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MEMORANDUM FORESTRY

Discussion Paper on the Community Action in the Forestry Sector

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Discussion Paper

ON COMMUNITY ACTION IN THE FORESTRY SECTOR

I. Introduction

1. The European Commission undertook in the programme it presented to the European Parliament in March 1985 to produce proposals related to forestry. It subsequently decided to consult widely before making concrete proposals. The Commission is presenting this paper on forestry as a basis for consultation. After interested parties have had the opportunity of expressing their opinions on the ideas put forward here, the Commission will make proposals for a Community forestry action programme.

In order to help these consultations, the Commission is publishing a more extensive and descriptive paper on forestry in the Community as an addition to the present document. A Community Action Programme would be complementary to national policies. This Forestry Action Programme could involve a series of measures which would lead to the extension of the forest area and improvements in the utility derived from existing forests. While the Commission is not proposing to establish a Community forest policy, many of the actions suggested would be more effective if taken at the level of the Community rather than at the level of individual Member States.

In addition to stimulating discussions on forestry in the Community, the Commission is convinced that forestry problems in countries outside Europe, especially in the developing world, should also be considered.

II. The importance of Community forests

2. Forests meet an important need for industrial materials, providing economic activity and employment in what are often less-prosperous regions and supporting activity and employment in wood-using industries elsewhere in the Community. They also play a vital role in maintaining the ecological balance and contributing to environmental quality, in the prevention of erosion and desertification, and in the recreational and leisure activities of the Community's citizens.

3. The need of the ten Member States for forest products (sawn timber, panels, pulp, paper, and so on) greatly exceeds the amount of wood obtained from Community forests, with the result that the Community is the world's biggest net importer of wood products. Net imports amounted to nearly 17 000 MECU in 1984 and this situation will be unchanged by the accession of Spain and Portugal.

This growing shortfall between the Community's demand for timber and its own production is only partly due to the insufficiency of the planted area - after all 20% of the Community's land area is planted to trees. It is also due to the under-utilisation of much of the existing forest, some of which is totally unproductive. Proper management and silvicultural techniques couldimprove the health, appearance and output of such forests.

At the same time, an increase in the supply of timber (bearing in mind that some demand can only be met by imports), coupled with a better organisation, could sustain more activity in the Community's own wood-using industries. Despite its overall deficit, the Community exports about 2 million tons a year of paper and board and is a net exporter of furniture. The demand and industrial capability exist therefore in the Community which should make possible a greater use of renewable resources, creating additional revenue and employment.

4. The environmental role of forests is important in relation to nature conservation and the maintenance of the natural balance, including the protection of soils and the prevention of water loss, as well as providing scope for recreation activities. Environmental objectives need not conflict with the objective of greater forestry development. In providing recreation to both the rural and urban population, forests answer social needs and help to provide services and leisure industries which reflect new trends in consumer demand.

5. The three main functions of Community forests mentioned above - providing raw materials, maintaining ecological balance and acting as a base for recreational activities - are of great importance. Improving the output of raw materials and services from Community forests can and should be achieved together.

6. The European Commission has made proposals for forestry and timber in the past. Several of these initiatives (on research, agricultural structure etc) have been implemented. A proposal on the protection of forests from fire and from acid rain damage finds support from a large majority of delegations and discussions in the Council are continuing. Two other initiatives are still before the Council with little progress being made on any of them. In 1979 the Commission proposed a Resolution on a Community Forestry Policy and the setting up of a Standing Forestry Committee. In mid-1983 it proposed objectives and lines of action for Community policy regarding forestry and forest-based industries. No decision has been taken by the Council on these proposals.

7. Why, then, should the Commission take further initiatives in the forestry sector ? There are a number of reasons.

   . The reduction of agricultural surplusses will lead to the search for alternative crops, including forests.

   . The Community's considerable trade deficit in wood and wood products gives scope for increasing Community timber production, if this can be done economically.

   . The need to maintain and expand economic activities and employment especially in rural areas.

   . Action is needed to stop the accelerating destruction of European forests by atmospheric pollution and by fire. The area lost to fire each year in Spain and Portugal is approximately the same as that in the other ten Member States.

   These problems raise important questions of Community solidarity and they call for Community action.

8. Another important reason for the Commission to take an initiative on forestry is the public pressure for such action. Several resolutions requesting action have been tabled in the European Parliament. The Parliament approved a resolution in 1983 calling for a comprehensive Community forestry policy. Many of the points raised by the Parliament are dealt with in this discussion document.

9. In fact, the Community has invested quite heavily in forestry in the context of its other policies. Between 1980 and 1984, around 470 MECU were committed from FEOGA, the European Regional Development Fund, from various research programmes and from the European Development Fund (outside the Community). In addition the European Investment Bank has made loans for forestry projects in Ireland and Portugal as well as in developing countries.

While such Community measures have had a significant impact, they remain isolated actions in the context of different policies. Forestry and the forest-based industries form, however, interrelated branches of economic activity which requires a clear strategy of its own if inefficiency is to be avoided. Afforestation of marginal land, for example, only makes sense if the infrastructure to exploit and use the timber can be developed. The different functions of Community forests argue in favour of a clearly identified forestry action programme.

10. The suggestions for Community action, which the Commission is putting forward in this paper, fall into three groups - extending the forest area, making the best use of existing woodland and protecting the forest.

III. Extending the Forest area

11. The fact that the Community has a large trade deficit in the products of temperate forests has already been emphasised. This deficit will remain even after the increase in timber production expected over the coming decade from new forests planted since 1945. There is wide scope, therefore, for the establishment of new forest as long as this can be done in an environmentally acceptable way.

Expansion of the forest area would provide employment, encouraging people to remain in those parts of the Community affected by agricultural decline. An increase in the volume of wood effectively available from the forest would also allow wood-processing industries to expand. In some of the already heavily wooded areas, where forestry is well organised, large numbers of jobs are directly dependent on forestry (in the German State of Baden-Württemberg, for instance it is estimated that forests provide employment for 250 000 people).

12. The Commission's discussion document "Perspectives for the Common Agricultural Policy" (COM(85)333) makes clear that forestry expansion may be critically important to the development of Community agriculture.

    - Land released from agriculture as a result of the crisis of overproduction could be planted to trees.

    - Forestry could provide a suitable crop on the less-productive parts of farms - as it already does on the large number of agri-forestry holdings. The development of privately-owned forestry on farms should therefore be encouraged.

    Some areas of marginal agricultural land provide ideal growing conditions for trees. There is scope in such regions for short-term cropping with a view to pressed-board production or processing into bio-chemicals as well as for traditional forms of timber production, where the owner must wait 15 or 20 years for a return on investment.

13. The main problem to be tackled in extending the forest area is that of incentives. Two approaches are currently practised in the Community, tax incentives and forestry grant schemes.

14. Incentives given through the tax system have led to a considerable extension of private forest in some parts of the Community. Measures taken by Member States to reduce the tax burden of companies or individuals investing in forestry could therefore be an important element in policy for forest expansion.

15. In view of the problems of surplus agricultural production in the Community, the Commission is already considering possible measures for the development of forestry as an alternative to agriculture. In this context, the cost of supporting forestry production must be seen in relation to the cost of agricultural support, and the cost of other measures for taking land out of agricultural production.

    In the long-term, the objective of agro-forestry action must be to develop an activity which is self-sustaining and does not require substantial subsidies (it is not envisaged that a regime of price supports or further external protection would be extended to forestry).

A number of grant schemes already provide incentives to farmers to replace annual crops by forestry. Aim of the schemes is to provide the farmer with a regular income from forestry similar to that from farming. In some cases grants are available to cover the investment cost involved in creating new woodland. On technique was introduced on a limited scale in the directive to improve agricultural structures (Regulation 797/85). This allows encouragement for farmers to put land down to trees by investment aids, or in the case of marginal areas by annual payments. Forestry measures have also been aided (Regulation 269/79) in France and Italy with a view to protection soils from erosion and controlling flooding. The development of woodland on farms has been assisted by specific agricultural measures in Greece and Ireland and by integrated development programmes in France and Scotland.

These two approaches - perhaps with different modalities - might be applied more extensively in the Community where trees replace surplus agricultural production.

16. Afforestation in Member States is encouraged through tax incentives or through grants. It may also be encouraged through Community action. The emphasis should be placed on choosing the instrument most suited to particular areas or objectives.

The Community could have a direct interest in financing such schemes since they could lead to budgetary savings on agricultural support. In areas where it is considered important to favour certain species for economic or ecological reasons, the grants could be varied to provide differentiated incentives.

17. Development of a Community action programme for forestry will require additional effort in forestry research, statistics (at regional as well as national level) and information. A considerable research effort has already been made in the "Wood as a renewable raw material" programme, which has just been prolonged for a further five years. Other programmes exist in the energy, agricultural and environmental areas which include forestry. This work could be strengthened by further research into tropical timber and alternative uses for wood.

18. A number of questions are posed in connection with extending the forestry area.

    - How can the extension of the Community's forest area best be organised ?

    - Under what conditions can forestry play a role as an alternative to those agricultural crops in surplus ? What would be the budgetary effect of switching areas used for agricultural purposes to forestry ?

    - How can tax or grant schemes be combined to provide efficient incentives to forestry develoment ?

    - How can the existing Community funds be used more coherently in this area ?

IV Making the best use of existing forest

19. Despite the high level of Community net imports of timber, only a low proportion of the Community's natural wood production is used productively. A considerable increase in output could be achieved with a relatively small additional investment.

20. The productivity of forests depends partly on the size of holdings and the degree to which the forest areas are contiguous and easily accessible. In regions where forest is held predominantly by state or semi-state bodies or by business, the parcels are often large and the infrastructure facilitates efficient management.

    The 60% of Community forests held in the private sector are often characterised by problems of small size and dispersal of plots. The average size of private forest holdings in the Community is probably about 8 hectares, but there are major structural differences between Member States. In the United Kingdom, where financial institutions own considerable areas of forest, the average size of private holdings is far higher than in France, Germany or Italy where much of the forest is in agricultural units.

21. The main difficulties in improving productivity lie in the small size and dispersal of parcels of forest, the lack of a suitable infrastructure and, frequently, the absence of ready markets for the wood. In a particular region, where these difficulties are acute, the price incentive to exploit the available wood may not be sufficient to compensate the high cost of harvesting. At the same time, It is unlikely that wood-using industries even of the most basic type, will be established where there is a low availability of timber. The lack of a market takes away any incentive to exploit the timber resources.

22. This situation would be improved by the creation of forestry associations for groups of individual owners. Such associations supplying forestry services and marketing assistance already exist in some areas of the Community, and have proved their effectiveness in Sweden and Finland. They could be involved in the drawing up of management plans for private forests. The creation of such associations should be encouraged. Their activity could be supplemented by firms specializing in forestry work, which could be aided in the context of programmes of assistance to small and medium sized enterprises, where such aids do not have direct effect on the pricing mechanisms of wood-based industry.

23. In some areas of the Community, the lack of an adequate roadway network in forested areas is a handicap to the better utilisation of existing forest resources. The Community already aids the creation of such networks in the Mediterranean areas of the Community. It may be necessary to give similar aid in other parts of the Community.

24. Appropriately situated and reasonably stable outlets are important for the achievement of higher productivity from forests. This, in turn, requires that agreements can be made both for forest owners to supply industry and for industry to take forest products. Establishment of large industrial facilities, such as pulp units, clearly requires a supply guarantee from a large area of forest. Smaller installations, like saw mills and chipboard manufacture, also require a continuous supply of raw material. The uses of appropriate supply contracts should therefore be encouraged.

25. In aiming to improve the productivity of forests, it is also necessary to support the expansion of wood-based industries. At the Community level, for instance measures to improve the standardisation of forest products would be a useful step to encourage the development of the timber trade. The Community already has a Directive approximating Member States laws on the classification of wood in the rough (1). This Directive should be followed where appropriate to remove remaining technical barriers to trade in forest products.

26. These proposals would help to improve the economic efficiency of forestry. It is also important to develop the usefulness of existing forest for environment and recreation.

An ecological code of conduct could be established for woodland management with the objectives of safeguarding the long-term fertility of the soil and the role of the forest in the water cycle, the conservation of woodland flora and fauna, the preservation of landscapes and the creation of an adequate diversity of species. The Community already supports some of these actions but it is important that a complete code of conduct should be generally applied.

