking place in the world. In particular, the Community's overall industrial performance is not as good as that of the USA or Japan.

The Community's share of world exports in manufactured goods is declining while the USA's share remains steady and Japan's is increasing. Excluding energy products the trade surplus of the USA and Japan is increasing while the Community surplus remains more or less static.

The major problem facing European industry is that productivity growth has slowed down, largely as a result of inadequate productive investment. As a result, competitiveness in

European Economy No 9, July 1981.

1955 1956 1957 1958 1959 1960 1961 1962 1963 1964 1965 1966 1967 1968 1969 1970 1971 1972 1973 1974 1975 1976 1977 1978 1979

Source: OECD

Gross rate of return on capital stock in manufacturing.

Canada
USA
— Japan
— Germany
— UK

273

195

117

78

Europe as measured by unit labour costs declined in relative terms between 1960 and 1980, according to calculations by the US Department of Labour which show that unit labour costs increased in the seven largest countries of the Community by an average of 8.7% per year, compared with 7.4% in Japan and 3.9% in the USA.

Trends in the manufacturing gross rates of return confirm this relative decline in the overall productivity of all factors of production.

Lastly, European industry's loss of competitiveness has meant a loss of potential employment: over the last decade, the number of jobs in Europe increased by 2 million compared with 5 million in Japan and 19 million in the USA.

It is very difficult to identify the causes of the EEC's poor industrial performance: in the first place they are manifold, and secondly it is very easy to mistake effects for causes and thus make the wrong diagnosis.

For this reason, the Commission, supported by Parliament's Committee on Economic and Monetary Affairs, has started a detailed study of the competitiveness of European industry: it will be available by the end of the year and will help identify both the weaknesses and the strengths of industry in Europe.

Even though this study has not yet been completed, the information available to the Commission already shows that the Community can make a real contribution to industrial expansion and that this contribution cannot come from any other source.

What will this contribution be? Can the EEC in the 1980s give its industry the kind of fundamental impetus that it did in the 1960s now that the economic context is one of a world in crisis and in a political and social climate which has been marked by the basic choices of society which would be difficult to call into question?

The answer is yes. A Community strategy which aspires to this end should drive for:

- renewed growth through increasing productive investment, because without growth positive adjustment will not be possible;
- the establishment of a European industrial continuum, with specific incentives for the development of our industry.

### The need for a European response

2. When the common market was set up in 1958, European industry was given a new framework in which to develop: it was given an objective — customs union; a timetable — ten years; and a strategy — international competitiveness.

This Community framework, which was certainly a change in the established order and which for industry might have been a leap in the dark, turned out to be the springboard for an unprecedented industrial boom in the Community.

But times have changed. In a world of increasingly fierce competition, change becomes at once more necessary yet more difficult and the authorities are called upon to intervene more and more in order to bring it about.

For instance, industry in the USA, which already enjoys the advantages of a continental-scale market, can count on large, particularly defence-related, public contracts. In Japan, the strategy of the main industrial groups is worked out within a planning framework based on consensus between government and industry.

In Europe, intervention on the market by the public authorities is as least as substantial, if not more so. But its effectiveness is undermined by two factors: it is sporadic; and it carries the ever-present risk of fragmenting the Community market. It is all the more important to improve the effectiveness of direct action by the public authorities to help industry in view of the many historical, geographical and political constraints on industrial development that elude control.

Thus because Europe has not been able in time to make the qualitative changes which would have allowed it to act in concert, it is permanently on the defensive in the face of American and Japanese strategy. Europe is no longer calling the tune; Europe no longer leads the way. Its responses are impirical and *ad hoc*; and, because they are taken to be a reaction rather than action, often lay themselves open to the charge of protectionism.

There is an urgent need for the Community to take a fresh lead by proposing a framework for a European response. This response must be renewed growth, which alone will persuade businessmen and workers to accept the need for

change; and the arena will of necessity be Europe's internal market, which is the greatest asset that Europe can give its industry.

Pressing the European market one important step further towards internal unity, thereby reaffirming its separate identity vis-à-vis the outside world, will help to restore confidence. We must once again see the common market as an opportunity for European industry. That is the thrust of the Commission's document on the internal market.

Secondly, confidence can be signalled by reviving productive investment, which is the only way of making a European industrial strategy credible: for it is in the first place the task of companies themselves to bring about the industrial reinvigoration of Europe.

It is therefore the companies themselves that must be reassured and convinced: as far as industrial policy is concerned, the Community has no task more urgent or more important than this.

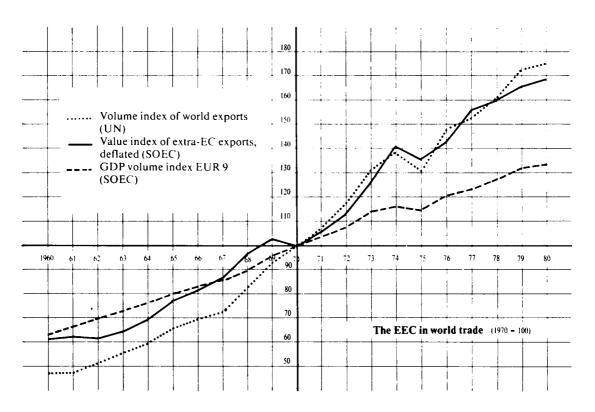
### **Reviving productive investment**

3. Our industrial base cannot be modernized without growth.

But it must be decided which component of demand — exports or domestic demand, consumption or investment — the Community is to take as a basis for growth that will nurture the renewal of our industrial base, both as regards new manufacturing techniques and the development of new products and services.

In the past, growth in the EEC was largely export-led: exports expanded at the same rate as world trade. Over the last few years, world trade has been slowing down and it is unlikely that we shall again see the like of the boom in the 1960s; neither is Community industry as a whole in the best position to take advantage of an upturn in world demand, should one occur.

For since 1978 the share of the world market held by European products has been decreasing and a gap is growing between the growth in world demand and the growth in Community exports.



<sup>&</sup>lt;sup>4</sup> Bull, I C 6-1981, points 1.1.6 and 2.1.11.

In the face of this trend, which denotes a decline in Europe's competitiveness, the Community must take action to exploit all the possibilities provided by international trade, even if they are more limited than in the past:

- The Community must re-emphasize that protectionism is a dead end for Europe: it is an absurd contradiction to predicate Europe's economic expansion on a growth in world trade and at the same time to hinder trade on its own market
- Conversely, the Community should insist that its industrial trading partners match its own contribution to the smooth functioning of the system according to GATT principles. This is a matter of the domestic macroeconomic policies of these countries and the opening up of their markets. It could also mean taking measures in concert with our partners along the lines of the OECD agreement on steel, which guarantees solidarity between the Community and the other producer countries in restructuring the industry, or the Multifibre Arrangement for textiles.
- Finally, the Community has special responsibilities vis-à-vis the developing countries whereby it stimulates their internal growth, which in turn provides direct spin-offs in the form of orders for capital goods.

In fact, the Community will find the springs for the growth it is looking for both in the strengthening of competitiveness and in the expansion of its own internal demand. The nature of this additional internal demand still has to be defined.

As the twin aims are to create more jobs which can generate wealth and at the same time to combat inflation, productive investment must be both the engine for industrial revival and its secure basis, since it not only creates additional demand but also helps to improve productivity. The Commission recommends that priority be given to productive investment, first of all in industry but also in the major supporting infrastructures.

A revival based on consumption, especially public sector consumption, would not offer the same advantages. It is therefore better to wait for consumption to rise as a result of the improvement in general productivity, whether this leads to higher incomes or a drop in the real prices of consumer goods.

Stimulation by means of investment will do more to help industrial redeployment if enough of this investment is directed towards:

- new technologies which aim primarily to improve productivity;
- activities which tie in with the priorities set by the Community; such as energy and research and development, or activities connected with environmental protection, which also directly create jobs.

Investment of the first type helps to improve and modernize the industrial employment base by increasing overall productivity in the economy. Its job creation impact occurs only with a time lag as sales, particularly exports, increase following improvements in competitiveness. Investment of the second type has a more immediate effect in creating new jobs.

Investment must be directed to upgrading both the human and financial resources of companies and the quality of the technologies to which they have access.

The common feature of this type of investment is that it generally has to be at the initiative of the public authorities; when necessary, they should be in a position to provide finance and, to do so, they should be able to recast fiscal policy so that the requisite resources are transferred from consumption to investment, in such a way as to avoid stimulating inflation.

### Energy

The first essential for energy is investment to secure supply and conserve energy.

It is unrealistic to think we can create a climate favourable to productive investment if we do not make this vital effort to guarantee the independence and security of the economic environment.

The Commission recently published its conclusions and proposals on this matter. The Council's reply will be a credibility test of the determination of governments to work towards the revival of the Community's industry.

<sup>1</sup> Pages 7 to 20 of this Supplement.

Between now and 1990 the Community should invest an amount of between 500 000 million and 750 000 million ECU to diversify its sources of energy and to save energy.

### Research and development

Owing to budgetary difficulties, almost all the Member States have cut down on government funding for R&D at the very time when financial conditions in the business world have compelled many companies to restrict their own expenditure. In its analysis of R&D in the Community, the Commission found that, having regard to both the scale of research requirements and the resources available, efforts are too scattered, supply does not match demand and the effectiveness of what has been done is very uneven.<sup>1</sup>

The priorities selected for Community research should be made more relevant to both present and future industrial requirements, and companies should have readier access to the research findings.

The Commission feels that it is essential to encourage projects which are long term and already foreseeable and to ensure that essential industrial sectors such as chemicals and automobiles, which are undergoing major changes, have the technologies they need in good time so that they can continue to be a source of wealth and employment.

At the same time, a greater effort must be deployed in the new technologies — biotechnology, information processing, communications and automation.

In these fields, the Commission proposes to launch a new long-term industrial R&D programme: to develop European capacities for the production of microprocessors and opto-electronic equipment and for the transmission, management and processing of information.

In view of the pressure of international competition in the field of innovation, the Community must ensure that industrial R&D is underpinned and enhanced by exploiting the advantages offered by the European dimension—advantages of scale (markets), industrial application (innovation) and the breadth of legislative provisions (standards, etc.).

<sup>4</sup> Pages 21 to 32 of this Supplement.

The Community must also intervene to encourage the attainment of objectives of common interest, to fill dangerous gaps and where necessary to facilitate technological ventures which are an industrial gamble.

The Community must also step in when national resources are on too small a scale to support technological programmes, and to make sure that smaller Member States are not left at a disadvantage and that regional imbalances are not created.

#### Innovation

A sound technological base is a necessary but not sufficient condition of industrial development. The Commission recognizes this and has spelt out in detail all the factors which determine the behaviour of companies and society as regards innovation.<sup>1</sup>

The tax and financial conditions pertaining to high-risk investments must be improved. Business leaders must be given the chance to try out innovations which are not yet on the market, for example by means of pilot projects. The economic environment, both general and as codified in legislation, also has a major influence on the vast majority of companies, which, owing to their limited size, are little affected by specific measures.

Regional measures must be stepped up to improve infrastructures, the availability of information and the support framework for companies in the structurally weaker regions. The recently proposed changes to the Community's regional policy accommodate this objective to a considerable extent.<sup>3</sup>

New consultation machinery must also be introduced to facilitate a common approach to development strategies for certain key technology sectors.

By these means, in sectors where the European dimension offers greater scope for effective action, the Community will be able to promote cooperation among companies active in key technologies and to support initiatives based on the new technologies.

The Commission has set up a round table of representatives from the European information

<sup>1</sup> Pages 33 to 41 of this Supplement.

<sup>&</sup>lt;sup>2</sup> OJ C 336, 23.12.1981: pages 57 to 61 of this Supplement.

technology industries as a forum for this industry. The Commission and the industry together discuss the responses that are needed to the strategies of its major competitors and the support which the Community could give to these companies in research, standardization, new product and service development and so on.

The Community should also be able to give direct assistance through adequate financial aid, similar to the Commission proposals for microelectronics, and indirect assistance by legislative measures, to foster cooperation among European producers to enable them to catch up and even regain the leadership in the development of products and services which have a strategic impact on the whole of European industry.

### Training

The Commission considers that training and management conditions as they affect company employees can have a major influence on their performance in terms of productivity, innovation and investment and so on. There is certainly much more to be done in this field, and a leaf could be taken from the book of our principal competitors.

The Commission intends to expand its role in this area through the European Social Fund and its training and education policy. It is obvious that ultimately the security of industrial employment depends on training, and that the Community cannot allow the shortage in certain skills to be yet another bottleneck, on top of the many constraints already in existence.

#### External investment

The growing trend towards the internationalization of investment means that non-European companies are investing and creating jobs and added value in the Community.

Similarly, European companies should be able to invest outside the Community for the following reasons:

• international investment leads to the subsequent expansion of the international markets — in components, services and capital goods;

<sup>1</sup> Bull. EC 10-1981, point 2.1.50.

- it is the best means of voluntary industrial cooperation, promoting the development of countries which may become major trading partners, such as China, the ASEAN and OPEC countries:
- it is an important way of strengthening our relations with the developing countries;
- the taking over of companies can open up access to the technologies required.

More particularly as regards developing countries, three objectives should be pursued:

- to secure Europe's supply of essential raw materials. This means a renewed emphasis on investments in the extractive industries so as to escape from dependence on competing industrialized countries. It also means establishing contractual relations with the raw materials exporting countries which would include supply agreements;
- to overcome the obstacles to the penetration of Third World markets and to offset our price competitiveness handicap by a policy of transfer of technology and the establishment of industry, whether this takes the traditional form of direct private investment of association with State-financed industrial development measures. Here too stable relations between the Community and the countries concerned are a condition for success:
- in the context of the adjustment of our industrial structures, to develop consultations and exchanges of information on the developing countries' industrialization policies and prospects, in order to exploit the opportunities for industrial cooperation, specialization and subcontracting.

### External support measures

Compared with its principal competitors, European industry is undeniably handicapped on international markets by the fact that financial support and other measures to assist firms are taken in a national framework without any concerted action at Community level.

At present the Community as such has virtually no instrument for promoting either exports or external investments. Certain practices, for example as regards the financing and individual insurance of exports, have sometimes

turned out to be an obstacle to closer cooperation on the international market among European firms.

The Commission considers that the Community cannot continue to hold aloof from export policy, which quite rightly appears in the Treaty (Article 113).

An effort must therefore be made to identify the weaknesses of European industry caused by the dispersal of effort in export and external investment policy, with a view to a tighter coordination of national instruments within the Community framework and, where this can and ought to be done, to the introduction of Community measures.

### Supporting investment

The investments referred to so far are essential for the modernization of European industry: but they will not be sufficient to ensure a revival on a scale that will have a large enough impact on employment. Accordingly, the governments, exercising strict discipline in their budgetary options, must release the resources needed to develop investment in the major infrastructures which create a large-scale demand for industrial products, such as steel, railway equipment and water engineering equipment, and which will draw the various parts of the Community closer together.

Such projects, many of which are eligible for Community financial aid, besides directly creating employment, also strengthen European industry's general ability to capture major international contracts.

Implementation of the Community's industrial strategy therefore requires the adoption by the Council of the Commission's specific proposals for energy and research. This is both a condition for success and necessary if the strategy is to be credible.

It is also essential to do away with the obstacles standing in the way of productive investment. But, as the aim is of course to expand European industry in a way that will create productive employment in the Community, we must be certain that it will indeed be European companies that will effectively and in the first place benefit from this set of measures.

This means that the Community must create, through all its policies, a European industrial continuum with a built-in element of preference for European companies.

# Towards a European industrial continuum

4. In the 1960s the reduction in national levels of protection by the abolition of customs duties was offset for companies by a European preference in the form of the Common Customs Tariff.

This European preference has now declined as the CCT duties have fallen. In any case, owing to the increasing relative importance of non-tariff barriers to trade maintained or introduced by the Member States, market unity is not all that it should be.

As a result, companies that venture into the European market by setting up organizations on a European scale do not find the huge continental market that they expected where economies of scale would compensate for the drawbacks of moving out of the immediate sphere of their country or countries of origin. Furthermore, the company organized on a European scale is often treated with suspicion by governments reluctant to afford it the benefit of their various industrial policy instruments: financing, R&D aid, public contracts, norms and standards, etc. Thus, for a company to organize itself on a European scale, which ought to be a considerable asset in the common market, in fact turns out to be a handicap.

The Community must therefore, as part of its attempt to unify its internal market, be able to grant such companies concrete advantages in the European context.

This can be done through three types of measures.

### A European industrial continuum

### The internal market

As already pointed out in the introduction, the internal market is the very basis for a European

industrial continuum. The Commission's proposals to strengthen it<sup>1</sup> must therefore be given priority in European industrial strategy. The most important of these proposals are:

Reciprocal notification in advance by governments of proposed rules which would create barriers to intra-Community trade; this will help to prevent and deter national protectionist measures.

Technical norms and standards fixed at national level can stop companies launching long-run production lines from the outset, and can prevent small and medium-sized firms from supplying nearby markets on the other side of frontiers. Rather than trying to harmonize them after they have been set, it would be much more efficient and logical to set new norms and standards for the whole of the Community from the outset. This would give Community industry a sounder foundation by providing a unified market, thereby giving Community producers preferential access to the Community market.

So that products can be designed directly for the single market, the Commission, in a proposal for a Council Decision,<sup>2</sup> asked the Member States to take all measures necessary to ensure that departments responsible for establishing technical rules and standards institutes cooperate closely to prevent the creation of barriers to trade. Priority in the establishment of norms and standards gives European industry an advantage over its competitors.

The promotion of norms and standards for a larger market, and even for the world market, may turn out to be advantageous for European industry in sectors where it is in a relatively strong position.

Company law and taxation systems in the European Community which encourage the creation of European industrial entities facilitate their activity in the common market.

The Commission's proposals in this area should be adopted immediately.<sup>3</sup>

Non-discriminatory access for all European companies to research activity carried out jointly in Member States with government aid.

The Commission will pursue its endeavours to ensure that Article 7 of the EEC Treaty is respected, i.e. that no discrimination by Member States based on company nationality is allowed.

### **Competition rules**

Where application of national and Community competition rules is concerned, assessment of the dominant character of a company's position on a market, whether national or Community, must take into account where necessary the fact that this market exposes the company to actual or potential competition from imports both from other Member States and from outside the Community, on the understanding of course that the rules on free trade are correctly observed.

State aids are exceptions to the free play of the market. The Commission authorizes them only in cases where they serve regional or sectoral development objectives covered by the Treaty. This means that they must help to make enterprises competitive enough to operate without aid within a foreseeable period. Consequently, aid to sectors in difficulty must be accompanied by the effective restructuring of the firms in these sectors. Greater stress must be put on the contribution of aids to restructuring, which is a requirement covering the whole common market. However, the Commission favours the granting of aid for developing advanced technology sectors that will promote both innovation and research and development.

## Preferences with regard to public procurement

Public procurement is becoming an increasingly vital element of national industrial strategies. The sealing off of national public-sector markets is a threat to the unity of the market that will get worse unless the growth of the public sector in the Member States is accompanied by the opening up of public contracts.

Opening up of public contracts is by no means easy. Governments are reluctant to use their own taxpayers' money to make purchases abroad; and nationalized industries, particu-

<sup>&</sup>lt;sup>1</sup> Bull. EC 6-1981, points 1.1.6 and 2.1.11; Bull. EC 10-1981, point 2.1.9.

<sup>&</sup>lt;sup>2</sup> OJ C 253, 1.10.1980.

<sup>&</sup>lt;sup>3</sup> OJ C 39, 22.3.1969; OJ C 253, 5.11.1975; OJ C 103, 28.4.1978; Supplement 4/75 — Bull. EC.

larly where they enjoy a preferential status as suppliers, are jealously concerned to hold on to their captive markets, an important factor in their profitability.

Opening up public contract markets in a climate of crisis is even more difficult, if only because of the relative size of the public deficits, which more than ever weigh upon the stimulation of industrial activity in the country. Moreover, it is hazardous suddenly to expose protected companies to international competition.

Until now the Community has therefore opted for very gradual progress in this area, despite the salutary effect in the medium term of such liberalization.

However, the disadvantages of restricted public procurement, especially in advanced-technology sectors where the national market is in most cases too small, are becoming more and more obvious: as a result, the time has come to take a firm step towards opening up these contracts. This could in certain cases be done more easily if the exclusive powers of the public authorities and national agencies were to be handed over to a European body that would develop a supply policy, or if there were Community-level consultations between national authorities.

There is one strategic area where there is scope for making such a quantum leap: telecommunications. For reasons of efficiency and cost in which technological constraints play an essential part, new products and services, particularly space communications and integrated numerical networks, must be designed from the outset at least in a European perspective, and not even restricted to the geographical area of the Community. A European public agency for coordination and application of these new products and services is thus both necessary and possible.

Preferences given by the Community in its own actions

### **Coherence of Community policies**

In pursuing its horizontal policies and in using its own financial instruments, the Community must stimulate the development of European companies.

The Community has a range of policies — competition, environment, R&D, standardization, financial instruments, trade policy - each of which has a bearing on industrial development. The Commission is aware that it must run Community policies coherently, to facilitate structural adjustment to the constraints and demands of international competition, the energy crisis and technological change. For the iron and steel industry this is explicit in the special provisions of the ECSC Treaty. In other areas the Commission must facilitate the realization of objectives defined at Community level by means of a consensus on objectives and methods between the national administrations and industry.

The position adopted by the Commission on the motor vehicle industry<sup>1</sup> is an example of this. The Commission, on its own initiative, presented an exhaustive analysis of the situation and set out to apply all the relevant policies on a concerted basis.

The Community already has a range of instruments for financing investments. In the view of the Commission it is essential to increase their already appreciable contribution to bringing about the basic conditions for a more rapid adjustment of Community industry. In order to achieve this, priority must continue to be given to loosening the energy constraint, and greater priority accorded to the financing of projects undertaken by small and medium-sized companies, including those in high-technology areas.

### The Community as a public service

As a public service the Community must, whenever its own needs so require, take action to encourage European industry to develop new products and services, with the aims of:

- giving producers a European frame of reference;
- helping to fix European norms and standards.

Three examples from the field of information technology show the value of such pilot schemes:

<sup>&</sup>lt;sup>1</sup> Supplement 2-81 — Bull, EC.

### Industrial data banks

With the help of the national telecommunications authorities, the Community has introduced the Euronet system, which enables any user with access to a suitable terminal linked to the telephone network to interrogate interconnected data banks. The tariff for the service is based not on distance but on interrogation time, i.e. whether the user calls from Milan, Copenhagen or Belfast he pays the same price.

Euronet could serve as the support for a new Community initiative to provide information to governments and companies on market trends and changes in Community industrial structures.

Today an increasingly critical factor in the industrial strategy of governments and companies, from large groupings down to small companies, appears to be the rapid availability of statistics on industrial activity. At the moment, for example, the market shares held by the Community clothing industry are known only up to 1979: but these market shares are an essential item of information for the preparatory work for renewal of the Multifibre Arrangement.

For the benefit of all potential users, the Community ought to set up data banks and industrial performance charts and facilitate access to them via Euronet or in other ways. In addition to the benefit to users, this action by the Community would open up numerous outlets to equipment manufacturers and to public and private producers of data banks.

### The CADDIA experiment<sup>1</sup>

The rapid availability of external trade data is an important requirement for sound industrial decision-making. At present, these data are still mainly collected by hand at frontier posts and centralized processing at national level involves substantial delays ranging from several months to several years depending on the information required. The CADDIA experiment, which is being sponsored by the Commission in association with the customs authorities of the Member States, seeks to change this situation by developing an integrated Community system of computerized data collection.

This system will also process the data arising from the management and financial control of the agricultural market organizations.

### Interinstitutional information system (INSIS)<sup>1</sup>

The Community is currently examining, in conjunction with the telecommunications authorities and others, the development and use of new information technologies in order to provide the Community institutions with advanced facilities for communication between themselves and with the national administrations.

When this interinstitutional information system (INSIS) becomes operational, users will be able to converse directly by means of machines; communication facilities such as the upgraded telephone, the electronic message system and electronic mail, teleconference, rapid facsimile transmission, electronic data storage and retrieval, videotex and direct data-based access will enable information to be obtained easily and to circulate rapidly.

Information will be transmitted between the participating institutions via public networks. In order to meet the needs of INSIS users, the PTT should be induced to speed up the installation of the integrated-facility European numerical network.

INSIS will provide European industry with the opportunity to develop new products and services which will give it a lead over its American and Japanese competitors even in their own markets.

# Guaranteeing coherence and continuity

5. Every examination of the driving forces behind industrial investment reveals that the security and confidence of the entrepreneur is a decisive factor. It is therefore important for the Community to be seen by economic operators as the guarantor of coherence and continuity in the evolution of their political, economic and social environment. Accordingly, the Community must explain the principles of its

<sup>&</sup>lt;sup>1</sup> OJ C 291, 12.11.1981.

<sup>&</sup>lt;sup>4</sup> OJ C 291, 12.11.1981.

actions as clearly and precisely as possible. It is by means of the medium-term economic policy programme that the Member States and the Community should give company heads the information they need on policy directions in general and on economic policy in particular. It is in this context that the Community must keep constantly under review the outlook for and the results of industrial policy measures implemented by the Member States and by the EEC. The Economic Policy Committee, attended for the purpose by representatives of the Ministers for Industry, could serve as a forum for discussion between the national governments and the Commission.

At the same time the necessary consultations with industrialists and the trade unions should be organized, in appropriate form, on the problems posed by industrial policy.

\* \*

### **Conclusions**

6. By setting up the common market and the customs union in 1958, the Treaty of Rome offered companies a new field of action where national frontiers were pushed back to the borders of the Europe of the Six. The free movement of persons and goods was intended to bring about an ever-increasing integration process.

This process has, however, been progressively slowed down by the fragmentation of the internal market due to growing public intervention in the national economies, which, if it results in markets being closed off against each other again, could be dangerous for the Community.

This trend, which has discouraged the creation of European companies and groupings, has weakened our industry's ability to meet the challenges posed by the present crisis. In order to retain the benefit of limited national protection, companies in an increasing number of sectors have been deprived of the advantage of access to a large market.

This trend, with all its implications for the employment situation, must be halted.

The alternative proposal put forward by the Commission offers every chance of breathing new life into European industry if governments, companies and trade unions can again find the courage to operate throughout the continental market.

The first requirement is a concerted effort, in a Community framework, so as to ensure coherence, to revive productive investment, notably by pursuing European energy, research and innovation policies and by developing financial instruments to further them. The aim here would be to win back the confidence of investors by launching this revival by means of decisive action.

What is especially important, however, is to press the internal market into a further important step on the road to integration by making it a genuine European industrial continuum, but with an element of Community preference in cases where industrial development involves the participation of the public authorities, as in the field of technical standards and public procurement.

The Commission expects the national governments to engage in a thoroughgoing discussion of these proposals. It is ready to fuel this discussion, both by providing further information and specific suggestions for action, provided that the Council for its part prepares itself to take in good time the urgent decisions which European industry needs.

S. 4/81 55



<sup>&</sup>lt;sup>1</sup> In addition to this paper, the Commission sent the Council on 29 October 1981 a proposal for a Regulation amending Regulation (EEC) No 724/75 establishing a European Regional Development Fund. The proposal was published in OJ C 336, 23.12.1981.

### **Contents**

Introduction	59
Guidelines and priorities for the Community's regional policy	59
Employment	59
Productivity	60
Indigenous development potential	60
• Geographical concentration	60
• Effective use of Community instruments	60
• Coordination of regional policy and other Community policies.	61
• Coordination between the Community's regional policy and	
national regional policies	61

### Introduction

- I. The Council resolution of 6 February 19791 provides that the Commission should prepare a periodic report on the situation and socioeconomic developments in the regions of the Community and propose guidelines and priorities to the Council on the basis of that report. This initiative introduces a means of regularly updating Community regional policy. In the resolution, the Council observed that the disparities between regions remained, and laid down certain fundamental principles:
- regional policy is an integral part of the economic policies of the Community and the Member States:
- it contributes to the convergence of these economic policies;
- the strengthening of regional policy is one of the conditions on which the economic integration of the Community depends;
- the principal Community policies have regional implications which must be taken into account when these policies are being formulated and implemented;
- coordination of national regional policies and Community regional policy is essential.

The Commission's first report on the regions<sup>2</sup> shows that regional disparities not only persist but have widened, that the principal cause lies in indigenous structural factors and that the recession is accentuating the factors that generate imbalances, further impeding the flow of capital to the less-favoured regions and creating intractable problems for reconversion and innovation in those regions.

In the present world economic situation, the best way to solve regional problems is to improve competitiveness and productivity throughout the entire European economy. In the face of ever-tighter budgetary constraints, the Member States, particularly the less prosperous where regional problems are often very acute, are finding it increasingly difficult to reconcile efforts to maintain or create jobs in the weaker regions with the general requirement to restructure and improve competitiveness. In the circumstances, the persistent and widening

gaps between the regions form a major obstacle to the greater convergence of the economies of the Member States. The problem can be solved only by coordination and solidarity at Community level as well as within Member States. The Community's regional policy must therefore promote the integration of the Member States' economic and regional policies through measures to alleviate the most serious regional problems.

Experience has shown that the Community's present regional policy instruments, in particular the European Regional Development Fund, cannot realize their full potential because their financial resources are limited, the effort is spread too widely and too thinly and certain operational procedures are too inflexible. If the Community's action is to involve more than the mere transfer of financial resources, new guidelines are needed for regional policy. Some initial suggestions on this point were put forward by the Commission in its report on the mandate of 30 May 1980.<sup>1</sup>

These guidelines relate to the Community in its present form. The problems and the requirements of the Community after enlargement will be analysed in the next report on the regions.

# Guidelines and priorities for the Community's regional policy

### Employment

2. Within the context of the integrated social and economic strategy being developed at Community level to combat unemployment,<sup>2</sup> top priority must be given in regional policy as in other relevant policy sectors to the creation of new productive jobs. The first report on the regions forecasts significant divergences in regional labour market trends up to 1985, particularly as regards demographic structure and the numbers of young job-seekers.

There will certainly be less interregional labour mobility than in the past. The regions in greatest difficulty will be those where structural unemployment is already high. Regional policy measures in these regions must be aimed at

<sup>1</sup> OJ C 36, 9.2.1979.

<sup>&</sup>lt;sup>2</sup> Bull. EC 12-1980, point 2.1.61.

<sup>&</sup>lt;sup>1</sup> Supplement 1/81 — Bull. EC.

<sup>&</sup>lt;sup>2</sup> Bull. EC 4-1981, points 1.1.1 to 1.1.11.

encouraging labour-intensive activities based on modern technology as well as services. This does not preclude restructuring that involves labour-shedding where productivity can thereby be improved. Specific youth employment schemes will also be required, together with measures to ensure the forward-looking management of the labour market at regional level. Above all, action by all the instruments of intervention — the Funds, loan machinery and national incentive schemes — must be directed towards the objective of securing the highest level of employment possible.

### Productivity

3. The report shows that the main reason for the worsening of regional disparities is the growing divergence of productivity trends. It must be a priority aim of the regional policies of both the Community and the Member States to raise productivity, primarily by promoting the use of the right technologies for releasing indigenous development potential and harnessing local resources. This is the way to raise the standard of living — not merely by transferring financial resources. Positive adjustment measures (restructuring, conversion and innovation) must take precedence: measures to shore up activities that are not competitive should be exceptional and of very short duration.

### Indigenous development potential

4. The regional development programmes must focus on the forms of development suited to the socio-economic characteristics of the less-favoured regions, in order to release and exploit their growth potential and their adaptability. This relates particularly to the available 'human capital', to alternative energy and environmental resources, and to dormant business capacity (especially in small and medium-sized enterprises, crafts and rural tourism), which need support services in terms of information, research, technical assistance, market analysis, etc. The European Regional Development Fund must be given the means to make an adequate contribution to these initiatives, and regional and local representative bodies should be called upon to play an active part.

### Geographical concentration

5. In the face of increasingly serious problems and limited financial resources, priority must be accorded to regional problems where the Community's efforts can make a significant additional contribution. In its report on the mandate of 30 May, the Commission has already stated that it intends to propose adapting the quota section (the part of the Fund allocated among the Member States by quota) so as to concentrate intervention even more heavily on the regions suffering from serious structural underdevelopment.<sup>1</sup>

A considerably greater share of Regional Fund resources should be assigned to the non-quota section, for which there are no national quotas. Measures under the non-quota section will be primarily aimed at the regions of the Community now suffering serious problems of industrial decline or the side-effects of certain Community policies.

### Effective use of Community instruments

6. The guidelines laid down in the Council resolution referred to in the last two points of the first paragraph of the introduction to this communication call for the concerted and simultaneous application of the various Community and national instruments. Among the former, loans are of particular importance, especially where accompanied by interest rebates.

The specific role of the ERDF, and especially its non-quota section, must be considered in the light of the evolution of other Community instruments; for example, a closer relationship must be established between the ERDF and the Social Fund.

The Commission has begun to carry out 'integrated operations' involving the coordinated application of various instruments in specific areas with particularly acute and complex problems (Naples, Belfast).

The ERDF will have to step up its operations in conjunction with other specific policies (for example, on agricultural structures, energy,

<sup>&</sup>lt;sup>1</sup> Including Greenland and the French Overseas Departments

research, innovation; SME) by drawing more heavily on the non-quota section.

# Coordination of regional policy and other Community policies

- 7. Policies must be coordinated at three stages:
- at the stage of formulating and implementing the principal Community policies (as laid down in point 2 of the Council resolution). This involves the systematic assessment of the regional impact of Community policies (RIA) proposed by the Commission in its regional policy guidelines of 3 June 1977 and approved by the Council and Parliament;
- at the stage of adopting accompanying measures aimed at facilitating the implementation of other policies or offsetting any adverse effects they are liable to have on a region. These measures could be adopted under the policy in question (this concerns particularly the CAP, under which there is considerable scope for such measures), or be implemented by means of specific operations conducted in parallel (for example, the non-quota measure connected with the restructuring of the steel industry):
- at the stage of combining measures to serve common priorities (for example, for the development of alternative energy sources in less-favoured regions).

# Coordination between the Community's regional policy and national regional policies

8. This is based on the regional development programmes submitted by the Member States to the Commission in accordance with the ERDF Regulation. The contents of these programmes must be spelt out more clearly and made more operational, particularly in regard to the labour market. Community supervision of regional aids should ensure that the ceilings and amounts of aid are assessed on the basis of the severity of regional problems both within Member States and at Community level. Coordination between the Community and Member States will become more effective with the transition to joint financing by the Community and the Member States, since the infrastructure and investment aid programmes (programme contracts) will form part of the regional development programmes, which would incorporate individual Community-aided projects. Other Community instruments (particularly loans) will have a part to play. In this way, Community assistance will at last be seen to be additional to national aid. And the Commission's regional activities will be cast in a new mould, evolving from tasks mainly to do with bookkeeping and checking conformity with the Regulation towards devising policy, promotion, planning and providing technical assistance; from the functions of a financing body to those more clearly identified with a development agency.