There is clear evidence, for example, of strong public feeling in some regions at the spread of coniferous forest and the reduced area of broadleaved woodland. It is possible to devise aid systems - which would not involve large finance - to encourage owners to plant deciduous trees. Such schemes could be created partly in the context of the common agricultural policy.

The creation of woodland nature reserves and forest parks, which are common in many countries, would increase the value of Europe's forests as a leisure resource. Small amounts of financial aid in the creation of the necessary infrastructure could open up many woodland areas as nature reserves and recreational areas.

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(1) Directive 68/89/EEC

27. A number of questions are posed in connection with making the best use of existing forests.

- How can the problems associated with the small size and dispersal of forest blocks be overcome ?
- What can be done to strengthen market possibilities for timber and other forest products ?
- How can the objectives of more productive forests, environmental quality, species diversity and of forests for recreation be combined ?

V. Protecting Community Forests

28. The woodlands in the Community are suffering from widespread damage as a result of atmospheric pollution, forest fires, attacks by disease and insect pests, and, at certain times, as a result of natural disasters such as storm and drought.

The destruction of forest in northern Europe has reached considerable proportions. It is especially widespread in Germany and eastern France. With about 50% of the German forest and, as recent reports suggest, 40% of the Vosges forest (Lorraine + Alsace) damaged, the future economic development of regions dependent on forestry and tourism is at risk. The health of these forests has deteriorated at an alarming speed. Whilst the causes of the damage and the mechanisms involved are not completely understood, it is generally agreed that atmospheric pollution is a major factor, and especially emissions of sulphur dioxide and nitrogen oxides.

29. The Commission has already made proposals to reduce pollutant emissions from cars, from large combustion installations and from domestic central heating installations. It envisages making further proposals on speed limits, emissions from diesel cars and from lorries before the end of the year; and at a later stage emissions from other significant sources as already announced in COM(83)721. It considers that implementation of these proposals would considerably reduce atmospheric pollution and probably related forest-damage.

A Commission proposal to establish a regular inventory of forest damage and network of observation posts for measurement is making only slow progress in the Council.

30. Forest fires destroy about 120 000 hectares of woodland each year in the Community of Ten and with enlargement this will more than double. In 1985, over 300 000 hectares of forest have been destroyed (more than the area of Luxembourg), fifty lives have been lost as well as a considerable amount of capital equipment.

    The Commission has proposed measures aimed at reducing the risk of forest fires and at improving Member States' fire-fighting capacity. This proposal would aid the establishment of fire fighting stations, encourage the improvement of equipment and of the training of specialised personnel. The Commission regards the progress of this measure, at the moment meeting resistance in the Council, to be of major importance. It also believes that the scope of Community action in this area should eventually be widened.

31. Biotic damage caused by insects or disease poses another challenge to Community forests and the Community should be prepared to intervene rapidly. The Standing Committee on plant health, which meets regularly, is consulted whenever a potential biotic danger is perceived. The Community has also undertaken various research projects in this area. New monitoring systems might be developed to reduce the risks of introducing new diseases and further specific research into forest diseases may be necessary. One important measure would be the adoption of a code of conduct on genetic impoverishment, a factor which is partly to blame for the weakening resistance of European forests.

32. Finally, there is the problem of the results of exceptional weather conditions, notably windblow. Here the Community has in the past restricted imports in order to reduce the pressure on the market coming from the sudden increase in supply. In order to improve the efficiency of such measures further cooperation between Member States needs to be considered to ease market tensions in such circumstances.

33. A number of questions are posed in connection with protecting Community forests.

    - How can forests be protected against pollution damage ?

    - What steps need to be taken to reduce forest losses due to fire ?

    - How can the monitoring of disease or damage by insects be improved ?

VI. Forestry in developing countries

34. As the Community is a major importer of wood, notably tropical timber from the developing countries, action in the forestry sector cannot be taken in isolation.

The Community has cooperation agreements through the Lomé Convention with certain of these supplier countries in Africa, the Caribbean and the Pacific (ACP). These agreements cover not only commercial arrangements but also financial and technical cooperation to protect and develop forests as a main factor in environmental improvement and defence against desertification. The Community is also a contracting party to the International Tropical Timber Agreement.

At present the tropical forest is being over exploited with grave results for climate and agricultural production, as well as the supply of tropical timber.

In a Forestry Action Programme the Community should take into account both these international agreements and its close relations with many developing countries.

35. A number of questions can be posed in connection with the promotion of forestry in developing countries.

- How can the Community mobilize its existing technical and scientific capacity to stop the decline of the tropical forest area and ensure long-term stability in the supply of tropical timber?

- How can the Community accelerate and improve its efforts to reduce and ultimately prevent desertification in developing countries ?

Conclusion

36. The Commission is anxious to proceed to as wide a consultation as possible on the questions raised and the ideas advanced in this paper - supplemented by the more extensive accompanying document.

It invites the other Community institutions and other organisations to formulate their own reflections and comments. Taking account of the views expressed in the course of the debate, the Commission will present its proposals before the summer of 1986.

The Commission underlines that the present document is not intended to prejudice the conclusions which it will reach and that it will take full account of the views expressed in these consultations.

COMPLEMENTARY MEMORANDUM

TO THE DISCUSSION PAPER

PREFACE

1. Our forests have a vital role to play over the coming years in bringing about a new social and economic equilibrium necessary to resolve the current recession. Forestry has not been a major concern of the Community until now, but its importance is steadily growing. Woodland provides the economy with an essential renewable resource, it is a crucial environmental factor, it is of major significance to the continuation of agriculture, it is a recreational asset to society and it is the basis for aid schemes in the developing world. In short, forests are a key area for the Community which it should help to protect, develop and exploit.

2. Recent trends in the action taken by the Community demonstrate the growing attention devoted to forestry. Up to a few years ago the Community's forestry activities were confined to a handful of specific schemes, such as afforestation and woodland improvement in designated areas, and to plant protection and improving the quality of reproductive material; more recently these activities have been expanded considerably. The Community has become particularly involved in forestry research, the integration of forestry into regional development programmes, the inclusion of forestry schemes in general policy on agricultural structures, the reduction of pollution in order to protect trees, the organization of contacts between different sections of the timber industry, tree planting as a means of combatting desertification in developing countries, and so on.

3. The new forestry schemes undertaken recently have thus all been inspired and supported by Community policies not specifically directed at forestry. These have included the common agricultural policy, research policy, regional policy, environmental policy, and so on. Under each of these, both funds and administrative resources - in some cases substantial - have been allocated to forestry.

   Taken as a whole, these resources have probably amounted to more than could have been made available under a Community forestry policy proper. In certain respects, the scope of the recent expansion of Community forestry activities could paradoxically be attributed to the lack of a forestry policy, since existing Community policies have stepped into the breach. In some cases, indeed, forestry has been a fruitful area into which to extend activities under these other policies.

4. This situation, which augurs well for the future, given the fact that some Member States are still resolutely opposed to a forestry policy at Community level, has led the Commission to refrain for the time being from establishing a formal forestry policy.

In order to make the position perfectly clear, the Commission will at the appropriate time be formally withdrawing its proposals for resolutions which are still being considered by the Council[1].

5. Nevertheless, the Commission feels that continuing with Community forestry activities under other policies calls for closer supervision by the Community institutions, as well as more active coordination of all the various schemes to ensure maximum effectiveness in terms of forestry itself.

   Accordingly, the Commission has recently decided:

   1) to upgrade forestry to an area of special responsibility under one of the Members of the Commission;

   2) to set up a forestry action programme with clear aims, in order to make all Community action in this field internally consistent and fully effective.

6. This report, which is being issued during the International Year of the Forest, fulfils the latter commitment. It represents the first step towards a forestry action programme for the Community.

   The report is to form the basis for wide-ranging consultation at Community level of the various interest groups involved in forestry and the timber industry. At the end of these consultations, the Commission will present the Council with new proposals for action in forestry. These proposals will form part of a comprehensive programme which takes account not only of the aims of the Community policies supporting each scheme but also the objectives for forestry as a whole.

7. Part I of this report sketches the current situation of the Community's forests. Part II briefly compares the forestry policies in the Member States and summarizes the main forestry activities on which the Community has already embarked. Part III deals with specific fields in which the Community could develop forestry schemes, the last chapter containing a summary table listing the schemes to which the Community could contribute in the short to mid term.

8. The Commission hopes that in this way a further step may be taken towards including forestry and its related activities among the Community's major concerns.

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(1) These are:
- Proposal for a Council resolution concerning the objectives and principles of forestry policy (COM (78) 621 final of 1.12.1978 - Council no. 3332/78)
- Proposal for a Council resolution concerning objectives and lines of action for Community policy on forestry and forest-based industries (COM (83) 222 final of 30.5.1983 - Council no. 7621/83)

PART I

FORESTS IN THE COMMUNITY

9. A broad outline of the Community's forests and the activities connected with them is not easy to draw because of the great diversity within the sector. Woodland covers a significant part of the Community's territory and gives rise to a multitude of activities. At Community level there is a dearth of statistics, studies and economic analyses.

   Compared with agriculture, to which it is closely related and with which it competes, forestry suffers from a chronic lack of information on a Community scale, which makes it impossible to assess accurately the full breadth and complexity of the sector.

10. Plenty of reports and figures are available within the Member States, indeed almost too many. This wealth of documentation, certainly useful, is still inadequate for the purposes of this report, because it takes so many forms and most of the statistics are not comparable.

11. The gaps in the figures available and the sheer variety of the background material on which the Commission must try to base an overview of forestry in the Community are the reason why Part I of this report will inevitably tend to be superficial and no doubt fall short of what it should be. It is a measure of the effort required if the Commission is to be better equipped to explore and describe the sector in the future. If this report serves to highlight the lack of Community-wide information, one can hope that among the bodies consulted there will be those who possess data which can help to illuminate the situation in the Community and that they will be encouraged to pass them on to the Commission.

12. The deficiencies referred to above are none the less not such as to disguise or distort totally the main features of forestry in the Community. The principal problems facing the sector are sufficiently obvious and clearly perceived by those affected for there to be no need to delay any further in describing the current position, however summarily, identifying what needs to be done, and acting.

13. The description which follows starts by reviewing the role played by forests in the Community, their extent and special features compared with competing forestry sectors in other parts of the world and with other parts of the Community economy. This is followed by a survey of the main structural constraints on the sector which prevent it from fully satisfying the needs of the Community. Timber, the primary product of forestry and a renewable resource with many different uses, is the subject of a separate analysis covering production, consumption, processing and marketing. Forests as a source of non-timber products and services, both commercial and non-commercial, are also dealt with, given the growing importance which attaches to these aspects.

CHAPTER I

THE ROLE, EXTENT AND SPECIAL FEATURES OF WOODLANDS IN THE COMMUNITY

14. An analysis of the current situation with a view to defining a forestry action programme must start by considering the demands made on forests. The most obvious is the supply of timber for various uses, including fuel. However, there are many others, often less obvious, some of which can be more important than the production of wood. Forests in areas exposed to erosion, particularly mountain regions, play a major role in protecting the soil and agriculture; the amount of timber they provide is frequently overshadowed by their function in safeguarding the environment. Other tracts of woodland near conurbations or in areas with a high population density are primarily of amenity value; they provide scope for recreation and leisure, again relegating timber production to a secondary role since, to be a suitable recreational resource, they cannot be subjected to as much felling as would be required by normal forestry rotation.

MULTIPLE ROLE OF FORESTS

15. There are three basic roles for woodlands in the Community, therefore:

- productive, above all of timber;
- protecting the environment in general and agriculture in particular;
- as a public amenity, especially for recreation.

The relative significance of these roles varies from region to region, influenced by natural, technical, demographic, social and economic factors. The relative importance of the different roles also changes over time in line with circumstances.

16. The productive role of forestry is vital to the Community; the latter's demand for forestry products, especially timber, is considerable and far from being met in full.

Apart from timber, woodland is the source of a very wide range of other products such as resin, cork, essential oils, medicinal plants, mushrooms and game. All these other products contribute to increasing the value added in the sector, in some cases by a significant amount.

17. The role of conservation and protection covers in particular:

- water regulation,
- soil protection and stabilization,
- conservation of wildlife,
- safeguarding the natural heritage (particularly the landscape),
- generating oxygen and filtering the air,
- regulating carbon dioxide in the atmosphere and consequently temperature.