Guidelines for European agriculture

Memorandum to complement the Commission's report on the mandate of 30 May 1980

### **Contents**

Preliminary remarks
Part I
Background for guidelines 66
<ul> <li>General economic development of the Community</li> <li>Development of the agricultural situation</li> <li>Need for medium and long-term decisions</li> <li>Prospects of production and consumption</li> <li>Evolution of Community trade</li> <li>Comparison with world markets and third countries</li> <li>Community spending on agriculture</li> <li>Structural policy</li> <li>Alternative production and energy</li> <li>Direct income subsidies</li> <li>National aid measures</li> <li>Improved control</li> </ul>
Analysis of market prospects and objectives for the principal agricultural products
• Sugar
• Milk 78
• Beef and veal
• Pigmeat, eggs and poultry 80
<ul> <li>Proteins and vegetable oils</li> <li>Tobacco</li> <li>80</li> <li>81</li> <li>81</li> <li>82</li> <li>83</li> <li>84</li> <li>85</li> <li>86</li> <li>87</li> <li>88</li> <li>89</li> <li>80</li> <li>80</li> <li>80</li> <li>81</li> <li>81</li> <li>81</li> <li>82</li> <li>83</li> <li>84</li> <li>85</li> <li>86</li> <li>86</li> <li>87</li> <li>88</li> <li>89</li> <li>80</li> <li>80&lt;</li></ul>
• Tobacco
• Fruit and vegetables
Final remarks
Annexes
Annex 1: Products as percentage of final agricultural production in each Member State and in the Community as a whole Annex 2: Crop and livestock production in the Community

S. 4/81 65

### **Preliminary remarks**

- 1. In its report on the mandate<sup>1</sup> the Commission recommended that future decisions on the common agricultural policy should be based on the guidelines set out below:
- a price policy based on a narrowing of the gap between Community prices and prices applied by its main competitors in the interest of competitiveness and a hierarchy of prices designed to improve the balance of production;
- an active export policy which would honour the Community's international commitments;
- a modulation of guarantees in line with Community production targets;
- an active structures policy tailored to the needs of individual agricultural regions;
- the possibility of income support subsidies to certain producers in specific circumstances;
- improved quality control at Community level and tighter financial control by the Community in the management of EAGGF expenditure;
- stricter discipline in relation to national aids to avoid undermining Community policies.
- 2. The Commission presents this memorandum to the Council in order to provide a more detailed analysis and indications of these guidelines.
- 3. It considers that the Community should now make a major attempt to integrate the common agricultural policy more adequately into an overall policy for general economic recovery. This necessitates the efficient use of physical resources in agricultural production, but also the maintenance of agricultural employment at an appropriate level in view of the difficulties of employment in other sectors.
- 4. In this memorandum the Commission has taken account of the resolution on possible improvements to the common agricultural policy adopted by the European Parliament on 16 June 1981.<sup>2</sup>

#### Part 1

### **Background for guidelines**

5. After twenty years of existence the common agricultural policy needs to be adapted to the new realities both of general economic conditions and of the agricultural sector itself.

# General economic development of the Community

6. Designed in a period of unprecedented economic growth, the common agricultural policy is now developing in an economic situation marked by the energy crisis, a slowdown or even a decline in growth, unemployment and monetary instability. In the base projection used by the Commission in the fifth mediumterm economic policy programme, which takes as its horizon the year 1985, the annual rate of growth of the Community's GDP in the period 1980-85 is put at 1.9%, compared with 2.2% in the period 1973-80, while the increase in purchasing power of the per capita wage in 1980-85 is put at only 0.8% compared with 2.0% in the period 1973-80. Demographic growth in the Community in the period 1980-85 is estimated at only 0.17% per year. This outlook implies that the increases in overall food consumption in the period between now and 1988 will be lower than in the 1970s, and particularly that the growth in demand for certain livestock products such as beef, which is closely associated with growth in incomes, will be less marked than in the past decade.

As regards employment, there are now over 9 million people out of work, which means that any drift from the land is inopportune and also that the unemployment situation has to be taken into account in the allocation of public resources.

Lastly, although held in check by the establishment of the European Monetary System, international monetary disorder has repercussions on the operation of the common agricultural policy. The introduction of monetary compensatory amounts remains a threat to market unity, despite the efforts to eliminate them.

This general economic situation in its entirety prompts anti-inflationary policies characterized

<sup>&</sup>lt;sup>1</sup> Supplement 1/81 — Bull. EC.

<sup>&</sup>lt;sup>2</sup> OJ C 172, 13.7.1981.

by strict control of public expenditure and the need for efficient use of the Community's financial resources in all fields, and particularly in the agricultural sector.

### Development of the agricultural situation

7. Irrespective of the economic outlook, which calls for a re-examination of the common policies, the actual development of agriculture over the past twenty years would necessitate such an examination.

Without losing sight of the successes achieved by the common agricultural policy in attaining the objectives laid down in Article 39 of the Treaty, we should make the necessary adjustments in time to safeguard these achievements.

8. The creation of the common market with a spectacular development of agricultural trade has improved the consumption of foodstuffs in both quantity and quality. It has shielded the Community from physical shortage of foodstuffs, and has stabilized agricultural markets by protecting them from speculative movements affecting world markets in raw materials. The CAP has encouraged the modernization of agriculture, and through the considerable growth in productivity it has enabled non-agricultural sectors to grow by providing them with the necessary labour. It has contributed to the development of the food processing industry, which is closely linked to agriculture. European agriculture has also contributed to satisfying world demand for food.

Although the CAP has to a large extent shielded the agricultural population from the consequences of the general economic crisis and ensured the continued growth of the sector, agricultural incomes have fallen sharply in real terms in the past two years. The drop averaged 2% for the Community in 1979 and 9% in 1980.

This average also reflects the differences between Member States depending on their rate of inflation.

It is of primordial importance in any examination of the common agricultural policy to recall that the decisions taken in this framework have a direct effect on the incomes of 8 million persons employed in agriculture, who together with their families represent 40 million persons; this is a responsibility which the Community institutions must always have in mind, particularly in implementing the measures advocated in this memorandum.

Lastly, although regional disparities of agricultural income persist, it is the general economic climate and in particular the existence or otherwise of alternative employment that is the principal cause of such disparities, and the mechanisms of the market organization have not reduced them.

9. As a result of the common agricultural policy, the Community's degree of self-sufficiency for many of the principal agricultural products has increased. However, this development has been accompanied by its own problems due to the fact that the common agricultural policy is essentially based on regulatory mechanisms supporting farmers' incomes by means of guaranteed prices or direct product subsidies for unlimited quantities not necessarily geared to the needs of the market.

Because of the continued growth of agricultural production, with a less rapid growth of food consumption within the Community, there have been increased difficulties of market management and a growing reliance on export markets, often with the aid of refunds paid from the Community budget. In the period 1974-79, expenditure from the EAGGF Guarantee Section increased more rapidly than the Community's potential own resources.

- 10. The Community has therefore been obliged in recent years to follow a more prudent policy for agricultural prices. The Commission included in its 1981/82 price package proposals aiming at the development of instruments for the participation by producers in the cost of disposing of additional production. At the same time, the Commission in its management of the markets, as regards both domestic markets and external trade, has placed renewed emphasis on vigorous and timely action to expand outlets, including an active export policy which has permitted the Community's agricultural exports to increase more rapidly than its imports.
- 11. These measures, helped by the good conjuncture of the markets, are now beginning to bear fruit. Expenditure from the EAGGF Guarantee Section in the period 1979-82 is estimated

mated to increase less rapidly than the Community's potential own resources. The picture is most striking in the milk sector, for which expenditure from the Guarantee Section will actually decrease from 4.752 million ECU in 1980 to 3.675 million ECU in 1981; in this sector the Community has succeeded in reducing a large part of stocks and expanding exports, while at the same time raising the level of prices on the world market, in such a way as to achieve considerable savings for the Community budget.

### Need for medium and long-term decisions

- The Commission considers that the Community should now take advantage of these favourable developments to form a long-term view of the future perspectives of agricultural production, consumption and trade, and to introduce the adaptations necessary for the better guidance of the agricultural policy in a multiannual context. The nature of agricultural production and markets is such that decisions based on a horizon of one or two years are often inadequate. The Commission believes that a horizon of five years would be desirable for the determination of long-term objectives. Since any new measures taken now would not begin to have their effect on production and consumption until 1982/83, it is appropriate therefore to take 1988 as the horizon for the guidelines developed in the present document.
- 13. Another factor to be taken into account is enlargement of the Community. During the period concerned by this study it is expected that Spain and Portugal will join the Community and that the agricultural policy will apply to twelve countries. This new enlargement will not only change the market situation for most agricultural products, but will require changes in the common agricultural policy itself. The Commission has already indicated in separate proposals the main changes in the common agricultural policy which would be needed for a Community of twelve, and these are taken into account in this document for the products mainly concerned (wine, fruit and vegetables, olive oil). But, in order to set reasonable limits to the analysis, the projections and forecasts have been made principally on the basis of a Community of ten.

- 14. But any reorientation of the common agricultural policy must be subordinated to certain fundamental considerations:
- any changes must respect the basic principles of the agricultural policy, and permit the Community to honour its obligation under Article 39 of the EEC Treaty to ensure a fair standard of living for the agricultural community; no adaptations which fail to respect these conditions could be politically viable;
- there can be no question of imposing an artificial limit on agricultural production, or of determining the level by administrative dictate; what are envisaged are objectives of Community production, beyond which the Community's guarantee would be reduced or adjusted in an appropriate way;
- the adaptations should take into account the impact of agriculture on the environment and the need to preserve the natural resources that form the basis of agricultural activity, and to ensure the preservation of wildlife and natural habitats.

# Prospects of production and consumption

- 15. The analysis of forecasts for 1988 of Community production and consumption of the main agricultural products for the coming years shows that, in many cases, production will continue to increase more rapidly than Community consumption if there is no change in present measures and price structures. (Details of these forecasts are given in Part II of this document and in the graphs in Annex 5.)
- 16. In any case, the presence of the Community on external markets makes it necessary to analyse the evolution of Community trade and to compare agricultural prices in the Community with those existing on world markets and with prices prevailing in other countries.

### Evolution of Community trade

17. In 1980 exports to third countries of agricultural products covered by Annex II to the EEC Treaty represented 8% of world agricultural trade, whereas the share of Community imports of agricultural products was 17%. This

shows the Community's important role and responsibility on the world market. In the past both imports and exports of these products have shown a considerable increase (respectively 75% and 164% in value terms during the period 1973-80). The exports of these products concern dairy products, cereals, sugar, beef, beverages and tobacco and fruit and vegetables. In 1980 34% was exported to industrialized countries, 51% to developing countries and 15% to State-trading countries. In particular exports to developing countries have in the past shown a considerable expansion (271% from 1973 to 1980). Imports relate mainly to fruits and vegetables, oilseeds, grains, beef, beverages and tobacco. In 1980 46% of these products came from industrialized countries, 49% from the developing countries and 5% from Statetrading countries.

18. Cereals imports have been showing a downward trend, which is due to the progressive increase in Community production and imports of cereals substitutes other than proteins, imports of which have almost doubled since 1974. The import conditions applicable to most of these products in the Community are particularly favourable: exemption from all protection at the frontier or a fairly low rate of customs duty.

As far as exports are concerned, there has been a particularly marked increase in Community exports of sugar, cereals, milk products, beef and veal and a wide range of processed products.

- 19. When assessing the prospects for Community exports of agricultural products in the 1980s, one must take account of the situation in which the Community finds itself in several sectors, e.g. milk products, sugar and meat in particular, and the possible development of other exports. In addition, it must be borne in mind that the Community will be required to continue and perhaps increase the volume of its food aid, particularly in the form of milk products and cereals and possibly sugar. The countries likely to become the Community's main customers are the East European countries (including the USSR), a number of developing countries and Japan.
- 20. In the context of the overall policy presented by the Commission the objective of Community export policy should be, in view of

world import requirements, to increase its agricultural exports so as to maintain its share in world exports in 1988 at least at the level reached in recent years. To that end, the Community may prefer, or even be compelled, to use a wider range of mechanisms in the export field. The Commission has already proposed the establishment of long-term contracts with non-member countries for the supply of agricultural products, and other formulas could also be considered.

The Community must also see to it that processed products win a growing share of its agricultural exports, in the interests of job creation in its agri-foodstuffs industry.

### Comparison with world markets and third countries

- 21. In general, differences in price levels reflect differences in industrial and social development. Farm price and price support levels in particular depend largely on the stage in the evolution of agricultural structures which are a determinant factor for the cost of production. Since the structural situation differs considerably among countries, it is evident that agricultural price levels in the world also vary significantly. The strong demographic density in the Community as compared to many other developed countries in the world is one of the principal causes why farm structures in the Community are generally less favourable than in these countries.
- 22. It is difficult to make accurate price comparisons. Different support systems, differences in statistical measurement, differences in quality, unstable exchange rates for conversion of prices in a common denominator, and the fact that exchange rates do not coincide with differences in purchasing power mean that any price comparison can only be of a global nature.
- 23. Comparisons with world market prices may easily lead to misleading conclusions. It is highly unlikely that European consumers could be supplied for long at low and stable world prices if Community supply, because of reduction in production, would depend to a greater extent on imports. World market prices are notoriously volatile because the quantities

S. 4/81 **69** 

involved in international trade are often marginal in relation to total production (e.g. sugar, cereals, dairy products) and may reflect short-term fluctuations in production. For several products (e.g. beef, wine, tobacco) there is no real world market and prices vary according to the destination of exports.

Therefore the Commission is convinced that a generalized and systematic alignment to world market prices would not be a practical policy guideline. On the other hand world market prices influence the level of export refunds and therefore budgetary costs. In many cases, the export market will in future be the only outlet for additional production exceeding internal consumption, and such production will therefore realize no more than the world price. This element must be taken into account in considerations concerning producer participation in financial costs.

24. Another yardstick for judging the Community price level is the price level which is applied in other countries and in particular in other major competitive export countries of agricultural products. Here also cautiousness is needed since in many cases the low-cost producers in the world could only satisfy a part of demand for food in the world, so that the production of other higher-cost producers is necessary in order to satisfy demand. The Community is not alone in maintaining a system of agricultural support and guarantees of markets and incomes for its farming population. Almost without exception, other countries have agricultural support systems of various kinds, with differing mechanisms of support and differing hierarchies of prices.

In countries with agricultural structures similar to that of the Community, the price level is frequently higher. For example, although the producer price for milk in New Zealand is 55% lower than in the Community and in Australia 15% lower, in the USA it is 15% higher, in Canada 18% higher and in Switzerland 55% higher. For beef, although producer prices in competitor countries such as Australia and Argentina are much lower than in the Community, they are only slightly lower in the USA, and they are more than twice as high in Japan. For wheat the price gap in 1980/81 between the Community and the USA was 30% and in comparison to Canada 27%. For maize, the price gap between the Community and the USA was 34% in 1980/ 81.

25. Almost all countries, in one way or another, place agriculture in a special position and give special treatment to agriculture compared with the other economic sectors. Without giving an exhaustive list, it is sufficient to cite the example of two major products (cereals and milk) in two leading producer countries (the United States and Canada).

In the United States measures include the fixing of a target price for the various cereals which enables farmers to claim deficiency payments when the market price falls below a certain level — accompanied by a system of seasonal and medium-term loans, the rates of which are fixed each year by the Government at a very low level, a system of disaster payments and, more recently, new machinery for adjusting supply: the producer storage programme, the aim of which is to encourage producers to stockpile or to run down their stocks, as the market requires. In addition, there are a series of measures for regulating production, including the 'setting aside' of land. In Canada the Government pays producers the difference between the world price and the internal price fixed by the Government for supplies to the mills. There is also a centralized system for the management of the market in wheat and barley and an income stabilization system for cereal farmers in the west.

26. As regards milk, in the United States income support is ensured by a parity price for milk, reflecting production costs and aimed at ensuring a level of agricultural income which will enable an appropriate production capacity to be maintained. The Commodity Credit Corporation buys in milk and milk products to enable the milk price to reach a level somewhere between 80 and 90% of the parity price. Production is regulated by marketing orders, and imports are restricted by quotas.

In Canada there is a system whereby the market in milk is split into milk for processing and that part of the milk supplied by producers of drinking milk going for processing. Each producer receives a market price, which is based on the support price, for deliveries not exceeding his market share quota. Over and above the quota the price received reflects the prices of milk surpluses on the world market. An equalization scheme for losses incurred in exporting surpluses chargeable to the producers has also been introduced. The Federal Government

bears only those export account deficits resulting from major unforeseeable changes in the world market situation. A system of income adjustment is also now in operation, designed to adjust the target support price for producers of milk for processing and cream in the light of production costs, the cost of living and other economic factors (incomes, processing costs, etc.) relative to the other main producing countries.

27. As regards public expenditure on price and income support, OECD estimates show that the levels of support vary considerably from one country to another. In 1977, the only year for which data are available for each of the countries in question, price and income support as a percentage of the value added of agriculture at market prices ranged from 7.5% in New Zealand to 27.3% in Switzerland. The Community comes quite near the bottom end of the range with 11.9%, which is very close to the levels in the United States (9.1%) and Austria (10.6%), but considerably lower than the Norwegian figure (21.4%).

## Community spending on agriculture

28. As is shown by the table in Annex 7, there was a sharp fall in EAGGF guarantee expenditure from 1973 to 1974, followed by rapid growth until 1979 then much slower growth from 1979 to 1982.

The growth rate during the period 1975 to 1979 was  $23 \cdot 3\%$  a year, whereas it falls to around 10% a year for the period 1979-82, and even lower when established for a constant number of Member States.

On the other hand, during both these periods the annual growth rate of the Community's 'own resources' (agricultural levy, sugar and isoglucose levy, customs duties and up to 1% of the common basis of assessment of VAT) has remained about 12% on average.

- 29. The following factors have brought about the increase in expenditure:
- general inflation forcing agricultural prices up;
- On the basis of amending budget No 2 for 1981, and for 1982 the draft budget and letter of amendment.

- upward trend of the degree of self-supply, particularly in the cereals sector (primarily by reason of substitutes) and the milk sector, although major fluctuations in either direction occur from year to year;
- enlargement of the Community to include Greece:
- widening of the scope of agricultural policy (e.g. aid for the consumption of olive oil, aid in respect of products processed from fruit and vegetables and the common organization of the market in sheepmeat);
- monetary movements;
- Community commercial policy;
- world price trends which, by the magnitude and suddenness of their fluctuations, have sometimes amplified the impact of the abovementioned factors and sometimes cushioned or even offset their effects.
- 30. The reason for the difference in the growth rate between the periods 1975-79 and 1979-82 is that during the first period the principal factors tended to reinforce one another, whereas during the second factors causing downward trends have been opposing factors exerting upward pressure.
- 31. From 1975 to 1979 inflation and the increasing degree of self-supply forcing costs up, were strengthened in their impact by:
- the adverse effect of monetary developments, which entailed substantially higher MCAs; from about 150 million ECU before 1975 to over 700 million ECU in 1979;
- a simultaneous decline, or even collapse, of world prices for almost all the sectors of production: cereals, sugar, oilseeds and milk products;
- at the same time, imports of cereal substitutes were growing rapidly and their impact was all the greater as the refund rates were high;
- the milk sector holds a key position in the increase in expenditure, expenditure on milk accounting for a high percentage of the total spent on the market organizations (between 30 and 50%, fluctuating from year to year).
- 32. During the period 1979-82 the factors exerting upward pressure, such as the accession

71

of Greece, the extension of Community financing (the impact of which comes mainly into this period) and the development of beef/veal exports, have been counteracted by factors exerting downward pressure, i.e.:

- decline of MCAs;
- recovery of world prices for cereals, sugar and milk products;
- slower growth of milk production;
- stocks are not so high that major special measures are needed for the disposal of skimmed-milk powder or for the development of measures for the disposal of butter:
- the participation of milk producers, amounting to over 400 million ECU in 1982;
- lastly, the fact that more account has been taken of market conditions, this being reflected in a prudent price policy and the efforts of the Commission to achieve rigorous management of measures.
- 33. As far as the future is concerned, apart from the adjustment of prices, possible developments in the regulations and any monetary movements, two factors will affect expenditure:
- the accession of Greece, the full impact of which will not be felt until the end of the transitional period, although the major part of it will materialize during 1982;
- world prices, which are currently high, could fall back. This eventuality has in fact been allowed for in the 1982 budget.
- 34. Lastly, it should be stressed that not all guarantee expenditure is in fact motivated by agricultural policy considerations.