In all these facets, woodland fulfils an essential function by helping to protect and develop agriculture.

The special nature of woodland, above all the extent of vegetation above and below ground, its long life cycles and the constancy of woodland soil make it a prime environmental indicator. The systematic observation of forest ecosystems can help to prevent the excesses of industrial development from getting out of hand.

18. The amenity value of woodland, finally, is of major importance to the health of an increasingly urbanized society. As an essential place of relaxation and recreation away from work and during holidays, forests make a major contribution to the balance of modern life. This is a role which is bound to expand, particularly on the fringes of large conurbations.

19. In these three basic roles, forests are a crucial economic and security factor.

On the economic side, they contribute to both economic activity and a more balanced development of the Community. Forestry in the strict sense, together with all the activities related to it directly, such as timber processing, or indirectly, such as tourism, generates a large number of jobs. More especially, it can help to develop the least favoured rural areas where most of our forests are generally to be found.

On the security side, woodlands represent a passive reserve of timber which for a time can ensure continuing supplies in the event of a sudden cut-off of external sources. By safeguarding the supply of raw materials in the Community, our forests are a leading security factor.

THE EXTENT OF FORESTS IN THE COMMUNITY

20. Depending on the definitions chosen and statistical sources consulted, the wooded areas of the Community as currently constituted total between 34 million and 38 million hectares. After Portugal and Spain join the Community, this figure will rise (on the same definitions and based on the same statistical sources) to somewhere between 53 million and 68 million ha.

If one takes forest proper ("closed" forest)[1], the figures are some 30 million ha for the Community of Ten and about 39 million ha for the Twelve (see Annex IV).

Depending on the type of forest under consideration (all wooded areas or closed forest only), this means that between a quarter and a fifth of the territory of the Community is covered by woodlands (see Annexes IV and V).

Nevertheless, the Community accounts for only a very small share (around 1%) of the world's forests. If the Community is a giant in agricultural terms, it is a dwarf in forestry terms (see Annexes I, II).

21. By comparison with agriculture, the Community's woodlands occupy an area approximately a third of the utilized agricultural area. Output is about 4% that of agriculture and value added about 6%.

Privately owned woodland accounts for around 60% of the forest area of the Community and this is spread among four million landowners; most of these are very small-scale owners.

The Member States themselves are owners of varying proportions of the forests covering their territory. In all, around a quarter of the Community's woodlands are state-owned (see Annexes VII and VIII).

22. The Community as presently constituted has on average 0.14 ha of wooded land per capita. The figure is ten times larger in the United States of America and more than a hundred times greater in Canada (see Annex VI).

Very approximate estimates put the number of people employed in forestry in the present Community at around one million, including both full-time and part-time workers and related activities such as timber hauling. In addition, about 1.5 million wage-earners work in the forest-based industries of the Community. Total employment in forestry on a broad definition therefore comes to some 2% of the working population of the Community.

23. Annual timber production totals more than 80 million cubic metres in the Community today, rising to about 100 million m^3 after enlargement.

This figure lags far behind demand in the Community, which has a large deficit in forestry products on its external trade balance of close to 18 000 million ECU a year (timber and timber products). Timber comes after energy as the largest deficit item in the Community's external trade.

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[1]Woodland with a least 25% tree cover.

SPECIAL FEATURES

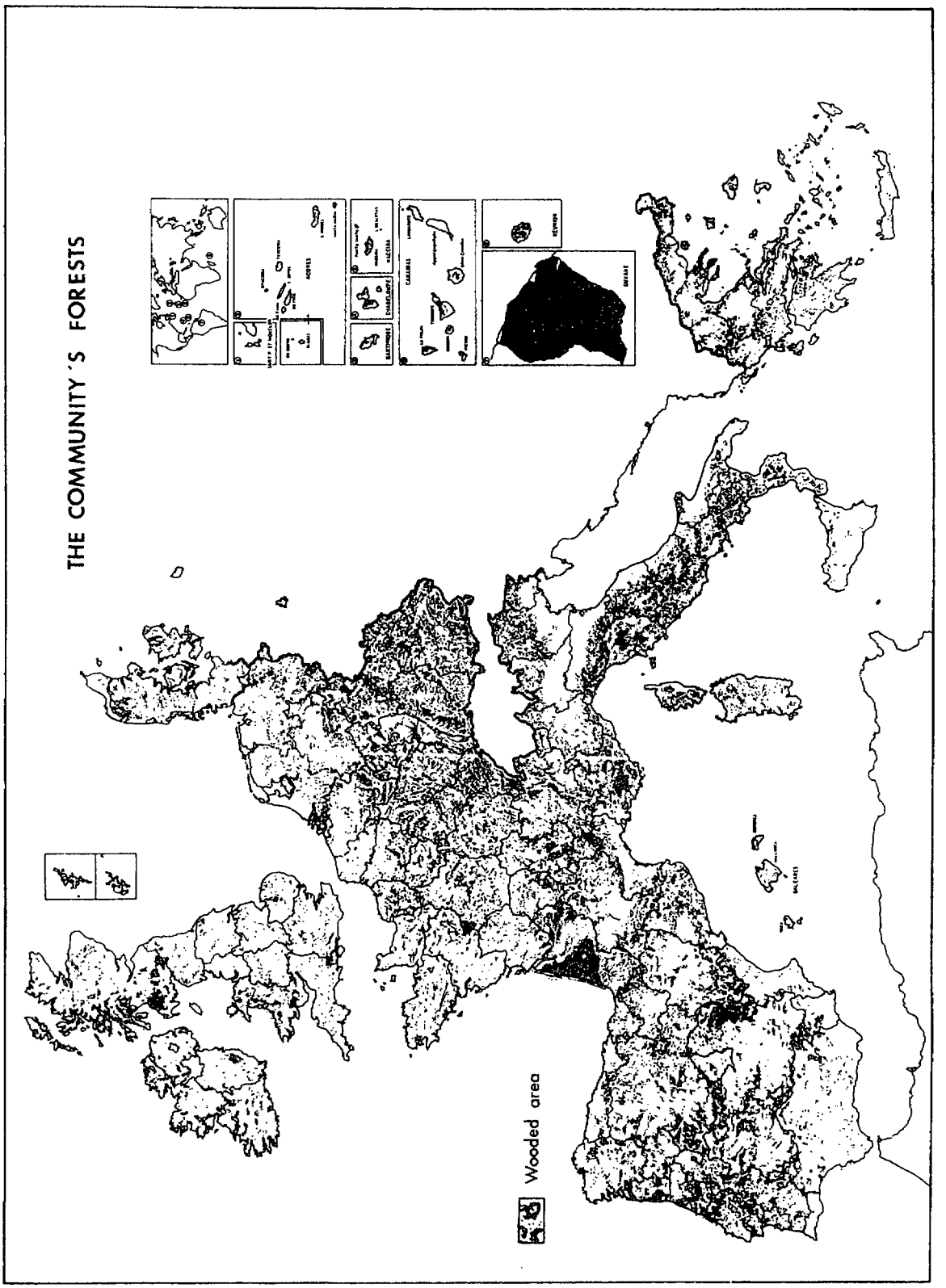
24. The main peculiarity of forests is the length of their production cycle. It is impossible to investigate and resolve the problems of forestry without taking this fundamental fact into consideration. It often takes more than a century to grow good broadleaved trees. The time factor thus underlies all decision-making in forestry.

    The forests themselves and the foresters who work them are ill-adapted to rapid action taken with a view to cyclical management of the economy, without regard to the longer term. The nature of the sector demands that one stand back before taking decisions and show persistence in carrying through schemes once started, leaving aside short-term economic considerations.

    The result is that forestry is generally relegated to the fringes of day-to-day policy-making because it involves thinking over the very long term and calls for schemes which generally last longer than a single budget year or even a parliament. This peculiarity doubtless explains why only a few isolated forestry schemes have been undertaken since the founding of the Community, without thought to the follow-up, and why all attempts to establish a proper forestry policy since 1959 have failed (see Annex XXVII).

25. The forests of the Community have been profoundly marked by the history of Europe's peoples. Some tracts of woodland still carry the scars of the conflicts which have torn the continent in the present century, either because they have been the scene of battles or because they have been drastically reduced to provide raw materials. Following these conflicts, several Member States have invested heavily in afforestation or reafforestation with the result that whole swathes of woodland have been resurrected. The fruits of these efforts will probably have a significant impact on the dimensions of the forestry problem in the years to come, particularly as regards the sale and processing of timber and timber products.

26. Finally, it must be noted that the forests of the Community consist of temperate woodland. There is a reasonable balance between deciduous trees (56%) and conifers (44%) and average yields per hectare are quite respectable. Average production from the total area under trees may seem low (2.1 m^3/ha) and this will sink even further when Portugal and Spain join the Community (1.5 m^3/ha). On the other hand, average forest growth in the narrow sense (closed forest) is high compared with most other large tracts of forest in the northern hemisphere, coming close to 4.4 m^3/ha/year (USA: 3.6; Scandinavia: 3.0; Canada: 1.7; USSR: 1.4) (see Annex III).


THE COMMUNITY'S FORESTS
Wooded area

CHAPTER II

MAIN STRUCTURAL FEATURES

27. The Community's forests, especially compared with those in countries which supply the Community with timber and timber products, suffer from a number of major structural deficiencies which amount to a serious handicap when it comes to surviving in international competition, and which prevent forestry from playing its full part in the economic development of the Community. In the first place, there is a fairly marked north-south divide.

NORTH-SOUTH DIVIDE

28. There is enormous diversity within the Community as a result of the natural conditions to which woodland is subject and the other sectors with which it competes, notably agriculture. Very broadly, a division can be made into north and south.

    - The northern woodlands generally consist of a limited number of species (often one only). Conifers predominate. They are managed to provide a high timber yield and thus have a mainly productive role. They produce structural timber (sawn timber) and industrial timber for the manufacture of chipboard/fibreboard and paper. In many regions this activity is quite distinct from agriculture. Like most of the forests of the northern hemisphere, those in the north of the Community are suffering widespread dieback which the experts agree is mainly due to atmospheric pollution.

    - The southern forests, made up principally of those in the Mediterranean areas of the Community, are different in the kinds of species which predominate, and in their management (structure, aims and methods). Most of the trees are broadleaved species that are not dedicated principally to producing wood and are thus not usually organized as timber forest. In general, such woodland consists of stunted trees or residual scrub vegetation ("maquis") remaining after grazing or burning off. Overall, it has a major role to play in protecting the soil and regulating water runoff and is closely bound up with agricultural activities. Frequently, it provides shelter and forage for livestock. It is particularly vulnerable to fires.

WOODED AREA AND FORESTRY AREA

29. With forestry competing on unequal terms with agriculture for the use of land, forest cover in the Community is on the whole lower than in many other parts of the world (1/5 as against 1/3).

    Tree cover varies very widely from one country to another, however. It accounts for less than 10% of the land area of several Member States (Ireland, Netherlands, United Kingdom) but is in excess of 25% in some others (Luxembourg, Germany, France) as well as in Portugal and Spain.

TABLE I

WOODED AREA AND TIMBER PRODUCTION IN THE COMMUNITY IN 1981 (1)

Member States	Total wooded area (2)				Raw timber production			
	Total			ha per capita	Total			m3 per ha of wooded area
	'000 ha	%	%		'000 m3 excl. bark	%	%	
Belgium	616	1.6	0.9	0.06	2 433	3.0	2.4	3.94
Denmark	493	1.3	0.7	0.09	2 030	2.5	2.0	4.11
Germany	7 207	18.9	10.6	0.12	29 439	36.5	29.0	4.08
Greece	5 755	15.1	8.5	0.59	2 482	3.1	2.4	0.43
France	14 765	38.8	21.7	0.27	28 828	35.7	28.5	1.95
Ireland	386	1.0	0.6	0.11	808	1.0	0.8	2.09
Italy	6 385	16.7	9.4	0.11	9 037	11.2	8.9	1.41
Luxembourg	82	0.2	0.1	0.22	295	0.4	0.3	3.48
Netherlands	309	0.8	0.4	0.02	976	1.2	1.0	3.16
United Kingdom	2 145	5.6	3.2	0.04	4 315	5.4	4.3	2.01
EUR (10)	38 143	100.0	///	0.14	80 643	100.0	///	2.11
Spain	26 706	///	39.3	0.70	13 041	///	12.9	0.49
Portugal	3 018	///	4.6	0.31	7 580	///	7.5	2.44
EUR (12)	67 957	///	100.0	0.21	101 264	///	100.0	1.49

Source : EUROSTAT, Basic statistics 1984.

(1) The figures involving areas relate in most cases to years earlier than 1981.

(2) These figures embrace all land stocked with trees and shrubs that is not used for agriculture or other non-forestry activities. This covers poplar groves, plantations of chestnut and walnut trees primarily for the production of wood, Christmas tree plantations, and nurseries planted in woodland for the own use of forestry enterprises.
The figures do not include plantations of fruit trees, areas containing isolated trees, parks and gardens, rows of trees of minor importance covering a small surface area, commercial forest nurseries not sited on forest land, and heathland. "Wooded area" comprises forest land proper (areas of woodland greater than 0.5 ha with tree cover greater than 20%) and other wooded areas (wooded area less than 0.5 ha with tree cover less than 20%).

In the Community as currently constituted, France and Germany are the major forest countries and by far the most important. Together they account for almost 60% of forest area and over 70% of production of timber in the rough. After enlargement, these two countries will be joined by Spain to make up the three giants. Between them, they will account for a little over 70% of both wooded area and timber production in the Community of Twelve.

FOREST OWNERSHIP

30. The wooded area of the Community is also distributed in widely different ways in the Member States between several types of ownership: the State, public bodies and private individuals. The number of woodland estates in the present Community, excluding Greece for which no data are available, are roughly estimated as follows (cf. Tables X and XI):

- 15 000 state-owned forests
- 35 000 public forests which are not state-owned but belong to public bodies
- 4 million to 5 million private woods and forests owned by individuals but excluding woodland on farms.

The average sizes of properties in these three categories are about 500 ha in state-owned forests, 120 ha in forests owned by public bodies and 3.5 ha to 4.5 ha in private woodland.

31. The average size of private forest properties is therefore very small. Very often, too, these properties are fragmented into several separate tracts, making management inefficient.

Woodland ownership in the Community hence presents an extremely mixed picture in terms of both type and size.

TYPES OF TREES

32. Just over half (56%) of "closed" forest in the present Community consists of hardwoods. The remainder (44%) are softwoods. Compared with tracts of woodland elsewhere in the northern hemisphere (see Annex III) the Community's woodlands would seem overall to be well-balanced. The accession of Portugal and Spain will readjust the balance even more precisely, with the corresponding percentages being exactly 50% each.

33. Individual Member States however (see Annex VI) tend towards either broadleaved species or conifers. The forests of the northern countries (Denmark, Germany, Ireland, Netherlands, United Kingdom) are biaised towards softwood production (pines, firs, spruce, larches, etc.) while the forests of the more southern countries (France, Greece, Luxembourg, Italy) are more geared to hardwood production (oak, beech, maple, etc.).

34. The search for increased yields has induced foresters in several Member States over recent years to practise or counsel the planting of softwoods where there has been clear-felling of hardwoods. As a result, softwoods have gradually encroached on the broadleaved species. More recently, however, under pressure from environmentalists, steps have been taken in several Member States (United Kingdom, Luxembourg) to slow down this trend and bring back the planting of broadleaved trees.

WOODLANDS ON FARMS

35. There are close links between agriculture and woodland in the Community, not only at macroeconomic level but also at the microeconomic level, especially on farms.

A relatively large proportion of the wooded area of the Community - over 9 million ha or about a quarter - is to be found on agricultural holdings. This figure comprises all the land belonging to farms which is stocked with forestry species of trees (including poplar groves, tree nurseries for a holding's own use, windbreaks occupying a substantial area, etc.).

36. Not all the farms in the Community of course are involved. In 1980 in the Community of Nine, some 1.7 million holdings (almost 30%) included woodland.

The relative share of farms with woodland varies considerably from country to country. It is less than 5% in Belgium, Ireland and the Netherlands but is over 40% in Germany and France and more than 50% in Luxembourg.

The average area per holding occupied by woodland in 1980 was 5.4 ha (Community of Nine). Broken down by country, the lowest figures were 2.1 ha in Belgium and 3.7 ha in Ireland and the highest were 7.5 ha in Denmark and 8.7 ha in the Netherlands.

37. The more even the balance between woodland and farmland, the closer the link is between silviculture and agriculture on these holdings. Naturally there is no question of balance where the woodland belonging to a farm is only an insignificant percentage of the total area. This is the case in Belgium, Denmark, Ireland, the Netherlands and the United Kingdom, where the proportion is less than 5%. There is a better balance in other countries like Luxembourg and France, but above all in Germany and Italy. Farm woodland in the latter two Member States represents 11% and 21% respectively of the total area of the holdings concerned; many of these farms are hence agri-silvicultural in character.

38. Woodland on agricultural holdings normally shows two main features:

- it often occupies the less fertile land on the farm where ploughing is difficult and where grass does not thrive, or the land furthest away from the main farm buildings;

- it is often badly maintained if not completely neglected, even where labour is available for carrying out forestry work, because for mainly economic and financial reasons workers are not encouraged to undertake this kind of activity.

39. Productivity in agriculture has risen considerably faster than in silviculture. Supported as they are by agricultural policies, farmers in many regions do not generally have to rely on their woodland to supplement their incomes. At most, they consider their wooded land as a source of finance when there are heavy investments to be made in the farm or their household. In a sense, therefore, woodland is regarded as a savings bank. A large majority of the holdings in the Community which possess woodland fall into this pattern.

    Against this, there are other farmers who take a very different attitude and manage their woodland as a form of small-scale forestry in intimate association with agriculture. This type of holding is to be found in particular regions of the Community, mainly the foothills and middle reaches of mountain uplands. When the economy is flourishing, this combination of agriculture and silviculture or of agri-silviculture coupled with livestock grazing is a guarantee of full employment and income security. In periods of recession, especially when both agriculture and forestry activities are affected simultaneously, these farms appear to suffer more than others. The very spread of their activities seems to become a handicap in the drive for higher productivity.

40. Farms containing woodland are only rarely analysed in terms of the management of both activities. The Community's Farm Accountancy Data Network (FADN) does not include separate figures on such holdings. However, a few studies have shown that the incomes earned by such farms may, all other conditions being equal, differ substantially from the income of similar holdings devoted specifically to agriculture.

41. Among the most typical silvicultural enterprises on agricultural holdings, the cultivation of poplars deserves a special mention. This is a widespread type of activity in lowland regions, especially river valleys.

    Poplars are often combined with grazing normally as a combined enterprise. Poplar cultivation in Germany, Belgium, the Netherlands and the United Kingdom (the only countries for which data are available) accounts for some 68 000 ha. It is also well-developed in some parts of France (the valleys of the Somme, Seine, Aube, Garonne and in Italy (Po Valley). Community production in 1980 (excluding Germany) was 5 047 000 m^3 without bark; this was a fairly usual annual volume.

Progress in forestry research on the poplar resulted in a wave of enthusiasm for poplar cultivation in the 1960s; the growth cycle was speeded up, market conditions were favourable and there were changes in legislation on tenant farming, all of which encouraged many landlords to plant the species. In some very fertile regions the crop even became competitive for a time with other agricultural crops such as maize (Po Valley).

LINKS BETWEEN FORESTRY AND OTHER SECTORS: THE TIMBER INDUSTRY

42. The development of forests and woodland depends on other sectors both upstream and downstream.

Improved productivity relies on research which, in this area, is often underdeveloped. It also relies on the quality of work done by nurserymen, as well as on the efficiency of the services required by woodland owners if they are to manage their estates properly.

Other elements are the timber growers (where they carry out their own felling), merchants, sawmills and the industry which processes forestry products. This chain of many interdependent links constitutes the "timber industry". The strength of the chain depends on the strength of each link, above all the weakest of them. This is why most of the Member States have concerned themselves, in many different ways, with monitoring the industry in order to identify bottlenecks which are likely to weaken it and prevent it from being successful.

43. Some of the wood produced in forests is not exploited. The volume of wood estimated to be left unused is 20% to 30%. The reasons for this under-utilization are varied, but a common factor is that the operations to recover this residual volume would not be profitable because of the costs involved as well as the selling price of the products. For similar reasons, a further proportion of wood is not always extracted at a suitable time. For instance, problems are caused by not carrying out initial thinning, especially among softwoods, because demand for the products is not sufficient to permit the cost of extraction to be met. As a result stands are not tended as efficiently as they should be, which in turn affects the output of the industry as a whole.

FORESTRY ADMINISTRATION

44. Forests and woodland fall within the remit of the minister of agriculture in Germany, Italy, Greece, the Netherlands, France and Ireland. In France they come under a minister of state (ministre délégué) for agriculture and forests and in Ireland a junior minister of forests and fisheries.

In Denmark and Luxembourg the minister of the environment is responsible. In Belgium and the United Kingdom forests come under regional executives (see Annex XX).

45. The management of public forests and woodlands (owned by the State or other public bodies) also varies widely among the Member States; there may be a separate administration as in Luxembourg and the Netherlands or a national public body like the "Office National des Forêts" (ONF) in France and the Forestry Commission in the United Kingdom, or again a series of regional administrations (Belgium, Italy).

Various trade associations, constituted in differing legal forms, support private owners in managing their forests in several Member States (Germany, France, etc.).

46. The timber market, in contrast to markets in agricultural products, is in general not highly structured. Efforts are being made in many cases to bring together buyers and sellers (group sales) but timber is sometimes sold uncut as in France, Belgium and Italy and sometimes "ex site" as in Germany.

Despite some progress in organizing the timber market, the situation is still far from perfect and makes it difficult for productivity gains made by some sections of the industry to benefit the industry as a whole.

STATE AIDS

47. The forestry sector also receives government assistance to help it develop. The earnings from investment and other activities are often more attractive in other sectors, added to which is the more immediate availability of non-forestry income compared with the long wait for a return from forestry. This has meant that Member States wishing to expand forestry have had to provide adequate incentives. All the Member States attempt to make forestry more attractive by giving support in the form of subsidies or tax relief or both.

However, public spending on forestry is much lower than on agriculture. Depending on the Member State, it varied in 1980 between 0.2% and 11.2% of comparable government expenditure on agriculture.

CHAPTER III

THE MAIN PRODUCT: WOOD

48. Wood is far and away the basic forest product, making up the bulk of final output and providing an essential raw material for the forest-based industries (sawmills, chipboard, fibreboard, plywood, paper). Timber is the cornerstone of the forestry economy. The production of timber, its use, the balance between supply and demand, the timber market itself, processing and international trade are all aspects influencing the commercial viability of the forestry sector and the timber industry. It is not possible, therefore, to attempt an objective assessment of the forestry situation without analysing, however summarily, the timber economy.