Many items of expenditure are charged to the EAGGF Guarantee Section although their real origin lies in Community trade concessions to non-member countries. For example, the Community has undertaken to import at low rates of duty or duty-free beef, New Zealand butter and sugar from the ACP countries, imports which give rise to comparable increases in exports. Moreover, imports at low rates of duty or duty-free of manioc and corn-gluten feed go far to account for the growth of expenditure on the cereals and livestock products sectors. The cost of these trade concessions (see Annex 9) can be estimated at about 1 600 million ECU in 1982;

the counter-concessions granted by other countries are difficult to quantify in budgetary terms.

## Structural policy

- 35. In its recent decisions on prices and related measures, the Council has paid particular attention to socio-structural policy; it has agreed to pursue and intensify the drive to improve structures, without interfering with measures to combat imbalance on some markets, but concentrating the available resources where the need is greatest: deficient farms and less-favoured areas. Expenditure on deficient farms and less-favoured areas should thus be able to reach two thirds of the EAGGF Guidance Section expenditure in 1981.
- 36. In future, and in so far as the Guidance Section's overall budget is increased, this policy will have to be strengthened all the more as adjustments in price and market policy will be unavoidable. Measures under socio-structural policy will also have to be amplified in order to:
- exploit more fully the opportunities offered by the improvement in product quality and the efficiency of processing and marketing channels;
- encourage the reorientation and diversification of production and the introduction of new products and new production systems;
- increase the contribution made by agricultural research and advisory services to facilitating the changes needed in agriculture.

However, not until the Commission has assessed the results of the operations currently under way will it be able to judge whether new proposals should be presented and to draw conclusions as regards the budget.

37. The socio-structural measures to assist less-favoured agricultural regions will also have to be continued. However, it is an illusion to believe that socio-structural policy on its own can bring about the requisite economic development of the less-favoured agricultural areas. Such development has to be planned in the context of regional development, on the basis of integrated measures supported by the

full range of Community financial machinery available for that purpose.

Alternative production and energy

38. The choice of lines of agricultural production as alternatives to those currently in surplus is at present limited and covers only very minor products (e.g. almonds, sunflowers, hazel nuts). This very limited choice has to be seen of course against the background of the present common market organizations for agricultural products both within the Community and outside. Efforts are being made to encourage wine-growers, for instance, to switch to other products and tobacco growers to change over to different qualities. But such measures, necessary as they are, have a limited impact overall. However, one can also envisage an expansion of lines of production currently supplying proteins for animal feed, particularly peas and field beans.

In many regions of the Community, forestry is a significant factor in the rural economy. The improvement of existing forests and more afforestation would make more efficient use of agricultural land, supply raw materials, relieve the balance of payments and help improve the environment in some areas. To that end, the Commission has already made a series of proposals to the Council which would contribute to the development of a real forestry policy, and it envisages putting forward other proposals concerning, for instance, the afforestation of marginal land.

39. Like all sectors of the economy, agriculture has been hit hard by the sharp rise in energy costs.

In addition to the energy-saving measures already undertaken, which should be continued and encouraged, a special effort should be made in this sector to develop new and alternative sources of energy. The Commission has made this one of the priorities of its energy policy. It has also proposed in the communication on R&D policy in the 1980s<sup>2</sup> that special attention be paid to the development of sources of energy which can be used effectively in rural areas. It has also emphasized that agriculture

can be a source of energy and it proposes in this case to present specific action programmes to be supported at Community level.

## Direct income subsidies

- 40. The common agricultural policy aids incomes of the agricultural population by supporting market prices; but it also affords producers certain direct subsidies which supplement their income from the markets. Under the socio-structural policy hill-farmers and farmers in underfavoured areas receive the aid provided for by Directive 75/268, to compensate for the natural handicaps imposed by climate, topography and quality of soil, etc. and to maintain a farming activity in those regions which helps to protect the environment.
- 41. In the context of its report on the mandate of 30 May 1980<sup>1</sup> the Commission considered whether it was possible to adopt new measures or adapt existing ones so as to support more especially the incomes of small producers. It came to the conclusion that some scope could be found in:
- the milk sector (exemption from the co-responsibility levy for the first 30 000 kg of milk);
- the beef and veal sector (income subsidy for beef and veal producers subject to a ceiling).
- 42. If the subsidy cannot exceed a limit fixed for each farm, these measures would allow Community action to be concentrated on small farms without jeopardizing the principle of equity since all producers would be entitled to aid up to a certain limit.
- 43. If the volume of aid granted to certain regions in the Community needs to be increased, consideration should be given to using the means already offered by the compensatory allowances for mountain and hill and other less-favoured areas.
- 44. In keeping with its response to the mandate, the Commission considers that any future extension of direct subsidies should be set in the context of the trend in prices and agricultural incomes, with account being taken of

73

<sup>1</sup> Pages 7 to 20 of this Supplement.

<sup>&</sup>lt;sup>2</sup> Pages 21 to 32 of this Supplement.

<sup>&</sup>lt;sup>1</sup> Supplement 1/81 — Bull. EC, point 26.

annual decisions on prices and other measures, and the budgetary situation. It reserves the right, if necessary, to make proposals to introduce or adjust direct subsidies in other cases.

## National aid measures

- 45. National expenditure in the agricultural sector is about twice that of the Community. Most national expenditure goes on structural policy, social security and fiscal measures to assist agriculture; Community expenditure is mainly on the organization of the markets, the total cost of which is borne by the Community, and certain aspects of structural policy, which is financed partly by the Community and partly by the Member States.
- 46. The competition rules laid down in the EEC Treaty (Articles 92 and 93) and the rules for their application in agriculture specify the criteria and procedures for assessing the compatibility of national aid measures with the common agricultural policy. The bulk of national expenditure on agriculture is in fact compatible with the rules of the Treaty.
- 47. However, by reason of the economic difficulties which have arisen in the agricultural sector in recent years, some Member States have been resorting increasingly to national aid measures. In some cases they have failed to observe the notification procedures and paid out aid incompatible with the Treaty.

Such aid is liable to distort competition, affect the balance of the agricultural markets and lead to additional expenditure chargeable to the Community budget. This trend is extremely worrying, not only for the Commission but also for the other Community institutions.

- 48. The Commission therefore considers that there should be stricter discipline in the matter of national aid measures, to prevent them from undermining the foundations of the common agricultural policy.
- 49. The Commission insists that plans for introducing or amending aid measures be notified to it in good time and that no payment be made which breaches Article 93(3) of the Treaty; any infringement of this provision will

give rise to systematic action under Article 169 and the other rules of the Treaty.

If an aid that is incompatible with the Treaty is paid by a Member State, the Commission reserves the right in future to invoke the rulings of the Court which require the recipients to reimburse it.

The Commission will also use its right to refuse EAGGF cover for expenditure by a Member State under the common market organizations if this Member State has paid a national aid in contravention of a market organization. This possibility, which is supported by Court judgments, will be examined when the EAGGF accounts are being cleared.

- 50. In order to give a clearer picture of the rules governing national aid in agriculture the Commission will also be proposing shortly to the Council a Regulation specifying which aids are to be notified, which are prohibited and which are authorized.
- 51. It should be stressed that it is not the Commission nor the Court which is mainly responsible as regards aids, but the Member States' Governments. Without their full collaboration all efforts to impose discipline and stricter procedures will be in vain and aids will multiply and not only undermine sound competition in agriculture but also put a heavy burden on the Community budget.

## Improved control

52. The Community must tighten up supervision of the implementation of agricultural legislation.

It is true that checks are made in the Member States at the paying agencies responsible for the management of Community expenditure. When, on the basis of files checked, expenditure is found not to comply with the agricultural rules, it will be barred from Community financing. But such checks are cumbersome without being comprehensive. In order to be able to check that certain operations conform to Community legislation, national staffing levels should be increased. In addition, there should be a team of Commission officials with independent powers entitled, for instance, to make surprise visits. The Commission will put forward appropriate proposals in due course.

The following is not an exhaustive list of sectors where there is no control:

- In the fruit and vegetables sector the present supervision of the application of quality standards for marketing and withdrawal operations, which is the responsibility of 1 300 national officials, is manifestly inadequate. The system of recording prices on representative producer and import markets notified by the Member States, serving as a basis for the adoption of Community measures, needs to be harmonized.
- Despite certain checks carried out by the governments, doubts remain about the strict and uniform application of the quality criteria for cereals and beef accepted for intervention.
- Doubts also remain about the actual final destination of skimmed-milk powder intended for animal feed and receiving EAGGF subsidies to that end.
- Despite real efforts made by government and Community authorities, there are significant discrepancies between the direct aid paid to producers of olive oil and actual production.
- In the wine sector checks on the alcoholic strength of the grapes used for wine-making, the use of sucrose, the use of concentrated grape musts, etc., and on the correct application in the Member States of the rules for planting of vines are inadequate.

## Part 11

# Analysis of market prospects and objectives for the principal agricultural products

53. The following paragraphs contain the Commission's analysis of the prospects for production, consumption and trade for the products of principal importance under the common agricultural policy, and which represent a significant part of expenditure from the agricultural budget. They also indicate, in those cases where the Commission considers it necessary, the appropriate production objectives and the measures to be adopted to attain them.

For the reasons explained in paragraph 12, the year 1988 has been chosen as the horizon for defining the long-term production objectives;

production objectives for the intervening years would be fixed at an appropriate level, in the framework of the annual decisions on the common organizations of the market for the different products. At each of these stages the Commission will propose, on the basis of results actually recorded and of market prospects, Community production volume targets. If these targets were exceeded producers could not hope to obtain from the Community the same guarantee for their products and would have to bear part of the cost of their disposal. These production targets do not set hard and fast levels for Community production or for its distribution; they indicate the threshold beyond which support will begin to diminish.

54. The proposals put forward by the Commission in this paper are based on economic forecasts at present available, on production methods currently in use and on present consumption patterns.

The Commission stipultates that during the period, i.e. between now and 1988, it might have to make adjustments to its targets and, generally speaking, act on all the consequences of technological, administrative or economic changes which may occur in the agricultural production/consumption chain.

In the same vein the Commission reserves the right to take any action which can speed up implementation of desirable innovations.

#### Cereals

55. Cereals production represents 12% of the value of the Community's agricultural production. It takes place on 3.6 million farms, generally with other crops and livestock; only about 400 000 farms may be said to specialize in cereals production. Expenditure from the Guarantee Section in 1981 is estimated at 1 931 million ECU, which is 17% of the Guarantee Section and 13% of the value of cereals production.

## Prospects for production, consumption and trade

56. Production of cereals in the Community in 1979/80 was 118 million tonnes, with imports of 18 million tonnes and exports of 17 million tonnes. The most important cereals

produced were wheat (45 million tonnes), barley (40 million tonnes) and maize (18 million tonnes). The graph in Annex 5 ipdicates the evolution of production and consumption. In the absence of any change in the existing policy and relative prices, it is estimated that production by 1988 would be about 135 million tonnes.

- 57. Since a large part of cereals is used for livestock production in the Community, the analyses of the market situation must take into account the demand from the livestock sector and the utilization of cereals substitutes. In 1980 animal feed accounted for 73 million tonnes of cereals (including 13 million tonnes imported) and the equivalent of 14 million tonnes of cereals in the form of imported substitutes (manioc, brans, corn, gluten feed, etc.). Imports of these substitutes have grown rapidly in recent years because of the Community's low level of external protection which gives them an advantage of price compared with Community cereals. In the absence of any change in import conditions and relative prices, future additional demand for animal feed would be covered by imported substitutes rather than by Community cereals, and the increase in the Community's cereal production would therefore have to be exported at a cost to the Community budget.
- 58. Specific problems exist for durum wheat, for which the Community's production in 1979/80 was 4·1 million tonnes, with a consumption of 4·5 million tonnes. In the absence of any change in the existing policy, it is forecast that production will increase by 1988 to 5·0 million tonnes, while consumption will decline to 4·1 million tonnes. This situation would pose serious problems of disposal of the surplus production. The cost to the Guarantee Section of the aid to producers of durum wheat, which serves as an income supplement, has increased rapidly from 89 million ECU in 1978 to an estimated 162 million ECU in 1982, taking account of the accession of Greece.

## Price policy

59. The Commission considers that it is principally in the cereals sector that the Community should take action to narrow the gap between its prices and those applied by its main compet-

itors in the world market. Several factors argue in favour of such a policy:

- Cereals have a central role in the Community's agricultural economy; a relative decline in cereals prices would mean lower costs of production for beef, milk, pigs, poultry and eggs and would therefore permit prices in these sectors to be supported at relatively lower levels, this in turn would make the Community's livestock production more competitive with that of third countries.
- The Community's cereals production is relatively efficient; although the average area of European farms is smaller, they have an average yield higher than in the USA, Canada or Australia, thanks to an intensive and therefore costly use of inputs.
- Although there are fluctuations in the world market prices of cereals, there exists a valid point of reference in the prices received by cereals producers in the USA, which in a recent period were about 20% lower than in the Community.
- From the point of view of agricultural incomes, a reduction in cereal prices in real terms would affect smaller cereal producers proportionally less than the larger producers, because the larger farms specialize in cereals production while the smaller farms tend to have a mixed farming system with other types of production, such as animals.
- The advantage enjoyed by imported cereals substitutes is essentially an advantage of price. It has been estimated that, if the price differential was reduced by 20 ECU/tonne, the substitutes would already begin to lose their economic interest for animal feed. A reduction in the relative price of cereals would therefore be the most efficient way to solve the problem of substitutes.
- 60. For these reasons, it would be in the Community's interest to embark on a programme of progressive reduction of cereals prices in real terms and relative to the prices of other products. To avoid unacceptable consequences for production and incomes, such a programme must be gradual: one could not envisage a reduction in nominal terms. It would be a question of progressively reducing the gap between the Community's internal prices and those in the USA over a period of years up to 1988. It

must be emphasized that Community preference in the cereals sector would be retained, since there would still be a difference between the price at which supplies from third countries could enter the Community (threshold price) and the internal support price (intervention price).

## Community production objective

61. The global production objective, with complete guarantee, for cereals for 1988 should be 130 million tonnes.

This objective is formulated on the following assumptions:

- that exports will maintain their present volume.
- that additional demand for cereals in animal feed will be met from the Community's own production rather than from imports of cereals substitutes, whose volume should be stabilized or reduced

Setting this target does not mean establishing a maximum limit on the possibilities for Community production or exports. It simply means that if the targets are exceeded, the producers could not hope to obtain from the Community the same guarantee for their products and would have to bear part of the cost of disposal on outside markets. It should be noted that if world demand rises and if the abovementioned price policy is followed, the cost of disposal on the third country market will tend to decline.

Similarly, the food aid policy which the Community is planning to develop would be a consideration in setting the target.

## Measures to be taken

62. Adjustment of intervention price. For 1981/82 the Commission proposed that, if the Community production of the principal cereals exceeded certain basic quantities, the intervention prices should be reduced; and the Council agreed in principle to introduce this measure for 1982/83. From both the economic and administrative point of view, this form of producer participation has advantages, and the Commission considers that it would be desirable to introduce it as the means of respecting

the production objectives. It must be emphasized that this measure would come into action only if there was an excessive increase in Community production; it would be a complement to the suggested price policy. The reduction in intervention prices would take place in the year following that in which the basic quantity was exceeded.

- 63. Durum wheat. The Commission considers that the appropriate form of producer participation must, as for other cereals, consist of an adjustment of the intervention price. In addition, in order to ensure that the budgetary resources are used in the most effective way to aid the incomes of small producers, the payment of the aid should be limited to the first ten hectares for each producer.
- 64. Interim action on cereals substitutes. In the long term, a programme of progressive reduction in cereals prices in real terms will eliminate the competitive advantage presently enjoyed by cereals substitutes. But in the short and medium term, while the advantage remains, difficulties may persist on the Community's cereals market. Taking into account its international rights and obligations, the Community should therefore open discussions with the principal third country suppliers of cereals substitutes for the introduction of arrangements to ensure that during the period of alignment of prices the volume of imports does not exceed present levels. These discussions should cover all the principal substitutes (and, if necessary, new substitutes) so as to ensure coherence and avoid displacement of demand from one product to another.

## Sugar

65. Sugar beet represents 3% of the value of the Community's agricultural production, and is produced on 300 000 farms. In 1980/81 production was 12·1 million tonnes (of which 10·9 million tonnes for quotas A and B), consumption 7·3 million tonnes, exports 3·5 million tonnes and imports 1·4 million tonnes, including imports from the ACP countries. Expenditure on sugar from the EAGGF Guarantee Section in 1981 is estimated at 700 million ECU, which is 6% of the Guarantee Section. However, this expenditure includes the cost of exporting the equivalent of the sugar imported from ACP countries, and is offset by levies paid

by producers themselves, which for 1981 are estimated at 463 million ECU.

- 66. Under the system of production quotas, which was prolonged for five years from 1 July 1981, the maximum quantity of sugar which benefits from a guarantee of price and markets (A and B quotas) is fixed, and all additional sugar must be sold at the world market price. As can be seen from the graph in Annex 5, total production has increased significantly in the 1970s; because of the quota system, the extent of future increases in production will depend on the course of world market prices, which can vary greatly. Consumption within the Community is expected to remain at about the present level.
- 67. The Community already has in the quota system a means of controlling production within certain guaranteed quantities. There is an integral co-responsibility of producers, who must bear the full cost of exporting surplus sugar other than the equivalent of 1.3 million tonnes principally imported from ACP countries. It would not therefore be appropriate at this stage to propose modifications in these arrangements.
- 68. However, the Council must review the quotas before 1 January 1984 in the light of the situation on world markets, and that will be the occasion to consider any necessary changes. In particular the Community must take account of developments in the production of other sweeteners, such as isoglucose and other new products, which may begin to occupy an increasing share of markets in third countries to the detriment of sugar produced from beet and cane.