PRODUCTION

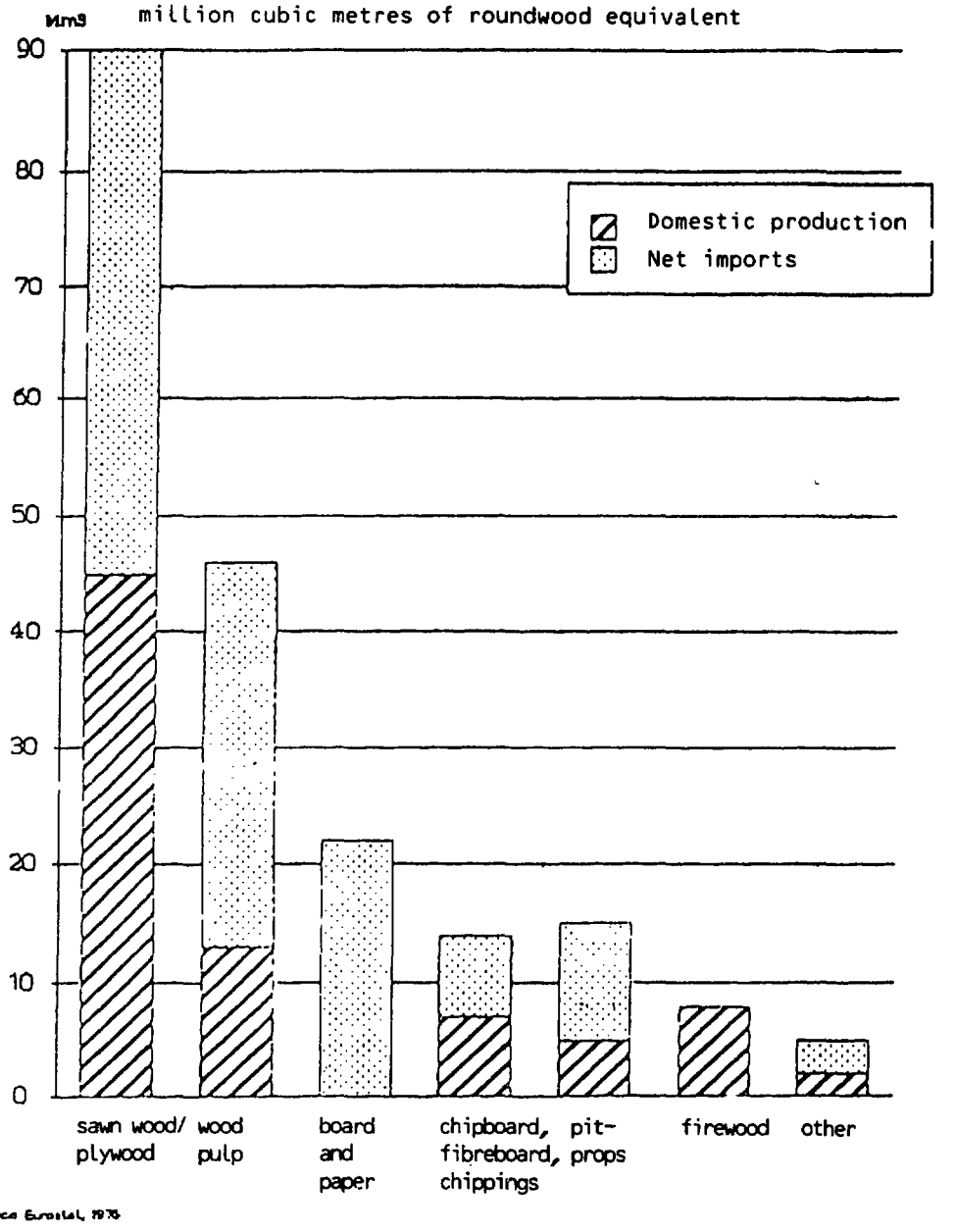
49. The Community's present output of timber is around 80 million cubic metres a year. It is difficult to predict future trends since a complete forest inventory has not been carried out yet in all the Member States. Production in most countries will probably increase greatly over the next few decades as a result of the widespread plantings, of conifers particularly, immediately after the Second World War. France, Belgium and the United Kingdom implemented very vigorous afforestation programmes during that period. It is forecast, for example, that French output over the next fifteen years will grow by 50% from current levels, rising from 40 million m^3 to 60 million m^3. Ireland, too, was the scene of heavy planting in the 1950s and expects its timber production to expand by 40% up to the end of the century. The Netherlands is poised to adopt a highly ambitious programme intended to meet national needs to a much greater degree than at present.

In Denmark, Germany and Luxembourg the area under forests has been more or less constant and any increase in timber production would have to come from improved yields from existing stands. Although Italy and Greece have initiated major afforestation programmes in recent years, their thrust has been somewhat blunted by the disappearance of many agri-silvicultural holdings and an intensification of agriculture on the remaining farms, so that the overall situation does not seem likely to change fundamentally. Forest fires have also taken a heavy toll in these countries.

Consequently, there is every likelihood that the Community as a whole will see a marked increase in softwood production over the next 20-30 years. This prospect will probably help to reverse to some extent the trend towards growing Community dependence on external suppliers during the 1970s (see Annex XII). The enlargement of the Community should also contribute overall to this turnround.

Apparent consumption of timber
in the Community

(Domestic production plus net imports)



Source Eurostat 1976

CONSUMPTION OF TIMBER

50. According to forecasts drawn up by experts from the Member States for the period up to the year 2000 and beyond[1], consumption of timber in the Community of Nine will probably see annual growth over the next few years in the order of:
1% for sawn wood (0.9%-1.8%)*
3.2% for chipboard and fibreboard from wood (1.5%-2.6%)*
2.3% for board and paper (2.2%- ?)*
(2%) for firewood (1.0%-2.8%)*

By contrast, demand for railway sleepers, plywood and other industrial roundwood is likely to remain constant. Consumption of chemical pulp, finally, will probably fall by 10% every ten years up to the year 2000.

If these forecasts turn out to be correct, and they are still being worked on, this would mean that the Community of Nine would require the following quantities, on top of the volume consumed in 1980, between now and the year 2000:
From 2 million to 6 million m^3 of firewood (10-30% of present consumption)
About 18 million tonnes of board and paper (60% of present consumption)
From 10 million to 22 million m^3 of sawn wood (10-40% of present consumption)
From 7 million to 14 million m^3 of wood for fibreboard and chipboard (33-66% of present consumption).

In addition, forest biomass in the Europe of 10 utilisable for energy (wastes and residues, excluding heating wood statistically inventoried) represents some 16 M tonnes of petrol equivalent per annum (2).

No comment is necessary on these figures; they indicate the efforts which will be required to meet the growing demand for timber in the 1990s and into the next millenium.

SUPPLY AND DEMAND

51. The key question is whether the forecast growth in timber consumption in the Community can be met by increased production from Community forests, in view of the fact that future timber supply from other parts of the world, particularly of tropical woods, is likely to stay steady or even fall.

The answer of the experts referred to above was that to meet expanding demand over the next 15 years, on the assumption that imports will stay at present levels and each Community country keeps its relative position, productivity in the Community will have to rise by the following amounts by the year 2000, based on a "low" scenario (a) and a "high" scenario (b).

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1 Timber Committee (Economic Commission for Europe and FAO).

* Derived from two sets of assumptions, one more optimistic and one less optimistic.

2 This biomass could be used directly as burnable wood (after compaction, pelletisation or chipping) or produce derived combustibles : gas, charcoal or wood-oil by pyrolysis or gasification.

- Timber for sawing	a : 23 %	b : 49 %
- Wood for chipboard and fibreboard	a : 49 %	b : 80 %
- Pulpwood	a : 50 %	b : 42 %
- Board and paper	a : 54 %	b : 57 %

These increases in Community internal production, needed to ensure continuing supplies of timber in the event that imports do not expand, would seem difficult to achieve in the case of most of the product groups considered, despite the prospects for increased output referred to in section 49, unless considerable efforts are made to develop timber growing.

52. In fact, it is optimistic to assume that the level of imports will remain constant; while the predictions of the 1960s and 1970s that a timber shortfall was imminent have not been fulfilled, tropical forests continue to shrink at the alarming rate of 11 million ha a year. There is a real fear that future timber supplies, especially from tropical regions, will become scarce from as early as 1990 onwards and that this shortage will last until 2050 in the case of some if not most of the products considered.

It is known that some valuable species have already vanished from tropical forests, that others are close to disappearing and that in the long run the remaining species will probably not support more than a meagre supply unless drastic conservation and planting measures are introduced immediately.

MARKETING

53. The timber market in the Community has in general not benefitted so far from the modern marketing and selling techniques which have made other, better organized markets more efficient.

Methods of selling wood follow a pattern derived from deeply ingrained local and national custom, and this does not always square with good forestry management. However, the advanced organization of the timber market in some Member States does ensure market "transparency" and helps to transfer productivity gains from one link to another at the forestry end of the timber industry's chain. The most efficient national market structure could probably serve as a model for improving the situation as much as possible throughout the Community.

The lack of common standards for certain types of product is a further brake on the free circulation of goods, with the result that there is little stimulus to competition and commercial efficiency in the sector.

PROCESSING (WOOD AND WOOD-BASED PRODUCTS)

54. Forest-based industries are not evenly distributed as between the Community and neighbouring countries in Europe, though this is not always a matter of the volume of timber supplied: there is considerable variation as between product groups.

55. In the case of sawn timber, there is generally a fairly close fit between the volume of forest output and sawmill capacity at regional level. Sawmills constitute part of the first stage of conversion and are close to timber growing itself, often integrated with it. Sawmills are generally of modest size, more like a craft industry, not unduly vulnerable to economic recession. Changes in the sawmill industry therefore come relatively slowly, but this means also that it lacks the flexibility to adapt to:

- fluctuations in world prices, which may force temporary modifications to production schedules;
- large supplies of timber and timber waste as a result of sudden and extensive damage to trees;
- favourable export conditions; here again, the lack of generally accepted standards is bound to be a handicap.

The Community in recent years has not only continued to import Scandinavian sawn timber but has also had to accept a growing involvement of Scandinavian capital in the distribution channels of the Community market.

56. Production of pulp for paper-making calls for heavy investment and a large volume of rough inputs (0.5 million m^3 roundwood per production unit), so a wide catchment area is needed to obtain sufficient raw material.

The extended tracts of forest in the United States, Canada and Scandinavia are able to supply a sufficient volume of timber within a reasonable radius while in the Community, with some exceptions, the area serving a wood-processing plant on this scale is so great that the cost of transporting the raw materials becomes prohibitive.

Concentration within the industry beyond the borders of the Community, above all in Scandinavia, has also sucked in raw materials from neighbouring fringe areas of the Community (North Germany, Denmark, Scotland).

57. The industry manufacturing chipboard/fibreboard and board and paper, on the other hand, is more highly concentrated in the Community, with capacity equal to double the volume of wood extracted for these purposes within the Community. The reason is that this industrial sector processes a considerable volume of imported roundwood and pulp. After a difficult period a few years ago, it has been undergoing major expansion mainly as a consequence of currency exchange factors (the rate of the US dollar).

This has enabled the sector to modernize as well as expand, with new plant being opened in the Community.

58. The share of the Community (without Greece) in total capacity in continental Europe (excluding the USSR) is as follows:

- sawn timber: 28%
- pulp: 17.3%
- chipboard/fibreboard: 46.1%
- board and paper: 46.5%

For comparison, the Community accounts for only 24.4% of industrial timber extracted.

This means that the Community has more capacity than it needs to process its own timber production. However, this is only apparent overcapacity; it is explained by the fact that the Community is an importer of timber and should not be taken to mean that the Community industry would be able to cope effectively with the increased volume of wood which its forestry industry will be bringing to market in the future. In the first place, processing capacity is out of step with the volume of domestic production and consumption and, secondly, present plant is usually located close to major import routes (particularly ports) and not necessarily in proximity to the Community's main trachts of forest. Furthermore, present plants are already unable to process from scratch the volume of raw materials corresponding to Community requirements as evidenced by the large proportion of imports of finished and semi-finished products (especially pulp for paper).

EXTERNAL TRADE

59. Wood and wood products make up 3.3% of the Community's total imports and 0.4% of exports.

The Community's external trade balance in wood and wood products shows a large deficit of almost US$ 18 000 million. Among the Community's major world trading partners, only Japan finds itself in a similar position (see Annexe XIX).

Exports amount to 10% of imports in the Community as presently constituted. After enlargement, with the addition of Portugal as the only Member State which is a net exporter of timber and forest-based products, this will rise to 14%.

60. To cover Community requirements up to the year 2000, imports of wood and wood products will have to grow by:

- 31 million m^3 assuming reduced demand and heavy recourse to the Community's own forest resources;
- 66 million m^3 assuming strong demand and reduced felling.

This increase corresponds to between a quarter and half of net imports during the 1970s.

RECOVERY OF WASTE WOOD AND RECYCLING

61. The forest-based industry in the last two years has seen considerable efforts to recover unused raw materials and recycle waste materials. Two activities in particular have been developed: exploitation of refuse wood and the recycling of waste paper.

The rate of recovery of wood refuse for household use rose from 45% around 1970 to some 65% around 1980 in the Community as constituted then. There are still productivity gains to be made, especially in view of the significantly higher rates attained by some Member States. Increased recovery of refuse wood is commercially attractive because it is a less expensive raw material than roundwood. Accordingly, one can expect that wood refuse will be even more sought after in the future, in particular by pulp mills, as technical progress renders it more and more acceptable in the manufacture of wood pulp

62. Striking progress has also been made in recycling waste paper, as the figures below indicate:

SOURCES OF INPUTS TO THE COMMUNITY PAPER INDUSTRY*

	1957	1973	1983
Timber	31 %	23 %	21 %
Waste paper	30 %	39 %	43 %
Imported pulp	23 %	33 %	33 %
Straw and rags	16 %	5 %	3 %

*not including Greece

Source: European Confederation of Pulp, Paper and Board Industries

63. Waste paper has now become the principal raw material for making paper in the Community; thanks to recycling, it makes up 43% by volume of the raw inputs used in manufacturing board and paper. For several years, the industry was able in this way to meet increased demand without recourse to wood from the Community's forests. In fact, during this period the share of raw timber in paper inputs actually went down considerably.

64. In this instance therefore scientific and industrial progress, which elsewhere has helped to damage woodlands, has made it possible to safeguard them. Apart from the economic benefits, recycling is of great value environmentally.

At the same time, it is worth considering what impact the recycling of waste paper has had on the exploitation of forest resources. The sizeable reduction in the extraction of roundwood for the paper industry has helped depress the timber market. Landowners have not been encouraged to carry out the thinning which is crucial to the future of their stands. There is reason to fear that the current lack of strong demand for pulpwood will in the longer term reduce the value of some forest stands because they have not been tended at the right stage.

Productivity gains from the recycling of waste paper seem at the moment to be levelling out; in addition, the cost of collecting waste paper is rising as new sources are opened up that are increasingly expensive to exploit. In several Member States the proportion of waste paper recovered for recycling has reached 40 %, a figure generally considered the maximum possible with current technology and prices. It is to be hoped that demand for roundwood from the paper industry will soon pick up again and create an incentive to thinning, provided domestic pulp can remain competitive with imported pulp.

CHAPTER IV

NON-WOOD FOREST PRODUCTS

65. Apart from the production of timber itself, forests provide a number of products and services some of which are commercial. These products often represent a significant supplement to the final output of forestry.

The value of these products (cork, tree seed and seedlings, game, etc.) ought to be relatively well-known considering they are covered by the common agricultural policy. In actual fact, separate statistics are seldom compiled. There are also other output components on which there are no figures at all and for which estimates are rarely given because they are difficult to make. Examples are shooting and the use of forest and woodland for recreation and tourism. Two of these non-wood products are looked at more closely below : - cork
- shooting and game.

CORK

66. For climatic reasons, but also as a result of human action, world cork production is largely concentrated in the Western Mediterranean.

Many attempts have been made to establish the cork oak outside the region (United States, Australia, Greece, Japan, USSR, Turkey, Argentina, Uruguay, South Africa, Bulgaria, Chile) to meet expanding demand but so far they have not significantly altered the geographical centre of gravity.

An FAO estimate in 1959 put the extent of cork oak plantations throughout the Mediterranean at 8 million ha; this has now been reduced to 2.5 million ha.

Cork growing in the Community of Ten covers only 200 000 ha. This figure will be increased seven times to 1 400 000 ha when Portugal and Spain join. These two countries are the largest cork producers in the world.

67. Production levels vary widely from one season to the next. The fluctuations in annual output profoundly shape the cork industry. Although cork is not a perishable product, storing it is a very expensive undertaking.

68. It is calculated that Europe accounted in 1980 for about 77 % of the world cork market and that the Community alone bought 38 %, EFTA 22 % and Comecon countries 12 %.

The cork industry used to be concentrated in a few industrialized countries which were major consumers but not producers. The United States, for example, processed almost half the world crop during the 1950s. Around the 1960s, in particular because of the widening socio-economic gap between the major consumer countries and the producer countries and because of transport costs, the cork industry transferred to the producers. Portugal especially, but Spain as well, have benefitted from the return of an industry which had previously flourished on the other side of the Atlantic.

WOODLAND SHOOTING AND LARGE GAME

69. Hunting and shooting are often closely associated with the woodlands and in some countries and regions are of considerable economic importance.

The present Community has about five million hunters (more than seven million after enlargement to include Portugal and Spain), a large proportion of whom are involved in woodland shooting.

70. Game shooting is often associated with forestry activities and would often not be possible without the presence of woodland; it is of considerable economic importance, not only because of its direct contribution to the regular income of forest owners and the meat it supplies to the game market, but also because of its knock-on effects in various sectors, above all dog breeding, gun manufacture and even pavement manufacture.

For the Community of Ten, total spending on shooting by hunters is put at some 3 500 million ECU annually[1]. It is also estimated that between 80 000 and 85 000 jobs (16 per 1 000 hunters) depend on this activity.

71. The total amount of game shot each year in the Community is approximately 80 000 tonnes (0.5 % of all meat consumed), in value terms around 400 million ECU. A major share of this game is to be found in woodlands.

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[1] The figure is three million ECU if gun dogs are left out.

CHAPTER V

EMPLOYMENT AND PRODUCTIVITY IN THE FOREST-BASED INDUSTRIES

72. Comparable macroeconomic data on productivity and employment are even more difficult to obtain than figures on production and consumption. The statistics available generally relate to the years 1970-80. They show an overall trend towards greater labour productivity and capital intensity but a decline in capital return.

73. In terms of value added, Germany has by far the largest complex of forest-based industries in the Community. In 1980 it had a turnover of US$ 4.6 million (1970 prices), twice the size of this sector in the United Kingdom or France and two and a half times that of Italy.

The greatest addition of value in any Member State in the wood and wood-products industry is to be found in the United Kingdom (US$ 650 000) and in Italy (US$ 440 000). In furniture manufacturing, the Member States rank in order of value added as follows : United Kingdom (US$ 690 000), Italy (US$ 640 000), France (US$ 520 000) and Belgium (US$ 360 000). In pulp for paper-making, Germany again leads with a value added of US$ 1 530 000 in front of the United Kingdom (US$ 1 320 000) and France (US$ 310 000).

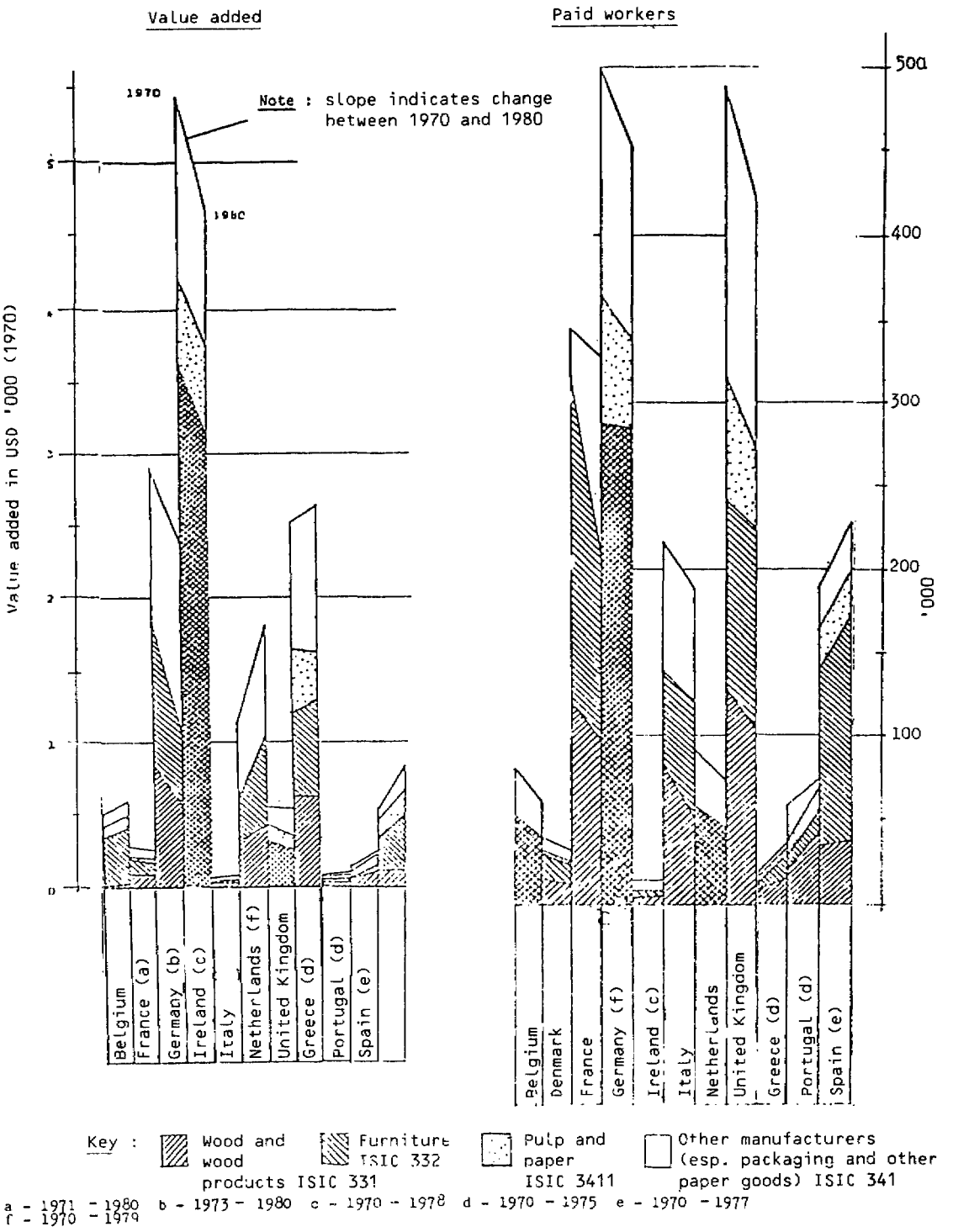
EMPLOYMENT

74. The total labour force in the Community's forest-based industries around 1970 was about 1 800 000. This had fallen to about 1 600 000 by 1980. The twelve Member States which will make up the Community from 1 January 1985 had about 1 900 000 workers in the various sections of the timber industry five years ago.

Numbers vary widely between Member States. The Federal Republic of Germany (450 000) and the United Kingdom (420 000) have the largest workforces in these sectors. They are followed, in decreasing order of size, by France (330 000), Spain (220 000) and Italy (190 000).

Forestry activities generate employment over the longer term. The experience in the 'Landes' in France, where a pine forest of a million hectares has been built up from nothing, making it the largest of its type in Europe, suggests that in the long run a well-managed forest generates two jobs per 100 ha of woodland somewhere in the timber industry.

FOREST-BASED INDUSTRIES



a - 1971 - 1980 b - 1973 - 1980 c - 1970 - 1978 d - 1970 - 1975 e - 1970 - 1977
f - 1970 - 1979

Source : FAO/ECE - Timber Committee, Trends and prospects in timber in Europe to the year 2 000 and beyond (taken from TIM/EFC/ACR R 15)

75. The accompanying graphs show that value added in the timber industry has followed different patterns in different Member States over the last decade. By contrast, the downward trend in employment has been fairly general save in the three Member States which did not belong to the Community during the period.

PRODUCTIVITY

76. The capital invested in the forest-based industries has also increased generally by large amounts but at different rates according to country and sector, as shown by the table below.

AVERAGE ANNUAL CHANGE IN CAPITAL PER HEAD OF WORKFORCE AND IN THE PRODUCTIVITY OF CAPITAL AND LABOUR IN SIX MEMBER STATES IN 1970-76

MEMBER STATES	ANNUAL AVERAGE CHANGE (%)					
	Capital stock per paid employee		Productivity of capital		Productivity of Labour	
	Wood + furn.	Paper + printing	Wood + furn.	Paper + printing	Wood + furn.	Paper + printing
Belgium	+ 10,3	+ 8,7	- 5,5	- 3,5	+ 3,9	+ 4,4
Germany	+ 6,1	+ 8,3	- 1,2	- 3,5	+ 4,7	+ 4,7
France	+ 5,6	+ 6,0	- 2,0	- 1,2	+ 3,0	+ 4,6
Italy	+ 5,3	- 1,0	+ 1,1	+ 1,4	+ 6,6	+ 2,1
Netherlands	+ 7,0	+ 6,3	- 2,1	- 1,6	+ 4,8	+ 4,6
United Kingdom	+ 6,2	+ 5,4	- 2,2	- 1,8	+ 3,7	+ 3,4

Source : FAO - ECE, Timber Committee

To summarize, the figures indicate for the period under review that :
- capital stock per paid employee has increased and productivity of capital has fallen in all countries except Italy;
- the productivity of labour has increased in all countries.

CHAPTER VI

DAMAGE TO FORESTS IN THE COMMUNITY

77. The forests of the Community are subject to attack from a variety of biotic and abiotic sources, leading to considerable damage to whole tracts of forest. This means a loss of timber output which Member States can still afford and a deterioration of the environment which is sometimes irreversible.

Such attack can be either permanent in its effects, in the form of "acid rain" and forest fires, or sudden but more generally of short duration, for example gales or attack by known pests.