## Milk

69. Milk production constitutes 20% of the value of agricultural production in the Community and takes place on about 1.8 million of the Community's 5 million farms. The number of farms has diminished rapidly, by a quarter in the last six years, but the total number of dairy cows has remained at about 25 million. Expenditure on milk from the Guarantee Section in 1981 is estimated at 3 675 million ECU (after deduction of the co-responsibility levy) which is 32% of the Guarantee Section and 14% of the value of milk production. This represents a reduction of more than 1 000 million ECU

compared with the preceding year, and is due to the successful management of the market through reduction of stocks and higher prices obtained on world markets.

## Forecasts of production and consumption

70. The trends and forecasts of production and consumption are shown in the graph in Annex 5. Deliveries of milk to dairies in the Community of ten in 1980 were 96 million tonnes, imports of milk products were equivalent to about 2 million tonnes of milk, and exports equivalent to about 16 million tonnes. During the 1970s deliveries of milk to dairies increased at an average of 2.6%, although in 1981 the rate of increase has decelerated to about 1%. In the absence of any change in the existing policy, the rate of increase in the coming years could be 1.0 to 1.5%, which implies a level of 104 to 108 million tonnes by 1988. Meanwhile consumption within the Community is forecast to increase by about 0.5% annually.

## **Exports and imports**

71. Our exports of milk products have increased rapidly in recent years, and we can expect to participate in growth in the world market. Food aid in the form of milk products should also be increased. By 1988 an additional export of the order of 4 million tonnes milk equivalent could be envisaged. As regards imports, the principal question is the future arrangements for New Zealand after 1983, which remain for decision by the Council.

## Community production objective

72. The objective of production should be that deliveries of milk to dairies should not increase more rapidly than the growth of Community consumption, i.e. in the present circumstances by about 0.5% per year.

## Measures to be taken

73. The Community should continue to follow a prudent price policy for milk. But it would not be appropriate to envisage an align-

ment of Community prices on those of competing countries, which in some cases are higher and in other cases lower than Community prices.

- 74. Measures for the co-responsibility of producers already exist for milk, and they should be reinforced in the following way:
- The existing co-responsibility levy should continue at the rate of  $2 \cdot 5\%$ , as long as expenditure on milk occupies more than 30% of the Guarantee Section. However, there should be a general 'franchise' for the payment of the levy, in order to assist the incomes of smaller producers; this could take the form of the exemption of the first 30 000 kg of milk delivered by all producers.
- A supplementary levy should be introduced so that producers participate in the cost of disposal of milk in excess of the production objective fixed for each year, taking account of the increase in Community consumption. The levy would be applied to dairies, which in turn would apply it to individual producers on the basis of their additional deliveries, according to guidelines to be fixed in Community regulations. The levy, which should be fixed at a level sufficient to cover the cost of disposal of milk in excess of the production objective, could be at a progressive rate that is, at a higher rate for each successive tranche of additional milk delivered.

The abovementioned supplementary levy would not be applied to dairies which can prove that additional production consists entirely of products which receive no form of support, in particular liquid milk for human consumption and certain fresh products.

• There should be a special levy on milk from 'intensive' farms to be defined according to certain criteria, for example those which deliver more than 15 000 kg of milk per hectare of forage.

If these measures are not accepted, then producer participation should be introduced in the form of a reduction in the intervention price if production exceeds the objective.

75. Consideration should be given to the suspension, at least for certain periods, of intervention for milk powder, which has created an artificial demand satisfied by dairies which no longer produce for the market. Private storage

aids could be used as an alternative measure. As a better balance is restored to the market, consideration should be given to phasing out gradually the less effective measures of disposal on the internal market, such as the butter subsidies

Quality should be improved by the adoption of common standards for the production and sale of milk and milk products, and standards concerning skimmed-milk powder and butter on the basis of the proposals made by the Commission. Progress should be made in the more accurate labelling and description of dairy products so as to provide better information for consumers.

76. In view of the measures proposed above a better balance needs to be secured in the long-term scheme for imports of New Zealand butter. To that end particular account should be taken of the consumption of butter in the Community and of the need to maintain the stability of world prices for dairy products.

## Beef and veal

77. Beef and veal represent 16% of the value of agricultural production in the Community, and are produced on half of the Community's farms, either from specialized beef herds or more often from herds producing milk. Expenditure on beef and veal from the Guarantee Section in 1981 is estimated at 1 497 million ECU, which is 13% of the Guarantee Section and 9% of the value of beef production.

## Forecasts of production and consumption

78. The trends and forecasts of production and consumption are shown in the graph in Annex 5. During the 1970s production increased at an annual rate of 2.4%, while consumption per head grew at 1.7%, and the Community is now more than self-sufficient. Production of the Ten in 1980 was 7.2 million tonnes, with imports of 0.4 million tonnes and exports of 0.6 million tonnes. In the absence of any change in the existing policy, production is forecast to grow at an average of 1.5 to 2.0%, which would imply a production of 7.8 to 8.2 million tonnes by 1988. Consumption of beef, which is influenced by the development of

incomes, is forecast to grow rather slowly at 0.7% a year.

## **Exports and imports**

79. The Community can expect to remain a net exporter of beef in the coming years at about the same level as at present. Although certain possibilities of enlarging the import arrangements as a result of Greek accession are under discussion, adjustments could also be envisaged to improve the operation of Community preference. As regards exports, demand and prices will continue to be influenced by general economic conditions, and the prospects for expanding our exports are not good.

## Community production objectives

80. The objective must therefore be to ensure that the average increase in beef production does not exceed the increase in consumption. This implies a production target of 7.6 million tonnes in 1988.

#### Measures to be taken

- 81. In order obtain this objective, the Community should follow a prudent price policy, since there is a risk that further price increases will deflect consumption to other meats and make our exports less competitive. The intervention system for beef could also be adjusted, with further limitation or suspension of intervention during certain periods.
- 82. The Community has already introduced measures for supplementing incomes in the beef sector through the various premiums paid to beef producers, including the suckler cow premium. The existing premiums should be revised, with a view to the introduction of new aids to support the incomes of specialist beef producers, with a limit of aid per farm.

## Pigmeat, eggs and poultry

83. Pigmeat, eggs and poultry constitute 19% of the value of the Community's agricultural production. Expenditure from the Guarantee Section in 1981 is estimated at 226 million

ECU, which is 2% of the Guarantee Section and 2% of the value of production in this sector.

- 84. The Community's regime for these products includes only limited measures for support of market prices (export refunds, and private storage for pigmeat). Past experience has shown that the market organization is self-regulating in the sense that prices operate to bring supply and demand into balance in the medium term, while action in the fields of trade and storage may be necessary to counter short-term fluctuations.
- 85. It would not therefore be appropriate to introduce production objectives or new measures of co-responsibility in these sectors.
- 86. A relative reduction in the price of cereals would have an important effect in reducing costs for our producers and making them more competitive on the world market: we are already highly efficient in these sectors of production by world standards, and our exports of poultry, for example, have already increased from about 200 000 tonnes in 1977-79 to about 300 000 tonnes in 1980. There are prospects for increased demand on world markets in all these sectors, and the Community should increase its exports with a prudent management of refunds.

## Proteins and vegetable oils

- 87. The Community produces a large quantity of protein products for its animal consumption: oilcakes, dried forage, peas and beans, etc. Of the 12·1 million tonnes of oilcakes produced in 1980, 11 million tonnes were made from imported oilseeds (soya, etc.). Community measures exist for the encouragement of production of dried forage and for peas and beans, etc. for animal consumption; expenditure from the Guarantee Section on these products in 1981 is estimated at 74 million ECU.
- 88. Vegetable oils are produced in the Community as a result of the crushing of oilseeds for oilcake, and from olives. Community measures exist to aid the production of several oilseeds, principally colza and sunflower seed; the cost of these measures has grown rapidly in recent years and is estimated at 505 million

ECU for 1981. Olives are produced in the most disadvantaged regions of the Community; approximately 1 million families in Italy and 300 000 families in Greece are concerned in olive production. The cost of the Community measures, including aids to production and consumption, has increased with the accession of Greece and is estimated at 453 million ECU in 1981 (or 28% of the value of production) and 684 million ECU in 1982.

# Community production objectives and other measures

89. No special measures are needed for the control of production of sunflower seeds, which should be encouraged, but there is a risk that a too rapid increase in production of colza, which increased from  $1\cdot 2$  million tonnes in 1978 to 2 million tonnes in 1980, may lead to marketing difficulties. The objective should be that production by 1988 should not exceed  $3\cdot 3$  million tonnes, which implies an annual increase of  $7\cdot 5\%$ . This objective should be achieved by a reduction of the intervention price if production exceeds the quantities fixed for each year.

90/91. For olive oil, the Community must take account of the prospect of the accession of Spain and Portugal, and the Commission has already made proposals for this sector in the context of enlargement. The limitation of aid to olives planted before a certain date will already constitute a restraint on the level of production. In addition, the following measures should be taken:

- (a) The payment of the production aid should be better controlled, particularly by the rapid introduction of an olive-register. If this measure does not prove effective, the aid should be paid instead on a flat-rate basis.
- (b) Some anomalies detected in respect of intervention need to be corrected: in this connection amendments should be made as regards certain qualities and for clearly defined periods. Eligibility for intervention would be subject to stricter conditions and storage contracts would be encouraged.

## Tobacco

92. Tobacco constitutes 0.4% of the value of the Community's agricultural production. There

are 225 000 tobacco planters, mostly possessing less than 1 hectare of tobacco; production takes place mainly in the disadvantaged regions of Italy and Greece. Expenditure from the Guarantee Section in 1981 is estimated at 327 million ECU, which is 3% of the Guarantee Section and 50% of the value of tobacco production. The accession of Greece has resulted in an increase in expenditure, which is forecast at 618 million ECU in 1982.

## Forecasts of production and consumption

93. The Community's production of tobacco is mainly of varieties for which demand is limited (particularly oriental varieties) and its consumption is of varieties of which only a small quantity is produced in the Community (particularly flue-cured varieties). As a result, production in 1980 was 246 000 tonnes, imports 470 000 tonnes and exports 70 000 tonnes. Consumption of tobacco in 1980 was 630 000 tonnes, and by 1988 one may expect a reduction of the order of 10% to 570 000 tonnes.

94. Production at present is relatively stable, but it is difficult to predict its future level following the accession of Greece. However, the problem of production is not so much its absolute level, since the Community is only 45% self-sufficient, as its composition as between different varieties.

## Community production objective

95. The Community must reduce the production of varieties for which there is no demand on its market, in favour of conversion to varieties which can be marketed. There must also be a conversion, within the varieties grown, from the lower to the higher qualities. In total, the Community's production objective for 1988 could be 246 000 tonnes if the abovementioned varietal conversion is implemented swiftly.

### Measures to be taken

- 96. In order to attain these objectives, the following measures should be taken:
- Intervention. Action can already be taken under the existing regulation to reduce the intervention price if the quantity offered for

intervention by an enterprise exceeds 25% of its output. These measures should be continued, and if necessary reinforced.

- Conversion. Action can also be taken under the existing regulation to pay aids for conversion to other varieties and to reduce the intervention price for certain varieties. Use should continue to be made of these measures.
- Other measures. The element of processing costs, used in calculating the aids for tobacco, should be adjusted. There should be research into the improvement of tobacco varieties.

## Wine

97. The Community's production of wine represents 6% of the value of its agricultural output. There are about 2.6 million hectares of vineyards and their area constitutes about 3% of the Community's agricultural area. Expenditure on wine from the Guarantee Section is estimated at 618 million ECU in 1981, which is 5% of the Guarantee Section and 11% of the value of wine production; however, this level of expenditure is exceptionally high because of a large harvest, and for 1982 it is estimated at 416 million ECU.

## Forecast of production and consumption

- 98. As can be seen from the graph in Annex 5, production of wine in the Community fluctuates greatly from one year to another. The average production in the period 1970/71 to 1979/80 was 153 million hectolitres, with a trend increase of about  $1\cdot2\%$  a year. Consumption (in the sense of direct human consumption, distillation without aids, etc.) has been steadily decreasing at an annual average rate of  $0\cdot6\%$  in the period 1970-80. The balance between production and consumption has been made by distillation with Community aid, which accounted for an average of 7 million hectolitres in 1970-80.
- 99. The Community has already taken a series of measures to stabilize production by limiting the area under vines, but at this stage it is difficult to give a precise estimate of future production in the 1980s. The Commission has taken action and made recommendations to reduce the burden of taxation of wine in the northern

countries. It is hoped that the fiscal rules will be amended so as to bring about a further reduction in the taxation of wine relative to beer; this should encourage further increases in consumption in the Member States concerned, which would help to offset the decline in consumption in Italy and France.

## Imports and exports

100. Imports in 1970-80 averaged about 5 million hectolitres and are fairly stable. Exports have increased from about 3 million hectolitres in 1970 to 8 million hectolitres in 1979-81 (including 2 million hectolitres which benefited from export refunds; but export markets are limited by the fact that most importing countries are also producers of wine.

## Community production objective

101. The Community's objective should be to avoid any increase in the gap between the trends of production and consumption.

## Measures to be taken

- 102. As far as production is concerned measures have already been taken to limit the area under vines, and indeed the wine sector is the only one where a discipline of this kind is imposed on producers under the common agricultural policy. It is essential that these measures should be applied effectively so that they have the desired long-term effect in controlling production. The structural measures for grubbing up vineyards must also be pursued.
- 103. Distillation measures should also be improved, to ensure a more stable market and to discourage the production of high-yield low-quality wine. There must be a reinforcement of control in the areas of production, both to prevent frauds and to ensure better quality for the consumer.
- 104. As regards consumption, in addition to what is stated in paragraph 99 on the matter of taxation, consideration should also be given to Community encouragement for marketing and promotion of wine, both on the internal market and on the export market.

## Fruit and vegetables

105. The production of fruit and vegetables, which includes a diverse range of products for consumption in fresh or processed form, accounts for 12% of the value of agricultural production in the Community; however, the Community's common price regime covers less than half of this production. Fruit production occupies 1.1 million hectares, of which two thirds are in Italy. Vegetable production occupies 0.9 hectares, of which 2% are under glass, principally in the Netherlands, Italy and France.

106. Expenditure on fruit and vegetables from the Guarantee Section in 1981 in estimated at 715 million ECU, which is 6% of the Guarantee Section. It is not necessary to give a survey of the situation for all the different products, and the following paragraphs concern those which account for the main expenditure: tomatoes (365 million ECU), citrus fruit (125 million ECU) and apples (54 million ECU).

107. In 1979/80 the Community produced 7.8 million tonnes of tomatoes, of which 3.4 million tonnes were consumed in the fresh state. For processed tomatoes the Community introduced in 1978/79 a system of aids for processors who make contracts to purchase tomatoes from producers at a minimum price. This aid is now equivalent to 34% of the value of the finished product or 95% of the value of the tomatoes, and its cost is substantial (362 million ECU). The aid, which was introduced as a means of supplementing the incomes of producers in disadvantaged Mediterranean regions, has resulted in serious problems of disposal of the processed product.

The principal production of citrus fruit is in Italy and Greece. The cost of the aid for processing is also substantial, having increased from 14 million ECU in 1978 to 82 million ECU in 1982.

As regards apples, disposal problems arise some years when the harvests are abundant, thus leading to substantial expenditure on withdrawals.

108. The Commission has already made certain proposals for the modification of the regulations for fruit and vegetables in the context of enlargement of the Community to include

Spain and Portugal, which are important producers.

## Community production objectives and other measures

109. Processed tomatoes. In view of the rapid increase in production in recent years, and the consequent difficulties of marketing, the aid to processors should be limited to a quantity of 4.5 million tonnes, which corresponds to the present volume of tomatoes processed.

Apples. In order to maintain normal production at a relatively stable level of about 6 million tonnes, and to avoid the encouragement of production of low-quality apples, the withdrawal prices should continue to be limited to certain categories of quality.

110. In general, the adaptation of supply in the Mediterranean regions to demand in the Community as a whole should be improved. This requires action to improve the marketing of products.

## Final remarks

- 111. To conclude this examination conducted as part of its mandate, the Commission feels that the common agricultural policy must continue to be centred on the following three instruments:
- an economic structure based on the market organizations;
- structural aids enabling qualified farmers to implement measures of adaptation;
- aids to individuals in marginal cases in which farmers cannot adapt and/or it is felt desirable to maintain a farming population.

It is also of the opinion that the guidelines laid out in this memorandum should act as a basis for an adaptation of the agricultural policy in the future. They should enable the decisions of the Community institutions to be taken with a view to the long term. If production targets can be fixed and measures implemented to ensure participation by producers if these targets are exceeded, producers will become more aware of market realities than in the past and the support which the Community gives its agricultural out-

put will be applied to the quantities which it is in its interest to produce within its frontiers, with proper regard to consumers' needs, international trade and the drive to combat hunger in the world. In return, application of these measures should, in future, produce a slower increase in spending on agriculture than that in the Community's own resources.

112. At the same time, the Community must face its responsibilities in respect of the incomes of its agricultural population. The present general economic conditions, and the imbalance in many agricultural markets, render that task more difficult than in the past. Nevertheless, the Commission has considered it essential, in its examination of the measures to be taken for the different products, to include provision where possible for measures to help

incomes, particularly of small producers (for example: milk, beef), and the reduction in cereals prices in real terms will also serve to make the Community's livestock production more competitive. It wishes to underline also the importance of the market itself in providing satisfactory returns for farmers: the Community mechanisms of support are designed to provide a floor, with a certain minimum price, and it is the responsibility of the individual producer through improved quality and marketing to obtain better returns. Above all, the Commission emphasizes that, in the present conditions and prospects of the agricultural markets, the limitation of the guarantees to a certain desired volume, and the introduction of producer participation beyond that point, is a precondition for the maintenance of a sound agricultural policy responding to the principles of the Treaty.