The two factors which are currently causing serious damage throughout the Community are :

- acid depositions
- forest fires.

ACID DEPOSITION

78. For some years now, extensive damage to trees has been observed in Europe. Surveys show that nearly seven million hectares of woodland in the Community are very seriously affected in varying degrees by the dieback generally attributed to "acid rain", an ill-defined term that is widely applied to the various forms of atmospheric pollution. About 230 000 ha of forest, in fact less than 0.2 % of the total woodlands of Europe (excluding the USSR), have suffered irreversible damage with the tree cover either dead or dying.

The damage has been concentrated in Central and Northern Europe. The ten countries in which it has been recorded, in declining order of area affected, are the Federal Republic of Germany, Czechoslovakia, Poland, Switzerland, Austria, Hungary, France, the Netherlands, Luxembourg and Belgium. In some of these countries, forest dieback is considered a national disaster.

In the Federal Republic of Germany, 50 % of the forest area is now thought to be affected. Trees are dead or dying over 1.6 % of the total area. The damage is not distributed evenly throughout the country. Some regions, like Lower Saxony, are only minimally involved while others, such as the Black Forest and the Bavarian Forest, have sustained very serious damage. This blight seems to have gathered momentum in Germany since the beginning of the 1980S. Reports of damage in other Member States have been coming in only since 1983 (see Annex XXIV).

79. The damage caused to trees by "acid rain" takes many different forms. Where it is not too acute, pollution may leave a tree alive but vulnerable to other types of attack, biotic or abiotic, which may kill it off. In dry summers, trees suffering from dieback may fall victim to drought.

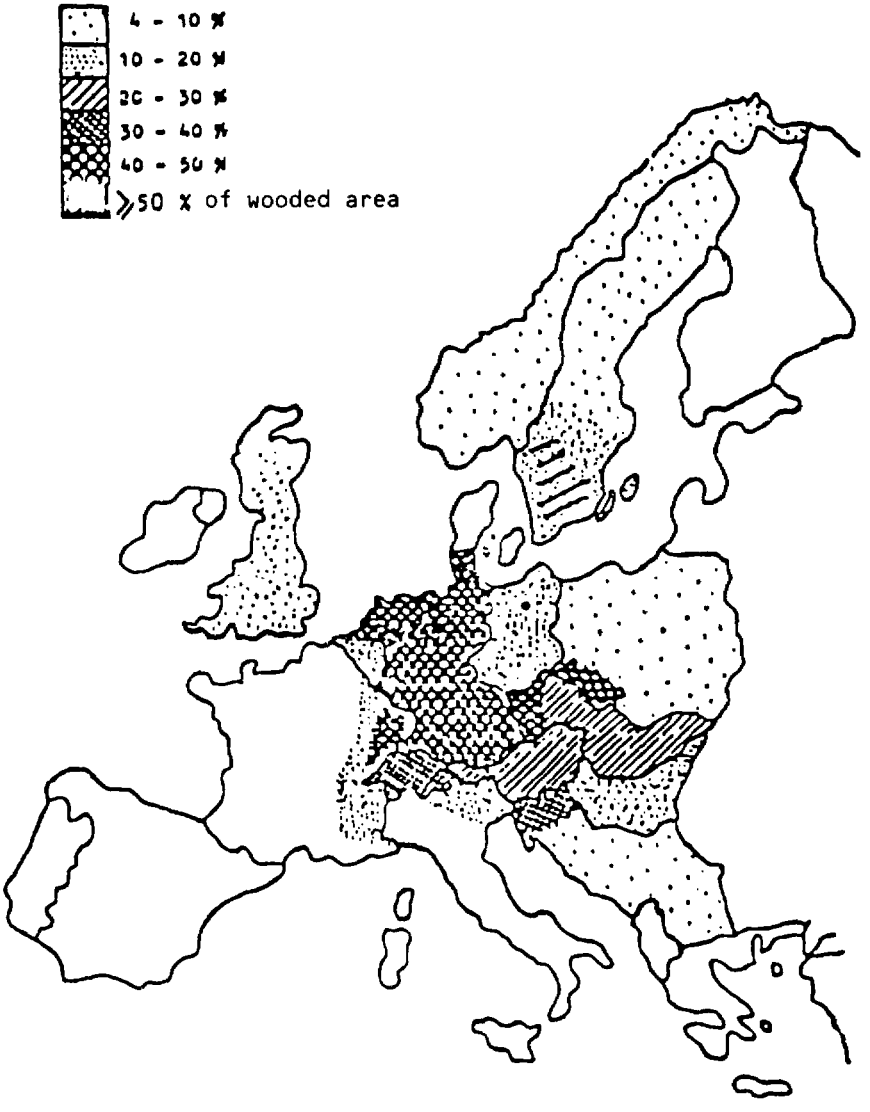
    Insects may prefer ailing trees for laying their eggs. Not only do the feeding and emerging pupae damage the timber but the insects may also be vectors for fungal diseases which they introduce under the bark. Damaged trees are in any case more vulnerable directly to some types of fungus which can not only kill them but also render the wood unusable.

80. Death caused exclusively by pollution or pollution in combination with abiotic stress such as drought does not impair the intrinsic quality of the timber, which is as healthy as timber felled in the course of normal rotation. Here the problem is the possible appearance of a large quantity of timber on the market, with the danger of prices collapsing. Many Länder in Germany have already halted their normal cutting programmes and are only carrying out emergency felling of stands. The felled timber has to be stripped of bark in any case to protect it against infestation by various insects and then treated in most cases to stop it being attacked by fungi and yet other insects. All these operations give rise to considerable extra costs which cannot be passed on when market, particularly if prices are falling.

81. So far, it has proved possible at national level to absorb timber felled for plant health reasons without seriously disrupting the timber market. It is foreseen however, even over the short term, that forest dieback will have a decided impact on the market. While it may well be possible to deal with further emergency fellings by introducing new measures to adapt national felling schedules, disruptions over the medium and long term may well call for new types of intervention.

    A careful watch will thus have to be kept not only at national level but also at Community level, since the damage caused by pollution is no respecter of frontiers and the future repercussions may affect the Community economy as a whole.

POLLUTION DAMAGE TO FORESTS IN EUROPE



Source : material gathered by the Forest Owners Association of Rhineland Palatinate.

FOREST FIRES

82. While "acid rain" damage remains in some respects an unexplained phenomenon, forest fires are only too well known. The causes and effects of fires have long been fully elucidated.

Throughout the Community, but particularly in the Mediterranean regions, the scourge of forest fires causes considerable damage to the economy and the environment. In the 12-country Community more than 250 000 ha fall prey to fire every year, leaving behind the dismal spectacle of a charred landscape which in some cases might never produce again and will succumb to erosion.

In 1981 close to 200 000 ha of woodland in the present community were ravaged by fire, 500 000 ha if Portugal and Spain are included (see Annex XXIV).

During this year (1985), with the season of fire hazard not yet over as these lines are being written because of the continuing autumn drought, 784 218 ha have suffered from fires, including 363 786 hf of closed forest (see Annex XXV). In all 47 people have died. Five aircraft have been lost and a large number of ground vehicles destroyed.

83. All the Member States concerned have undertaken unusual efforts to provide advance warning of and to combat fires, which are so expensive to the community at large. A sober appraisal of the cost has to take into account not only the loss of forest products but also the damage to the environment resulting from fires, and the considerable sums spent on putting them out. It is not easy to make an assessment and the figures must be treated with caution. However, a conservative estimate would put the cost of fires to all the Member States (plus the two new members) in an average year at more than 500 million ECU.

Preventing and fighting forest fires could, without doubt, be made more effective still in several of the countries involved if they had a better infrastructure. Furthermore, when national resources can no longer cope with major fires, international cooperation should have a positive contribution to make. It would be a pity if the considerable investment made by the different parties concerned were not better exploited to the benefit of the whole Community.

OTHER TYPES OF DAMAGE

84. Gales are another recurring problem, especially in conifer monoculture plantations. This applies in particular to firs in the north-west of the Community, that is in such countries as France, Denmark, Germany, Belgium, the United Kingdom and Ireland. To some extent the risk of storms can be reduced by knowledge of wind patterns, by proper thinning, choice of species and so on, but it is still always possible that hurricanes will blow down thousands of hectares of forest each year; a catastrophe of this kind can upset all human calculations and lead to extreme disturbance of the timber market and of the tending programmes for individual stands.

    If populations of game, above all deer, are not carefully controlled they can also cause extensive damage to woodland. The creation and over-use of ski runs, too, can result in some damage to forests, and occasionally excessive utilization for cross-country motorcycling.

85. Insect pests such as Dendroctonus micans, which is currently very widespread, and the fir bark beetle threaten a large proportion of the Community's forests. The damage to trees may even be sufficient to kill them and calls for complicated measures of control designed to prevent these pests spreading to other regions.

    Fungal and viral diseases are also frequent. Dutch elm disease has so ravaged the elm population of Europe already that very few remain. Other diseases such as oak wilt, which is common in the United States, present a considerable potential threat.

86. The member countries of the Community constitute one of the most densely populated parts of the globe but also one of the least wooded (see Annex II). In this situation, man himself can in certain places and under certain circumstances represent a further threat to woodland. This is especially true in woodlands situated on the edges of conurbations, which serve as places of relaxation and recreation for a large number of people and are therefore put under stress. Such woodland has to be managed accordingly to minimze the damage.

    The same applies to upland forests near winter-sport resorts, when used intensively for skiing.

    Finally, it is true of most forests where heavy vehicles are employed for timber-hauling, since these compact the soil.

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As will have become apparent above, the forests and woodlands of the Community form an ecosystem in delicate balance which is subject to permanent stress of all kinds. Some of these stresses require particular attention because they can have irreversible effects on society both now and in the future, with maybe tragic consequences.

PART II

FORESTRY POLICIES AND PROGRAMMES

87. Forestry policy is generally understood to mean all the legislation, regulations, administrative instructions, and budget and fiscal arrangements dealing with forestry and immediately related upstream and downstream activities at various levels, especially national and regional.

88. A forestry programme is generally understood as a set of specific forestry schemes designed to implement forestry policy, covering different geographical units and following a defined timetable.

CHAPTER I - FORESTRY POLICIES AND PROGRAMMES IN THE MEMBER STATES

A. FORESTRY POLICIES

89. The forestry policies pursued in the Member States have many similarities but also points on which they diverge.

Similarity in overall aims

90. The national policies certainly resemble each other in terms of their aims, especially with respect to timber production. Since all the Member States have a trade deficit in timber, their forestry policies are all designed to reduce the shortfall as much as possible. The importance given to this objective, however, usually varies according to the size of the deficit.

Another general aim of forestry policy in the Member States is to promote the contribution made by woodland to the environment and society at large.

91. The forestry policy aims usually cited include the following :

- safeguarding and developing the role of woodland in production, conservation and recreational amenity;
- ensuring a sustained return on forest activities and fair incomes for forest landowners;
- striking a balance between the different groups involved with woodland (landowners, hunters, nature conservation groups, etc.);
- enlarging forest resources;
- promoting the timber-processing industry;
- improving employment in rural areas;

- rehabilitating derelict land;
- combating erosion and protecting the soil;
- raising the productivity of woodland;
- safeguarding woodland against stress factors such as forest fires, pests, etc.;
- promoting the timber economy in general;
- integrating forestry activities into agriculture;
- supporting forestry cooperatives and other grouping.

92. Another common feature of national policies is that they usually demonstrate a degree of continuity. Since their objectives are long-term and woodlands evolve slowly, policies are difficult to adapt to sudden changes in direction.

Nevertheless, for all the national forestry policies but especially those of the larger Member States, there is now a groundswell movement towards decentralisation or regional devolution. This irrestible process is an unmistakeable feature of the end of this century, above all in Europe; it is a testing time for forestry policies, particularly those which have been the most centralized. The forest policies of the Member States are therefore passing through an unsettled period which some are standing up to better than others.

93. Above and beyond these shared characteristics, however, the forestry policies of the Member States diverge in many fundamental ways :

- the way they are formulated;
- the relative weight given to the different roles fulfilled by forest;
- the type and scale of the instruments employed;
- the levels at which decisions are taken;
- the administrative framework and its treatment for budget purposes;
- the manner in which public woodlands are managed.