Annex 1 Products as percentage of final agricultural production in each Member State and in the Community as a whole

										(1070)
	EUR 91	Deutsch- land	France	Italia	Neder- land	Bel- gique Belgie	Luxem- bourg	United King- dom	lreland	Dan- mark
1	2	3	4	5	6	7	8	y	10	11
A — Common price products										•
Wheat	6.2	4.6	8 · 4	7.6	1.5	4.0	2 · 8	7 · 8	1 · 4	2.0
Rye	0.3	1 · 1	0 · 1	$0 \cdot 0$	0 · 1	0 · 1	0.4	$0 \cdot 0$	$0 \cdot 0$	0.8
Oats	0.2	$0 \cdot 3$	$0 \cdot 3$	$0 \cdot 0$	$0 \cdot 2$	$0 \cdot 2$	0.6	$0 \cdot 2$	$0 \cdot 2$	$0 \cdot 4$
Barley	3 · 1	2.9	$3 \cdot 3$	$0 \cdot 2$	0.5	1.9	$2 \cdot 8$	6.9	5.9	12.9
Maize	1 - 7	$0 \cdot 3$	4 ⋅ 1	$2 \cdot 3$	$0 \cdot 0$	$0 \cdot 0$	$0 \cdot 0$	$0 \cdot 0$	$0 \cdot 0$	$0 \cdot 0$
Rice	0.3	$0 \cdot 0$	$0 \cdot 0$	1 · 2	$0 \cdot 0$	$0 \cdot 0$	$0 \cdot 0$	$0 \cdot 0$	$0 \cdot 0$	$0 \cdot 0$
Sugarbeet	2.7	3 · 1	2.6	$2 \cdot 2$	2 · 3	5 · 1	$0 \cdot 0$	2.6	$2 \cdot 0$	2.5
Tobacco	0 · 4	$0 \cdot 1$	$0 \cdot 4$	$1 \cdot 0$	$0 \cdot 0$	$0 \cdot 1$	$0 \cdot 0$	$0 \cdot 0$	$0 \cdot 0$	$0 \cdot 0$
Olive oil	0.8	$0 \cdot 0$	$0 \cdot 0$	$3 \cdot 8$	$0 \cdot 0$	$0 \cdot 0$	$0 \cdot 0$	$0 \cdot 0$	$0 \cdot 0$	$0 \cdot 0$
Oilseeds	0.4	0.5	$0 \cdot 7$	0 · 1	$0 \cdot 1$	$0 \cdot 0$	$0 \cdot 0$	0.6	$0 \cdot 0$	1.0
Fruit and vegetables <sup>2</sup>	4.6	$2 \cdot 2$	4 · 1	8.9	2.9	4 · 2	1 · 2	2.6	0.9	$0 \cdot 8$
Table wine	2.7	$0 \cdot 1$	5 · 3	6.9	$0 \cdot 0$	$0 \cdot 0$	0 · 1	$0 \cdot 0$	$0 \cdot 0$	$0 \cdot 0$
Milk	19.5	24 · 2	16.5	11-7	27 - 9	17.3	41.2	22 · 2	32 · 1	25.3
Beef and veal	15.8	17.6	17.0	10.3	13 · 1	18.6	30 · 3	$17 \cdot 0$	35 · 8	$12 \cdot 3$
Sheepmeat and goatmeat	1 · 4	$0 \cdot 3$	$2 \cdot 0$	$0 \cdot 7$	0 · 7	$0 \cdot 2$	$0 \cdot 0$	3.9	3 · 4	$0 \cdot 0$
Pigmeat	12-1	19.6	7 · 0	6 · 1	18 · 1	23 · 2	9.9	9 · 2	$8 \cdot 0$	27.9
Seeds	0.3	$0 \cdot 4$	$0 \cdot 0$	$0 \cdot 0$	1 · 4	0 · 1	$0 \cdot 0$	$0 \cdot 3$	$0 \cdot 0$	1 - 1
Flax and hemp	0.1	$0 \cdot 0$	$0 \cdot 2$	$0 \cdot 0$	$0 \cdot 0$	0 · 1	$0 \cdot 0$	$0 \cdot 0$	$0 \cdot 0$	$0 \cdot 0$
Hops	0 · 1	0.4	$0 \cdot 0$	$0 \cdot 0$	$0 \cdot 0$	0 · 1	$0 \cdot 0$	$0 \cdot 2$	$0 \cdot 0$	$0 \cdot 0$
Silkworms	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Subtotal A	72.7	77 - 7	72.0	69.0	68 · 8	75.2	89 · 3	73.5	89 · 7	88.0
B — Other regulated products without common prices										
Eggs	3.3	3 · 7	2.5	2 · 8	3 · 7	$4 \cdot 0$	$2 \cdot 8$	5.9	1 - 3	1 · 4
Poultrymeat	4-1	1 - 7	4 · 4	5.9	4 · 2	2 4	0 · 2	6 · 2	2 - 5	$2 \cdot 0$
Quality wine	3 · 7	3 · 5	7 · 7	4 · 1	$0 \cdot 0$	$0 \cdot 0$	3 · 6	$0 \cdot 0$	$0 \cdot 0$	$0 \cdot 0$
Other fruit and vegetables	6.3	3 · 3	5.0	10.5	6.6	9 · 2	1.6	5 · 7	2.0	1 · 5
Subtotal B	17.4	12 - 2	19.0	- 23 - 3	14.5	15.6	8 · 2	17.8	5.8	4.9
C — Products with no common market organization										
Potatoes Other <sup>3</sup>	2·3 7·4	1 · 7 8 · 4	1 · 7 6 · 9	1 · 9 5 · 8	3·6 13·1	2·6 6·6	$\begin{array}{c} 2 \cdot 1 \\ 0 \cdot 0 \end{array}$	4·5 4·2	$2 \cdot 5$ $2 \cdot 0$	1 · 1 6 · 0
Subtotal C	9.9	10.1	8.6	7 · 7	16.7	9 · 2	2 · 1	8 · 7	4.5	7 · 1
Grand total (A + B + C)	100 · 0 104 · 6 '000 m EUA	100 · 0 21 · 5 '000 m EUA	100 · 0 29 · 5 '000 m EUA	100 · 0 21 · 7 '000 m EUA	100 · 0 8 · 7 '000 m EUA	100·0 3·9 '000 m EUA	100·0 118·0 '000 m EUA	100·0 12·3 '000 m EUA	100·0 2·5 '000 m EUA	100 · 0 4 · 3 '000 m EUA

Source: Eurostat — Agricultural accounts.
 Calculated from figures in national currencies converted into EUA at 1979 exchange rates.
 This relates to products in Annex II to Regulation (EEC) No 1035/72.
 Including agricultural work done by others to orders, taxes on production not broken down into products; Belgium: including sales by occasional producers.

Annex 2

Crop and livestock production in the Community

(a) Crop produ	- 1	1973	1974	1975	1976	1977	1978	1979	nillion tonne
		19/3	19/4	1973	1976	19//	19/8	19/9	1960
Total cereals (excluding rice)	EUR 9 EUR 10	105 · 7 109 · 0	108 · 0 111 · 8	97·2 100·8	90·7 94·7	103 · 4 106 · 4	116·1 120·3	113·9 118·0	119·2 124·3
of which:									
— Total wheat	EUR 9 EUR 10	41 · 3 43 · 0	45·3 47·4	38 · 0 40 · 1	39·1 41·5	38 · 4 40 · 2	47 · 6 50 · 3	46 · 4 48 · 8	51·8 54·8
— Barley	EUR 9	34.5	34.8	32.5	30.0	37.7	39 · 5	39 · 1	40 · 3
,	EUR 10	35 · 4	35.8	33 · 4	31.0	38 · 3	40 · 4	39.9	41 - 2
— Maize	EUR9	16.3	14 - 2	14.0	11.3	15.5	16.4	17 - 4	16.4
	EUR 10	16.9	14.7	14.5	11.8	16.0	16.9	18 · 1	17.6
Rice (paddy)	EUR9	1 - 1	1 · 1	1 - 0	0.9	$0 \cdot 7$	1.0	1 · 1	1.0
	EUR 10	1 · 2	1 · 2	1 · 1	1.0	0.8	1 · 1	1 · 2	1 · 1
Fresh vegetables	EUR 9	22.5	23.0	22.6	20.8	23 · 8	24.0	24.8	
from agricultural holdings of which:	EUR 10	25 · 4	26 · 1	26.3	23 · 6	26 · 3	27 · 6	28 · 4	
— Tomatoes	EUR9	4.4	4.8	4.6	4 · 1	4.5	5 · 2	6.4	6 · 1
	EUR 10	5 · 7	6 · 4	6.3	5 · 2	5 · 7	6.8	8 · 1	7.6
— Fresh fruit	EUR 9	15.1	13.3	13.8	14.2	11.4	14.1	14.6	
(excluding citrus fruit) of which:	EUR 10	16.4	14-6	15.2	15.5	12.7	15.3	15.9	
— Dessert	EUR 9	7 - 1	5.7	7 - 2	6 · 2	4.9	6.6	6.9	6.8
apples	EUR 10	7 · 4	5.9	7.5	6.5	5 · 2	6.8	7 · 2	7 - 1
Citrus fruit	EUR9	2.7	2.8	2 · 7	2.9	2.8	2.6	2.8	2.6
	EUR 10	3.3	3.6	3.6	3.8	3.6	3.3	3 · 4	
Wine (m hl)	EUR 9 EUR 10	170-6 175-7	160 · 2 165 · 8	145 · 4 149 · 9	148 · 4 153 · 8	128·3 133·4	138·3 143·9	177 · 2 182 · 4	
					-		-		
Sugar (white sugar equivalent)	EUR 9 EUR 10	9·0 9·1	9·5 9·7	8·6 8·7	9·7 10·0	10·0 10·4	11·6 11·8	11·8 12·1	12·3 12·6
Leaf tobacco	EUR 9 EUR 10	0·158 0·250	0·157 0·240	0·180 0·300	0·182 0·324	0·166 0·286	0·173 0·302	0·199 0·324	0·19: 0·31

Source: Eurostat — Cronos.

## Annex 2 (continued)

(million tonnes)

(s) =::tottotii piodustis								(	
		1973	1974	1975	1976	1977	1978	1979	1980
Total meat	EUR 9	18.8	20 · 4	20 · 4	20.6	20.9	21 - 7	22.7	
	EUR 10	19.2	20.9	20.9	21 - 1	21.5	22 · 2		
of which:									
<ul> <li>Total beef and veal<sup>1</sup></li> </ul>	EUR 9	5.4	6.5	6.6	6.5	6.3	6 · 4	6.8	7 · 1
	EUR 10	5 · 5	6.6	6.7	6.6	6.5	6.5	6.9	7 · 2
- Pigmeat <sup>1</sup>	EUR9	8 · 2	8 · 4	8.3	8 · 5	8 · 8	9.3	9.7	
•	EUR 10	8.3	8 · 5	8 · 4	8 · 6	8.9	9.4	9.8	
— Poultrymeat <sup>1</sup>	EUR 9	3 · 1	3 · 1	3 · 2	3 · 3	3 · 4	3.6	3 · 7	
•	EUR 10	3 · 2	3 · 2	3.3	3 · 4	3 · 5	3 · 7		
- Sheepmeat and	EUR 9	0.5	0.5	0 · 5	0.5	0.5	0.5	0.5	
goatmeat <sup>1</sup>	EUR 10	0.6	0.6	0.6	0.6	0.6	0.6	0.6	
Cows' milk <sup>2</sup>	EUR 9	91.3	91.4	92.0	93.6	96 · 2	100 - 4	102 · 2	
	EUR 10	91.9	92 · 1	92.7	94.4	96.9	101 - 1	102.9	
of which:									
<ul> <li>Delivered to dairies</li> </ul>	EUR 9	79.7	80 · 4	81 · 4	83 · 7	86.6	90.6	93.0	95.5
	EUR 10								
Butter	EUR 9	1 · 7	i · 7	1 · 7	1.8	1.8	2.0	2.0	
	EUR 10	1 · 7	1 · 7	1 · 7	1 · 8	1 · 8	2.0	2.0	
Cheese	EUR 9	2.7	2.9	2.9	3.0	3 · 1	3.3	3 · 4	
	EUR 10								
Whole-milk powder	EUR9	0.4	0.4	. 0.4	0.4	0.5	0.5	0.6	
•	EUR 10	0 · 4	0 · 4	0 · 4	0.4	0.5	0.5	0.6	
Skimmed-milk powder	EUR 9	1 · 8	1 · 8	2.0	2 · 1	2.0	2 · 2	2 · 2	
•	EUR 10	1 · 8	1 · 8	2.0	2 · 1	2.0	2 · 2	$2 \cdot 2$	
Hens' eggs	EUR9	3.7	3 · 7	3 · 8	3.8	3.8	4.0	4.0	4.0
20	EUR 10	3.8	3 · 8	3.9	3.9	4.0	4 · 1	4 · 1	-

Source: Eurostat — Cronos.

Gross Community production.
Production.

Annex 3

EUR 9 — Trade with non-member countries

(a) Crop products (import	ports)	(imi	ducts	pi	Crop	(a)	(
---------------------------	--------	------	-------	----	------	-----	---

(thousand tonnes)

() (	,							
	1973	1974	1975	1976	1977	1978	1979	1980
Total cereals (excluding rice)	23 825	21 377	26 081	28 749	24 445	19 363	17 210	15 350
of which:								
— Wheat	6 230	4 549	7 079	5 023	4 052	4 962	4 731	4 553
- Barley	2 191	1 115	1 213	2 884	2 533	885	718	549
— Maize	13 868	13 431	15 493	18 185	16 477	12 756	11 252	9 906
— Other cereals	1 536	2 282	2 296	2 657	1 383	760	509	342
Wheat flour (product weight)	19	11	6	4	2	2	3	2
Malt	68	62	52	73	57	61	44	46
Starch residues								
(gluten food)	n.a.	694	930	1 148	1 486	1 685	2 021	2 596
Manioc roots	1 667	2 250	2 337	3 039	3 801	5 976	5 456	4 866
Oilseeds of which:	9 303	10 912	10 129	11 657	11 086	13 420	14 732	14 672
— Soya beans	6 666	9 095	8 096	9 156	8 755	10 843	11 716	11 754
Total oil cakes of which:	7 583	6 619	7 154	9 192	9 171	11 027	12 171	13 031
— Soya bean oil cakes	3 280	3 264	3 321	4 240	4 130	5 898	6 153	7 175
Olive oil	218	204	105	93	141	102	152	169
Sugar (raw and refined)	2 410	2 282	2 310	2 271	2 030	1 845	1 744	1 654
Wine	729	594	501	483	534	578	556	533
Fresh vegetables:								
— Tomatoes	385	364	388	353	346	364	397	392
<ul> <li>Other fresh vegetables</li> </ul>	613	626	601	703	847	714	789	797
Preserved tomatoes	n.a.	242	165	191	221	160	156	125
Fresh fruit:								
<ul> <li>Oranges, mandarins</li> </ul>	2 8 1 6	2 561	2 541	2 529	2 485	2 466	2 527	2 5 1 4
Apples	339	397	404	433	405	455	397	430
— Pears	67	77	71	94	82	80	101	105
— Grapes	150	168	167	170	131	129	145	152
Raw tobacco and tobacco	450	43.0	454	1/5	440	5//	40.0	463
refuse	478	434	471	467	448	564	498	467

Source: Eurostat.

## Annex 3 (continued)

(thousand tonnes)

	1973	1974	1975	1976	1977	1978	1979	1980
Total cereals (excluding rice) of which:	6 834	5 510	7 108	5 152	2 059	6 063	8 014	12 339
- Wheat	3 201	3 116	4 946	3 420	1 428	1 917	4 362	7 524
— Barley	2 909	1 657	1816	1 477	528	3 783	3 111	4 309
— Maize	262	332	267	76	83	97	39	143
— Other cereals	462	405	79	179	20	266	502	363
Wheat flour (product weight)	1 947	1 837	2 048	1 783	2 113	2 244	2 547	3 024
Malt	766	929	1 019	1 198	886	1 123	1 135	1 015
Starch residues (gluten food)	n.a.	2	4	16	37	47	53	68
Manioc roots	_	1	_		_	_	_	_
Oilseeds of which:	166	288	64	135	47	37	29	53
- Soya beans	29	11	14	1	1	_	l	6
Total oil cakes of which:	919	849	405	420	490	585	596	959
Soya bean oil cakes	723	772	351	374	448	535	550	922
Olive oil	16	12	9	21	10	17	25	13
Sugar (raw and refined)	1 729	1 112	655	1 623	2 508	3 308	3 312	3 971
Wine	478	475	495	566	667	744	815	929
Fresh vegetables:								
— Tomatoes	31	34	41	34	36	37	41	38
<ul> <li>Other fresh vegetables</li> </ul>	283	295	306	352	316	355	287	325
Preserved tomatoes	n.a.	115	67	133	135	127	193	213
Fresh fruit:								
<ul> <li>Oranges, mandarins</li> </ul>	62	107	74	115	126	82	70	86
— Apples	218	217	244	264	205	157	303	204
— Pears	86	105	77	61	68	44	69	61
— Grapes	63	66	68	57	64	79	86	80
Raw tobacco and tobacco								
refuse	17	35	37	33	22	29	37	32

Source: Eurostat.

(b)	Livestock	products	(imports)	)
-----	-----------	----------	-----------	---

(thousand tonnes)
-------------------

	1973	1974	1975	1976	1977	1978	1979	1980
Live bovines (live weight) Beef and veal (fresh, chilled,	349	214	106	133	92	134	147	118
frozen)	646	209	89	168	152	150	168	146
Live pigs (live weight) Pigmeat (fresh, chilled,	12	37	75	52	14	38	39	26
frozen) Pigmeat (dried, salted,	86	97	157	116	82	95	40	67
smoked)	41	26	23	18	13	15	15	12
Live poultry (live weight) Poultrymeat	8 53	6 51	6 55	8 58	7 <b>4</b> 7	8 48	4 49	3 52
Sheep and goats (live weight) Sheepmeat and goatmeat	40	34	41	37	34	38	52	51
(fresh, chilled, frozen)	296	231	277	262	254	258	251	218
Butter	157	157	159	132	120	125	118	103
Cheese	115	83	96	104	89	77	77	96
Whole-milk powder	2	ì	1	2	1	2	_	_
Skimmed-milk powder	2	4	13	6	8		1	1
Eggs in shell	18	28	16	15	22	13	8	5

Source: Eurostat.

## Annex 3 (continued)

/ L	\ T	ivactoric	duate	(avaarte)	١
(b	) I	Livestock	products (	(exports)	

	tonnes.

	1973	1974	1975	1976	1977	1978	1979	1980
Live bovines (live weight) Beef and yeal (fresh, chilled,	28	36	33	48	48	52	74	134
frozen)	42	161	197	144	86	102	224	527
Live pigs (live weight) Pigmeat (fresh, chilled,	2	1	1	1	1	1	1	1
frozen) Pigmeat (dried, salted,	26	30	49	43	46	52	99	83
smoked)	12	8	7	6	6	5	4	5
Live poultry (live weight) Poultrymeat	1 121	2 126	2 121	3 157	3 216	4 193	4 264	5 337
Sheep and goats (live weight) Sheepmeat and goatmeat		1	. 2		1	****	_	_
(fresh, chilled, frozen)	3	2	3	6	5	3	4	5
Butter	350	119	60	104	245	245	464	547
Cheese	159	189	160	201	208	219	265	330
Whole-milk powder	161	194	199	237	330	335	385	531
Skimmed-milk powder	280	353	182	192	436	418	636	580
Eggs in shell	17	27	31	136	32	36	54	61

Source: Eurostat.

Annex 4

# '1978' world production of and trade in the principal agricultural products, and the Community's share of the world market

	World prod-	of which EC	World	(3/2) × 100 Proportion				of world	l trade				(6 – 5) Nei EC
	uction '000 t	'000 t	trade <sup>1</sup> '000 t	of produc- tion traded	Imported by EC	Exported by EC	Exported by main competi				untries		share of world trade
l	2	2 bis	3	4	5	6	6 his		6 ter		6 quater		7
								%		%		9,0	
Total cereals (except rice) <sup>5</sup> of which total wheat	1 163 227 422 078	111 133 44 133	151 722 65 518	13 · 4 15 · 5	13·4 6·9	3·5 3·9	USA USA	50·4 39·6	Canada Canada	10·5 17·9	Argentina Australia	8·2 10·9	- 9·9 - 3·0
Feed grain (except rice) <sup>5</sup> of which maize	741 149 368 128	67 000 16 433	86 204 63 109	11·6 17·1	18-2 21-3	3·2 0·1	USA USA	59 · 4 73 · 8	Argentina Argentina	10·9 8·5	Canada South Africa	4 · 3 3 · 4	-15·0 -21·2
Oilseeds (by weight produced) of which soya	163 217 84 399	1 374	28 649 22 940	17·5 27·2	45·3 45·5	0·1 0·0	USA -	83 - 1	— Brazil	5.6	 Paraguay	1 - 1	-45·2 -45·5
Tobacco	5 568	171	1 289	23 · 1	39.0	2 · 2	USA	21 - 4	Brazil	8.9	Turkey	5 · 1	-36.8
Wine	31 314	14 790	2 484	8.0	22.9	30.7	Spain	11.5	Algeria	7 - 2	Bulgaria	5.5	7 · 8
Sugar	103 421	11 133	26 507	25.6	7-1	12-4	Cuba	25 · 2	Australia	8.9	Brazil	7.8	5.4
Total whole milk	455 293	99 600	138	$0 \cdot 0$	0.7	60 - 1	Australia	0.6	USA	0.5	New Zealand	0.3	59.4
Butter	6 924	1 933	650	9.3	18-6	48.9	New Zealand	₫ 17.5	Australia	2.9	Romania	1.6	30.3
Cheese	10 702	3 266	614	5 · 7	13-2	37-6	New Zealand	d 5.6	Switzerland	4.7	Australia	3.9	24 - 4
Milk powder (skimmed and whole)	5 701	2 666	1 494	26 · 2	0.2	56 · 6	Canada	6 · 2	Australia	5 · 2	USA	3 · 5	56.4
Total meat (except offals) of which:	134 9713	21 766	4 3 1 0 3	3.13	15.03	10.03	Australia	13.0	New Zealand	9 · 2	USA	7.6	- 5.03
beef and veal	46 4203	6 500	2 1324	4.54	7.34	6.44	Australia	23 · 6	Argentina	9.8	New Zealand		- 0.94
pigmeat	50 5313	9 266	4954	0.94	14.54	13.34	USA	7.6	Hungary	5.0	Romania	3.3	- 1.24
poultrymeat sheepmeat and goatmeat	26 380 7 134	3 566 525	778 726	2·9 10·2	6-1 35-0	28·7 0·6	USA New Zealand	19.4	Hungary Australia	11.9 23.8	Brazil Argentina	5 · 4 3 · 3	22.6
Hens' eggs	25 689	3 933	316	10.2	4.7	12.9	Cbina	8.3	Hungary	5.6	USA	4.9	8.2

Sources: FAO (world production and world trade).

Eurostat (% of world trade).

1 Exports (excluding intra-EC trade) and excluding processed products.
2 Net balance EC trade/world trade.

3 Including salted meat.

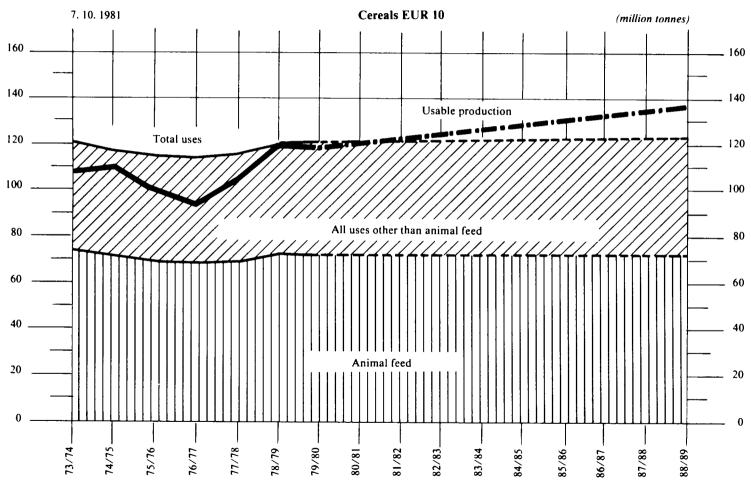
Excluding salted meat for trade.

Only cereals in grain (without processed products).

## Annex 5

## Development of production and consumption of certain products

The following graphs show the development and forecast of production and consumption of certain products (cereals, sugar, milk, beef, wine) on the assumption of no change in existing policies. The detailed assumptions underlying these forecasts are explained for each product in Part II (pages 75 to 83).



7. 10. 1981 (million tonnes2) 15 . - 15 14 -\_ 14 \_ 13 13 \_ 12 -\_ 12 Production — Quotas A + B + C<sup>1</sup> 11 -\_ 11 Production — Quotas A + B<sup>3</sup> \_ 10 Consumption

Sugar EUR 101

10.

8

. 8

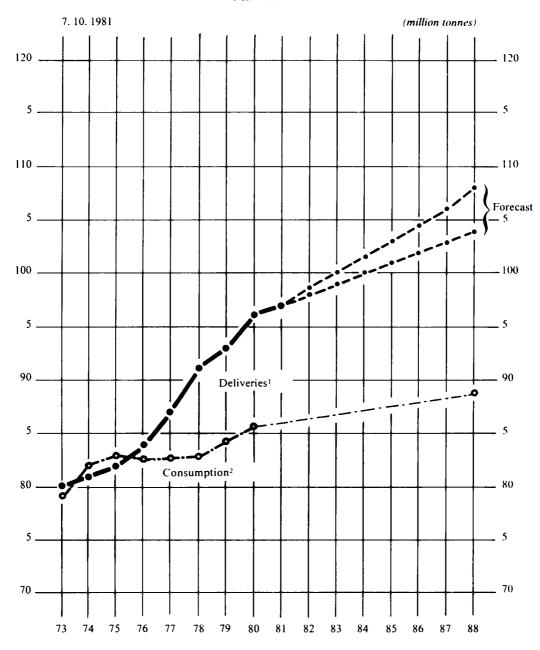
\_ 7

84/188

Includes French Overseas Departments.

White sugar equivalent. Under Community responsibility.

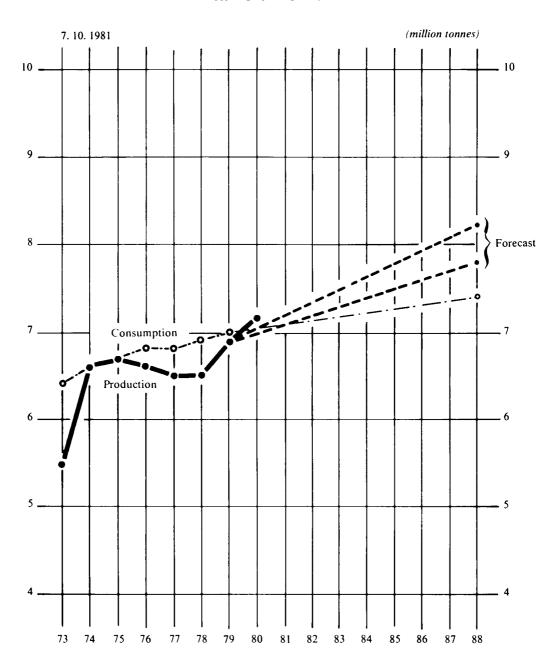
## Milk EUR 10



Deliveries to dairies, except for Greece (where total milk production has been used).

Excludes consumption of dairy products consumed on the farm. Consumption is calculated on the basis of the whole milk equivalent of each product (i.e. butterfat basis).

## Beef and veal EUR 10



## Wine EUR 10



N. B.: Excludes quantities distilled with the aid of subsidies.

Annex 6 Selected structural data on agricultural holdings (1975)\*\*

		EUR 9	D	F	l	NL	В	L	UK	IRL	DK	GR	EUR 10
I. I. All holdings													
<ul> <li>number of holdings</li> </ul>	(000')	5 835	908	1 315	2 664	163	138	6.2	281	228	132	(956)	(6 791)
— ha agri. area	('000')	86 549	12 399	29 464	16 486	2 086	1 468	136	16 469	5 077	2 966		
— livestock units	(000')	86 957	15 919	23 475	10 892	6 272	3 611	179	16 506	5 994	4 110		
<ul> <li>standard gross margins ('00)</li> </ul>	00 ESU)	39 602	7 461	12 605	8 411	2 899	1 296	$63 \cdot 5$	4 298*	931*	1 636*		
2. 'Small' holdings													
<ul> <li>number of holdings</li> </ul>	%	60	44	40	83	16	42	32	38*	68*	24*		
— SGM	%	12	9	7	33	2	6	6	4*	27*	4*		
3. 'Big' holdings													
— number of holdings	%	11	14	16	3	46	19	23	26*	3*	25*		
— SGM	%	51	46	53	35	77	55	53	75*	21*	58 *		
4. 'Main occupation' holdings													
- number of holdings	%	56	56	69	40	83	65	79	86	76	76		
— SGM	%	50	50	0,	70	0.5	0.5	,,	00	70	70		
5. 'Dual active' holders	, ,												
- number of holdings	%	27	42	20	29	19	24	23	23	n.a.	20		
— SGM	70 9∕0	21	42	20	29	19	24	23	23	II.a.	20		
— 30M	70												
II — labour input:													
<ul> <li>annual work units</li> </ul>	(000')	7 543	1 234	1 950	2 827	254	140	12.4	626	325	177		
- agri. labour force:													
<ul> <li>total number of persons</li> </ul>													
working on agri. hold-													
ings	(000)	12 710	2 215	3 069	5 390	332	221	15.8	756	474	236		
<ul> <li>of which full time</li> </ul>	%	28	29	34	16	46	44	61	59	39	49		
<ul> <li>of which 65 years and</li> </ul>													
older	%	16	13	14	19	7	10	18	12	16	13		
— persons with main occupa-													
tion in the sector 'agricul-													
ture'	(000')	6 791	1 319	1 899	2 270	255	123	7	520	228	170		

Source: Lahour Force Sample Survey 1979.

As the SGMs were calculated over the reference period 1972-74, comparison of UK, IRL and DK with the six original Member States is questionable as the three countries were in that period only starting to adapt to the common agricultural policy.
For explanations see page 102.

## Selected structural data per product (1975) \* — EUR 9

			Dairy cows	'Other' cattle (beef)	Pigs	Laying hens	Broilers	Cereals	Sugar beet	Fruit and veg.1	Olives	Vine- yards	All products
1 1.	All holdings with												
	<ul> <li>number of holdings</li> </ul>	(000)	2 164	2 722	2 216	3 052	1 599	3 580	365	1 342	726	1 827	5 835
	— % of all agric. holdings	%	37	47	38	52	27	61	6.3	23	12	31	100
	— number of ha/head	(000')	25 020	55 380	66 242	277 000	241 000	25 761	1 862	1 806	1 113	2 516	86 549
	— % of all ha	%						30	2 · 2	2 · 1	1.3	3	
	— % of total agri. activity	%	22	14	6.4	1 · 2	0.3	21	3 · 2	10	0.13	7 · 3	100
2.	'Small' holdings:												
	- number of holdings	9/0	37	39	47	55	57	51	20	59	87	69	60
	— number of ha/head	%	10	13	7	10	10	12	3.3	22	57 55	30	12
		70	10	1.5	,	10	10	12	3.3	22	33	30	12
3.	'Big' holdings:												
	<ul> <li>number of holdings</li> </ul>	0/0	16	16	12	10	8	13	38	11	2 · 3	6	11
	— number of ha/head	%	42	43	60	67	61	54	77	47	20	33	51
4.	'Main occupation' hold- ings:												
	— number of holdings	%	77	п.а.	68	65	n.a.	63					5.4
	— number of ha/head	%	88	n.a.	79	71		79	n.a.	n.a.	n.a.	п.а.	56
	number of har head	70	88	11.4.	19	/1	n.a.	19	n.a.	n.a.	n.a.	n.a.	n.a.
5.	Holdings with 'dual active'												
	<ul> <li>number of holdings</li> </ul>	%	20	20	25	23	22	25	14	24	31	26	27
	— number of ha/head	%	10	12	15	16	15	14	9	17	27	20	n.a.
11 4	'S-asislined' holdines												
II 6.	'Specialized' holdings  — number of holdings	(0000)	786	246	53	18	7.6	406	n.a.	n.a.	200	485	
	— number of holdings — number of ha/head	(000)	13 316	9 814	16 119	n.a.	n.a.	5 814	n.a.	II.d.	200 n.a.	1 409	
	— % of holdings with	( 000)	13 310	7014	10 117	11.4.	n.a.	2014	-		11.4.	1 407	
	holdings  — % of holdings with	%	36	9	2.4	0.6	0.5	11			28	27	
	ha/head	9/0	53	18	24	n.a.	n.a.	23			n.a.	56	

<ul> <li>7. 'Small' specialized holdings:</li> <li>— % of specialized holdings</li> </ul>	%	37	66	40	46	45	73	94	76	,
<ol> <li>'Big' specialized holdings:         <ul> <li>% of specialized holdings</li> </ul> </li> </ol>	%	14	5	26	26	21	10	0.7	6	

For explanations see page 102.
 Fresh vegetables and fruit, excluding citrus: a further breakdown is available.

## Annex 6 (continued)

## Notes and explanations

- 1. The data are based on the '1975 Community survey on the structure of agricultural holdings', which is the most recent source of data allowing this degree of detail of structural analysis.
- 2. Data for Greece, based on the Greek structure survey held in 1977 (which followed the 1975 Community outline), will be added where possible, when they have been analysed in the SOEC.

## 3. Terminology used

- % of total 'agricultural activity': share of a particular agricultural enterprise (e.g. cereals) in total agricultural enterprises (sum of all crops and livestock) expressed in standard gross margins (SGM: see below point 4).
- 'Small' holding' is defined in economic terms as a holding of less than 4 European size units (ESU) (see below point 4).
- 'Big' holding' is defined in economic terms as a holding of 16 ESU or more.
- 'Main occupation' holding: is a holding where the holder works on his holding for at least half of the normal full working time.
- 'Dual active' holder: is a holder who besides his agricultural work on the holding has another gainful occupation.
- 'Specialized' holdings: are those holdings belonging to a Community typology type (principal or particular types) e.g.: specialized cereal holdings are the holdings belonging to the typology type 11: 'cereals'; i.e. cereals account for at least two thirds of the holding's total SGM (see below point 4).
- 'Small' and 'big' specialized holdings: are defined in the same way as 'small' and 'big' holdings above.

## 4. Community typology of agricultural holdings

- In order to be able to group agricultural holdings in more or less homogeneous classes of size of business and of type of farming (agricultural activity) a Community typology was established (Commission Decision 78/463 of 7.4.1978: OJ, L 148, 5.6.1978). The size of business and the type of farming are calculated using an economic criterion: the standard gross margin (SGM).
- By standard gross margin is meant the balance between the monetary value of production and the value of certain direct costs involved in this production. SGMs were calculated for each agricultural product, for each region. The reference period for the calculation was 1972-74.
- SGMs are expressed in European units of account (1972-74 ref. period).

One could say that a holding is 'small' if it has not more that about 10 ha of wheat and no other agricultural activity since such an area of this crop is on average equal to about 4 ESU. This area varies from region to region according to the return per ha (examples: Netherlands and Belgium: about 8 ha of wheat; Denmark, Cologne, Picardy and the Venetian plain: about 9 ha, Corsica about 30 ha). By analogy a holding would be considered 'big' with an area of about 40 ha wheat and more. If instead of wheat, dairy cows were used as a measure, a holding would be 'small' with less than about 11 dairy cows (ex.: Netherlands: 9 cows; Western Ireland: 18 cows; in the mountains of Sardinia: 27 cows) and 'hig' with about 45 or more dairy cows.

## Annex 7

## Expenditure from the EAGGF Guarantee Section and own resources

										(million ECU
	1973	1974	1975	1976	1977	1978	1979	1980	1981**	19822
	I. EAGG	F Guarante	e Section (	excluding ,	fisheries bi	ıt includin	g refunds i	n respect o	of food aid)	
Гotal	3 9271	3 0941	4 5131	5 5761	6 8221	8 657	10 418	11 292	11 580	13 919 - 3
/ari- ition		-833 -21 · 2 ° o	+1 419 +45 · 9 %	+1 063 +23 ·6 %	+1 246 +22·3%	+ 1 835 + 26 · 9 ° ° °	+ 1 761 + 20 · 3 %	+874 +8·4 %	+ 288 + 2 · 6 %	+ 2 339 · 3 + 20 · 2 %
	1		<b>4</b> -				17 · 5 % per y	/ear — — — —		
			-		23 · 3 % per <u>s</u>	/ear —————	-→ ←		10·1 % per	year <sup>3</sup>
		opment of e ommunities (		from the	EAGGF G	uarantee S	Section as	a percenta	ge of the ge	eneral bud
	77 . 7	67	69-3	69-2	74.0	74 · 2	72.6	69 · 2	62.8	62-0
	III. Own	resources,	subject to a	ı limit of I	00 VAT (e.	xcluding 'C	Other rever	iue')		
Fotal	8 260	(9 180)*	(10 120)*	(12 120)*	(14 080)*	14 961	16 379	17 821	20 015	23 090
Vari- ation		+920 +11·1°0	+940 +10·2°o	+2000 +19·8°0	+1 960 +16·2%	+881 +6·3 %	+ 1 418 + 9 · 5 %	+ 1 442 + 8 · 8 %	+2 194 +12·3 %	+ 3 075 + 15 · 4 %
	1		<del></del>				+ 12 · 5 % pe	r year		
			<b>←</b> -	+	12 · 8 % per	year — — — — —	-→ ←	<del></del>	-12 · 1 % per	уеаг
	IV. Vari	ation of agr	icultural o	wn resourc	es					
Levies Sugar levies	438 105	280 81	534 86	1 040 133	1 817 320	1 873 406	1 678 465	1 535 470	1 310 464	1 818 907
Total	543	361	620	1 173	2 137	2 279	2 143	2 005	1 774	2 725
Vari- ation		$-182 \\ -33 \cdot 5^{+0} = 0$	+ 299 + 71 · 7 %	+ 553 + 89 - 2 %	+ 964 + 82 · 2 %	+ 142 + 6 · 6 %	-136 -6.0%	-138 -6·4%	-231 -11·5 %	+951 +53·6%
	ı			<del></del>		+	23 · 6 % per y	<u>/ear</u>		
				+	.36 ⋅4 ° ₀ per	year		-	+8·3 % per y	/ear

Estimated figures, since VAT was not taken into consideration for the year in question.
 The 1981 figures correspond to the the 1981 draft budget adopted by the Council on 19.10.1981.

<sup>&</sup>lt;sup>1</sup> For the purpose of comparison the expenditure previous to 1978 has been converted from million IMF u.a. to million ECU. Likewise, the figure for 1973 was adjusted to correspond to 12 months of payments.

<sup>&</sup>lt;sup>2</sup> The figures shown for 1982 are those of the amending letter to the 1982 preliminary draft budget, incorporating the addendum required by the currency realignment of 4 October 1981. The sum of 13 913-3 million ECU breaks down into 13 819-3 million ECU in Chapters 10 to 29 of the Guarantee Section and 100 million ECU in Chapter 100.

On the basis of this amending letter the Council adopted the draft of the amending letter to its 1982 draft budget, but with a different breakdown between the Guarantee Section and Chapter 100; this provides for the Guarantee Section 13 147-3 million ECU and for Chapter 100 772 million ECU. But this latest decision does not complete the budgetary procedure, since Parliament's decision and a final reading in the Council have still to come.

<sup>&</sup>lt;sup>3</sup> If, for the purpose of comparison, the estimates of expenditure for 1982 are adjusted to cover only the nine Memher States as in 1979 and if the 1979 and 1980 expenditure is adjusted to take account of actual expenditure by the Member States in 1979 but not charged until 1980, then the rate of increase between 1979 and 1982 comes out to 7-6% per year instead of 10-1%.

## Annex 7 (continued)

# **Expenditure from the EAGGF Guarantee Section, by sector, since 1973** (excluding fisheries)

(million ECU)

									(#	utton EC U
	1973	1974	1975	1976	1977	1978	1979	1980	1981 amending budget No 2	1982 amending letter <sup>2</sup>
Cereals and rice	1.061-5	384 - 0	592.7	674 - 3	643 - 4	1 130 - 4	1 606 - 7	1.728 - 0	1 963	2 179-6
Sugar and isoglucose	141-2	106-1	271 - 2	229.3	598 - 4	878 - 0	939.8	575-2	700	1 222 - 5
Olive oil	246 - 2	109 - 5	158 - 7	143 - 4	177 - 1	182 - 1	388 - 2	317.9	453	674.0
Oilseeds and protein seeds	84 - 3	14 - 3	40 - 5	119-1	105 - 2	186-6	279 - 7	429.9	579	629.0
Fibre plants and silkworms	7.0	12.0	15.0	20 - 7	14.8	15.9	18-1	17.2	57	114-0
Fruit and vegetables	31.7	58 - 5	72-6	185 - 1	178-2	100 - 7	442 - 8	687 - 3	715	860 - 0
Wine	11-1	41.0	141 - 3	133 - 8	89.9	63 - 7	61.9	299.5	618	409 0
Tobacco	124-5	166 4	200 - 5	185 - 4	205 - 2	216-1	225 - 4	309 - 3	327	643-0
Other (seeds, hops, apiculture)	20 - 7	20.7	32-4	40 - 1	28.0	31.4	40 - 2	38 - 2	52	57.0
Milk and milk products	1.583 - 6	1 257-9	1 193 - 7	2 277 - 7	2 924 - 1	4 014 - 7	4 527 - 5	4 752 - 0	3 675	4.350 - 2
- expenditure prior to										
co-responsibility	(1.583-6)	(1.257-9)	(1 193 - 7)	$(2.277 \cdot 7)$	(2.948 - 2)	(4.170 - 81	(4 621 -0)	(4 974 - 9)	(4 178)	(4 770 - 2
<ul> <li>co-responsibility levy</li> </ul>	(-)	(-)	(-)	(-)			(-94.1)	(-222.9)		(-420-0
Beef	18-3	322-1	923.3	615-9	467 - 7	638 - 7	748 - 2	1.363 - 3	1 497	1.415-0
Sheepmeat and goatmeat	_	_		_	_		_	53 - 5	190	234-0
Pigmeat	107 - 2	69 - 7	56.9	29.0	37.3	45.0	104 - 9	115-6	162	159.0
Eggs and poultry	25.5	18-2	9.4	15 - 1	25-6	38-1	79.5	85 - 5	104	116.0
Non-Annex II products	27 - 7	13.7	23 - 9	67 - 0	136 - 3	208 - 5	252 - 2	221-3	360	426.0
Total common organization										
of markets	3 490 - 5	2.594 - 1	3 732 - 1	4.735.9	5 631-2	7 749 - 0	9.715 - 1	10 993 - 6	11 452	13 488 - 3
Accession compensatory amounts	289 - 1	346 - 4	444 · 8	402 · 0	201 - 1	27 - 2	0.2	0 · 1	5	3.0
Total COM + ACA	3 789 - 6	2 940 - 5	4 176 - 9	5 137 - 9	5 832 - 3	7 776 · I	9 715 - 3	10 993 - 7	11 457	13 491 - 3
MCA	147.4	153-5	335-6	438-2	98-9-3	880 - 3	708.4	298 - 5	163	428.0
Provisional appropriations	'*'.*	100.0	333.0	400.2	70-7-3	990.3	/00.4	290.3	- 40	
Provisional appropriations									- 40	p.m.
Overall total	3 927 - 0	3 094 - 0	4 512 - 5	5 576 - 1	6 821 - 6	8 657 - 4	10 423 - 71	11 292 - 2	11 580	13 919 - 3

Including 6 million ECU relating to the clearance of earlier accounts. See footnote 2, page 103.

## Annex 7 (continued)

# Expenditure from the EAGGF Guarantee Section, by sector, since 1973 (as a percentage of total expenditure)

	1973	1974	1975	1976	1977	1978	1979	1980	1981 amending budget No 2	1982 amending letter <sup>1</sup>
Cereals and rice	27 · 0	12.4	13 · 1	12.1	9.4	13-1	15.4	15.3	17.0	15.7
Sugar and isoglucose	3.6	3.4	6.0	4-1	8 - 8	10 - 1	9.0	5.1	6 · 1	8 · 8
Olive oil	6.3	3.5	3.5	2.6	2.6	2 - 1	3 · 7	2 · 8	3.9	4.8
Oilseeds and protein seeds	2 · 1	0.5	0.9	2 · 1	1.5	2 · 1	2.7	3 - 8	5.0	4.5
Fibre plants and silkworms	0 · 2	0.4	$0 \cdot 3$	0.4	$0 \cdot 2$	$0 \cdot 2$	$0 \cdot 2$	0.2	0.5	0.8
Fruit and vegetables	0.3	1.9	1.6	3 · 3	2.6	1.2	4.2	6 · 1	6.2	6 · 2
Wine	0.3	1.3	3 · 1	2.4	1.3	0.7	0.6	2 · 7	5.3	2.9
Tobacco	3.2	5.4	4.5	3 - 3	3.0	2-5	2.2	2.7	2 · 8	4.6
Other (seeds, hops, apicul-										
ture)	0.5	0.7	0.7	0.7	0.4	0.4	0.4	0.3	0.5	0.4
Milk and milk products	40 · 3	40.7	26.5	40.9	42.9	46 - 4	43 - 4	42 1	31.7	31.3
<ul> <li>expenditure prior to</li> </ul>				-	_					
co-responsibility	(40.3)	(40.7)	(26.5)	(40.9)	(43 - 2)	(48-2)	(44.3)	(44 · 1)	$(36 \cdot 1)$	(34-3)
<ul> <li>co-responsibility levy</li> </ul>	(-)	()	( - )	(-)	(-0.3)	(-1.8)	(-0.9)	(-2.0)		(-3.0)
Beef	(0.5)	10.4	20.5	11.0	6.9	7.4	7.2	12.1	12.9	10.2
Sheepmeat and goatmeat		_	_		_		_	0.5	1.6	1.7
Pigmeat	2.7	2.2	1.3	0.5	0.5	0.5	1.0	1.0	1.4	1.1
Eggs and poultry	0.6	0.6	0 · 2	0.3	0.4	0.4	0.8	0 · 8	0.9	0.8
Non-Annex II products	0.7	0 - 4	0.5	1 · 2	2.0	2 · 4	2 · 4	2.0	3 - 1	3 · 1
Total COM	88.8	83 · 8	82 · 7	84.9	82.5	89.5	93 - 2	97 - 4	98.9	96.9
Accession compensatory amounts	7 - 4	11.2	9.9	7 - 2	3.0	0.3	0.0	0.0	0.0	0.0
Total COM + ACA	96 - 2	95.0	92.6	92 - 1	85 · 5	89.8	93 - 2	97 - 4	98.9	96.9
MCA Provisional appropriations	3 · 8	5.0	7 · 4	7.9	14.5	10 - 2	6.8	2.6	1 · 4 0 · 3	3 · 1 p.m.
Overall total	100 ° o	100 %	100 ° °	100 ° o	100 ° o	100 %	100 %	100 %	100 %	:00 %

<sup>&</sup>lt;sup>1</sup> See footnote 2, page 103.

Annex 8 Expenditure from the EAGGF Guarantee Section, by sector, as a percentage of final agricultural production

	1980 expenditure as a % of EUR 9 final agricultural production for 1980	1981 expenditure as a % of EUR 10 fina agricultural production for 1980
Total cereals and rice	12.0	13.0
Sugar beet	18 · 21	21 - 81
Olive oil	27.8	27.8
Oilseeds	56-7	76.0
Fibre plants and silkworms	29.3	26 · 5
Fruit and vegetables	5.4	5 · 1
Wine	5.3	10.8
Tobacco	77.3	50 · 0
Other crop products (seeds, hops)	8.8	11.9
Milk and milk products	21 · 42	16 · 22
Beef and veal	8.0	8.7
Sheepmeat and goatmeat	3.2	8.9
Pigmeat	0.9	1 · 2
Eggs and poultry	0.9	1.2
Total EAGGF Guarantee Section	11.4	10.9

Without the sugar levies,  $3\cdot 3\,^\circ \circ$  and  $7\cdot 4\,^\circ \circ$  respectively. Without the co-responsibility levy,  $20\cdot 4\,^\circ \circ$  and  $14\,^\circ \circ$  respectively.

Annex 9

## Estimated cost in 1982 of certain trade concessions under the CAP

(million ECU)

Concessions		Net cost in 1982	
1. Preferential sugar (1-3 million tonnes)		260	
2. New Zealand butter (92 000 tonnes)		130 } 940 1	
3. Beef — various import arrangements		550	
<ul> <li>4. Principal cereal substitutes:</li> <li>(a) imports of manioc (5·5 million tonnes)</li> <li>(b) imports of corn-gluten feed (3·5 million tonnes)</li> </ul>		500 } 650	
	Total	1 590	

Figures taken from Volume 7A of the preliminary draft 1982 budget, page 26.

Note These figures are estimates based on the data in the preliminary draft 1982 budget and do not take account of certain positive effects on the Community budget or in particular of counter-concessions to the Community by other countries, or the existence of certain commercial cooperation arrangements. The counter-concessions granted by non-member countries to the Community and the existence of certain commercial arrangements have beneficial effects on the Community which cannot be reflected in the budget.

## European Communities — Commission

## A new impetus for the common policies: Follow-up to the mandate of 30 May 1980

Supplement 4/81 - Bull. EC

Luxembourg: Office for Official Publications of the European Communities

1982 — 107 pp. —  $17.6 \times 25.0$  cm

DA, DE, GR, EN, FR, IT, NL

ISBN 92-825-2891-X

Catalogue number: CB-NF-81-004-EN-C

Price (excluding VAT) in Luxembourg

ECU 5 BFR 200 IRL 3-50 UKL 3-10 USD 7

In its report to the Council pursuant to the mandate of 30 May 1980 the Commission confined itself to making general suggestions. Between July and October 1981 the Commission enlarged upon these suggestions, notably in the areas of economic policy, energy, R&D, industry, industrial innovation, regional policy and the common agricultural policy.

## Salgs- og abonnementskontorer · Vertriebsbüros · Γραφεία πωλήσεως · Sales Offices · Bureaux de vente · Uffici di vendita · Verkoopkantoren

#### Belgique — Belgiě

Moniteur beige - Belgisch Staatsblad

Rue de Louvain 40-42 — Leuvensestra: t 40-42 1000 Bruxelles — 1000 Brussel Tél. 512 00 26

Sous-dépôts - Agentschappen :

Librairie européenne — Europese Boekhandel Rue de la Loi 244 — Wetstraat 244 1040 Bruxelles — 1040 Brussel

CREDOO

Rue de la Montagne 34 - Bte 11 Bergstraat 34 - Bus 11 1000 Bruxelles — 1000 Brussel

#### Danmark

Schultz Forlag

Møntergade 21 1116 København K Tilf (01) 12 11 95

Underagentur

Europa Bøger Gammel Torv 6 — Postbox 137 1004 København K Tif. (01) 15 62 73

#### **BR** Deutschland

Verlag Bundesanzeiger

Breite Straße — Postfach 10 80 06 5000 Koln 1 Tel. (0221) 20 29-0 (Fernschreiber : Anzeiger Bonn 8 882 595)

#### Greece

G.C. Eleftheroudakis S.A. International bookstore 4 Nikis street Athens (126) Telex 219410 elef gr

Sub-agent for Northern Greece:

Molho's Bookstore 10 Tsimiski Street Thessaloniki Tel. 275 271 Telex 412885 limo

#### France

Service de vente en France des publications des Communautés européennes

Journal officiel 26, rue Desaix

75732 Paris Cedex 15 Tél. (1) 578 61 39

"Service de documentation "

D.E.P.P. — Maison de l'Europe

37, rue des Francs-Bourgeois

75004 Paris Tél. 887 96 50

#### Ireland

Government Publications

Sales Office G.P.O. Arcade Dublin 1 or by post Stationery Office Dublin 4 Tel 78 96 44

#### Italia

Libreria dello Stato
Piazza G. Verdi, 10
00198 Roma — Tel. (6) 8508
Telex 62008

#### Nederland

Staatsdrukkerij- en uitgeverijbedrijf Christoffel Plantijnstraat Postbus 20014 2500EA 's-Gravenhage Tel. (070) 78 99 11

## United Kingdom

H.M. Stationery Office P.O. Box 569 London SE1 9NH Tel. (01) 928 69 77. ext. 365

Sub-agent :

Alan Armstrong & Associates 8 Queen Victoria Street Reading, Berks RG1 1TG Tel (01) 258 37 40 (01) 723 3902

#### España

Mundi-Prensa Libros, S.A.

Castello 37 Madrid 1 Tel. (91) 275 46 55

#### Portugal

Livraria Bertrand, s.a.r.l.

Rua João de Deus — Venda Nova Amadora Tél. 97 45 71 Télex 12 709 — litran — p.

#### Schweiz - Suisse - Svizzera

Libraine Payot 6, rue Grenus 1211 Genève Tél. 31 89 50

#### Sverige

Librairie C.E. Fritzes
Regeringsgatan 12
Box 16356
103 27 Stockholm
Tél. 08-23 89 00

#### United States of America

European Community Information Service

2100 M Street, N.W. Suite 707 Washington, D.C. 20 037 Tel. (202) 862 95 00

#### Canada

Renout Publishing Co., Ltd. 2184 St. Catherine Street West Montreal, Quebec H3H 1M7 Tel. (514) 937 3519

#### Grand-Duché de Luxembourg

٠.

Andre lande · Andere Länder · Ἄλλες χώρες · Other countries · Autres pays · Altri paesi · Andere landen

Kontoret for De europæiske Fællesskabers officielle Publikationer - Amt für amtliche Veroffentlichungen der Europäischen Gemeinschaften - Υπηρεσία Επισήμων Εκδόσεων τῶν Εύρωποϊκῶν Κοινοτήτων - Office for Official Publications of the European Communities - Office des publications officielles des Communautés européennes - Ufficio delle pubblicazioni ufficiali delle Comunită europee - Bureau voor officielle publikaties der Europese Gemeenschappen

ECU 5

Price (excluding VAT) in Luxembourg BFR 200 IRL 3.50 **UKL 3.10** 

USD 7



OF THE EUROPEAN COMMUNITIES OFFICE FOR OFFICIAL PUBLICATIONS

ISBN 92-825-2891-X

L-2985 Luxembourg

Catalogue number: CB-NF-81-004-EN-C