94. These differences are not surprising, and we shall return to them later. They arise from the diversity of the Community's forests and woodlands, which is itself the product of the diversity of natural conditions to be found in the Member States and the course of their recent history.

Different ways of formulating policy

95. Most of the Member States have legislation on forestry which sets out the main aims of government policy. This may take the form of single acts of a general nature (Denmark, Germany) or of collections of statutes or of regulations (Belgium, France, Ireland, Luxembourg, Netherlands, United Kingdom), in some cases unified in a forestry code.

Several countries have new and basic legislation in hand (France, Netherlands).

As can be seen, the formulation of policy differs from one Member State to another. Its objectives are rarely quantified.

Different weighting of the various roles of woodland

96. In line with natural conditions and even political circumstances, the forestry policies of the Member States focus either on the productive aspect of forestry (Northern and Central Europe) or on conservation aspects (Mediterranean) or on recreational amenity (near cities in the countries with a high population density).

It is unusual to see equal attention given to all these functions.

97. At the same time, the concentration on maximum value from the main perceived role of woodland never leads to complete neglect of the other functions.

Differences in instruments

98. Although their aims are similar, the forestry policies of the Member States often employ different instruments as a consequence of their particular approach to the subject.

The desire to make timber harvesting more efficient, for example, may translate into incentives to increase yields or expand the areas under forest. In such cases the incentives may consist of subsidies (e.g. the "Fonds Forestier National" (National Forestry Fund) in France) or tax relief (e.g. United Kingdom). Either instrument will achieve the overall aim but the appeal will be to different sections of the industry. Subsidies will benefit the smaller landowners, especially where there is a ceiling on aid, while tax relief will benefit most owners in the upper tax brackets.

99. The scale of the funds allocated is also very different from one country to another (see Annex XXI). As a result, the incentive provided by outwardly similar measures can vary very widely. Assistance granted towards afforestation is almost insignificant in Belgium, for example; in many other countries it makes up the bulk of government spending.

The level of public expenditure in 1980, expressed in ECU per hectare of wooded area, would seem very low in Luxembourg and Belgium (0.50 and 1.68 ECU/ha), low in Germany, Denmark and France (3.9, 4.2 and 5.2 ECU/ha), relatively high in Italy and the Netherlands (21.5 and 24.0 ECU/ha) and very high in the United Kingdom and Ireland (54.9 and 91.6 ECU/ha)[1]. Levels of expenditure have evolved at different rates too; taking 1975 = 100, the index figures by 1980 were 76 for Luxembourg and 349 for Italy[2]. Compared with government spending on agriculture, the amounts allocated to woodlands are very small. They represent under 5 % of support for agriculture in all Member States except Ireland (7.9 %) and the United Kingdom (11.2 %).

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1 These last two very high figures are probably due to the fact that both countries had an afforestation programme running at the end of the 1970s, but of course their wooded area is relatively small.

2 Index based on national currencies at current prices.

Different levels of decision-making

100. Given the general trend towards decentralization in most of the European democracies, decision-making powers in respect of some basic aspects of forestry policy are tending to be devolved more and more to the regions. Certain decisions will usually still be reserved to central government, such as the broad outlines of forestry policy, issues involving foreign trade, major public works of national importance and international relations.

In several countries, nevertheless, decisions are increasingly being taken at a regional level, more particularly those affecting business undertakings and individuals. The disparities between the Member States in this regard are bound to complicate the introduction of Community schemes because some national governments will not be able to delegate to a supranational authority the powers they no longer hold.

Different administrative structures

101. The differences already discussed, added to the fact that forestry policy is not generally considered a major field of political responsibility, explain the marked differences between the Member States in the level of authority chosen to take political and administrative responsibility (see Annex XX).

In most Member States the responsible minister is also in charge of agriculture. But while there are several cases where "forests" figures alongside "agriculture" in the title of the ministry (e.g. Germany) there are other cases where the ministry name does not include it even though the minister of agriculture is responsible, forestry being allocated at most to a minister of state or a junior minister (as in France, Greece and Ireland). In yet other cases, forests and woodlands come under ministers responsible for the regions (Belgium and the United Kingdom).

A radically different solution is to place forests in the hands of the minister of the environment (e.g. Denmark and Luxembourg).

102. To compound the problems, political responsiblity for the timber-processing industry is only rarely given to the ministers responsible for woodlands themselves. While in France and Italy there is one supreme authority for the whole of forestry and the timber industry, this is the case in Germany and Luxembourg only up to the first stage of timber conversion. In other countries a completely different minister is in charge (usually the minister of economics, trade or industry) (see Annex XX).

103. All these differing allocations of political responsibility in the Member States, and therefore in the designations of the overseeing authorities, mean that consultations between Member States on forestry are fraught with difficulties that do not arise in other fields.

104. The result of all these differences of approach is, naturally, a different treatment for budget purposes. In several instances there is no apparent coordination. This makes it impossible in many cases, on inspecting national budgets, to determine which parts actually cover forestry and related sectors.

Differences in the management of public forests and woodland

105. The proportion of woodland falling within the public sector and managed by governments varies from country to country. Here again, each Member State has a different approach. In several countries (Belgium, Denmark, Luxembourg, Netherlands, Greece) public woodland is managed by government departments, in other words by full-time civil servants, while in other countries it is administered by quangos or other public bodies, such as the "Office National des Forêts" in France.

106. The development policies pursued in the public sector also diverge In some Member States there is a trend to enlarge public forests through government purchases of private estates (e.g. France); in others, by contrast, some government-owned forests have been sold to the private sector (e.g. United Kingdom).

107. It would probably be easy to find many other areas where present forestry policies differ between Member States. The above listing and comments will suffice to show the complexity of the current position.

The mottly pattern among the countries concerned is a result of different natural and economic conditions as well as the long history of each country. This explains to a great extent the difficulties which have so far prevented a Community forestry policy from coming into being.

B. FORESTRY PROGRAMMES

108. A number of countries have long-term national programmes to develop the forestry sector. These may be integrated into an overall development strategy (Greece) or consist of strategies specifically for forestry (Ireland). Some countries are in the process of drawing up a forest strategy (Italy, Netherlands). In several cases planning is regional (France).

Those countries with a large proportion of public forest, particularly state-owned forest, may not have forestry strategies covering the whole of their territory but do possess a significant strategic tool in the form of management programmes for the public forests. Much the same could be said of those countries where privately owned woodland predominates but where management plans are required under guidelines for the private sector (France).

109. Finally, several Member States have incorporated industrial considerations (timber processing) into their forestry strategies as part of their approach to the forest-based industries as a whole (France, Ireland).

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110. Although the forestry policies and programmes of the Member States all have very similar general aims, they are different in approach and in the way they are implemented. Because they are usually formulated in different ways and are difficult to isolate within national budgets, it is far from easy to analyse and appraise them.

111. An effort should be made at Community level, with the collaboration of the Member States, to elucidate the structure of the national forestry policies and programmes, their means and ends, in order to provide a more adequate basis for improved coordination between them and for more complementarity between Community schemes and national schemes.

CHAPTER II - COMMUNITY FORESTRY SCHEMES TO DATE

112. The Community has so far not had a specific programme of its own for forestry but it has financed forestry schemes from the following sources :

(i) EAGGF (European Agricultural Guidance and Guarantee Fund)
(ii) ERDF (European Regional Development Fund)
(iii) ESF (European Social Fund)
(iv) EIB (European Investment Bank).

The ERDF and the ESF have funded only a small number of projects. Those supported by the EIB have been rather more numerous. The majority of projects, however, have been funded by the EAGGF under the regulations dealing with structural policy in agriculture.

Between 1980 and 1984, the Community committed 469 million ECU to forestry, broken down as shown in the table below

FORESTRY SCHEMES 1980-84	million ECU
1. Forestry development in the Mediterranean regions (EAGGF)	274
2. Forestry projects in developing countries (European Development Fund - EDF)	75
3. Forestry schemes as part of regional development programmes (ERDF and EAGGF)	90
4. Forestry research (research budget)	± 25
5. Forest protection (preparatory schemes)	5
T O T A L	469

This is a much higher figure than the sums devoted to forestry in the past. It indicates the increased efforts the Community has made over the last five years to step up action in this field.

European Agricultural Guidance and Guarantee Fund

113. Financial support from the EAGGF has been concentrated on the Mediterranean areas of France, Italy and Greece under Regulations (EEC) Nos 269/79, 763/85, 1975/82 and 619/84. The subjects have been :
- afforestation,
- improvement of derelict woodland,
- control of mountain torrents,
- construction of forestry roads,
- pilot projects in particular fields of local significance.

114. Special schemes of a local character have been implemented under the general provisions of the EAGGF in accordance with Regulation No 17/64/EEC; expenditure to 1976 totalled 30 million ECU. Schemes of a more short-term nature have also been undertaken, for example under Regulation (EEC) No 1940/81 to support thinning and replanting in the French Department of Lozère and under Regulation (EEC) No 1939/81 to fund the planting of windbreaks in the Western Isles of Scotland.

A further major regulation which includes long-term forestry schemes involves the West of Ireland (Regulation (EEC) No 1820/80, known as the "western package"). Under this instrument 27 million ECU have been allocated to forestry projects, in particular the plantation of small woods on farms, but it should be pointed out that this programme has only recently taken off, four years after its inception.

115. Regulation (EEC) No 797/85 has introduced a common measure to improve the efficiency of agricultural structures in the Community[1], which for the first time contains provisions enabling certain types of forestry scheme to be included in farm modernization plans (Article 20). Article 19 also allows certain kinds of forestry scheme to be undertaken in regions suffering from structural handicaps. Article 15, finally, provides an incentive to farmers who qualify for compensatory allowances in certain hill and mountain areas to plant trees on agricultural land. After many years of being excluded, the incorporation of forestry into the structural policy for agriculture is a step forward even if the scope and attraction of the relevant provisions do not go as far as the Commission originally intended.

EAGGF, ERDF, ESF

116. The Council recently adopted Regulation (EEC) No 2088/85 on the Integrated Mediterranean Programmes[2], which are to draw mainly on the Community's structural funds (EAGGF, ERDF, ESF); it incorporates the technical provisions to implement Regulation (EEC) No 269/79 establishing a common measure for forestry in certain Mediterranean zones of the Community. In theory, it broadens the scope of the latter Regulation in that it does away with the constraints on funding by removing the ceilings on the amount of aid per hectare and the overall allocation to forestry. It also widens the geographical area to regions which previously did not qualify, such as the Aquitaine region of France.

In practice, however, it is possible that the regions concerned will not take full advantage of the Regulation when they set up their own programmes. The true value of the Regulation to forestry will depend on the use made of it.

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1 OJ No L 93, 30.3.1985, p. 1
2 OJ No L 197, 27.7.1985, p. 1

European Investment Bank

117. Outside Europe, forestry has formed part of development programmes under the successive Lomé Conventions. Aid has been granted towards reafforestation and planting, and preliminary studies for such work, in a number of countries, especially Fiji, the Solomon Islands, Samoa and others.

The EIB has helped to finance the following projects (remembering that these are loans and not subsidies).

1. Two afforestation projects carried out in Turkey in 1966-67 covering 430 000 ha in total and each involving the building of a pulp mill and paper works with associated roads and harbour facilities.

2. Also in Turkey, in 1973, a total area of 1.4 million ha of forest was included in a combined exploitation and conservation project in which natural woodland was felled to supply a sawmill and a paper mill at a low level of environmental pollution, the forest being re-established thereafter by new plantations.

3. In 1978 the EIB financed the purchase of harvesting and sawing equipment in the High Demerara area in French Guiana to enable 152 000 ha of woodland to be exploited.

4. Other projects outside the Community have been implemented in Portugal, which in 1981 saw the planting of 27 000 ha of short-cycle eucalyptus to supply a saw mill; in the People's Republic of the Congo and in New Caledonia, where feasibility studies have been carried out on a pulp mill based on 50 000 ha of eucalyptus and a power plant supplied by 7 000 ha of Leucaena (lead tree); in Greece prior to accession, where in 1979 the EIB financed the purchase of harvesting equipment and the acquisition of haulage equipment for exploiting 90 000 ha of natural forest in Thrace and Macedonia.

   In Community countries, the Irish forestry service has so far received EIB support for two projects involving the purchase of equipment and the construction of roads. This was connected with the thinning or clear-felling of existing woodlands and their reafforestation.

Research

118. The current research programmes administered by the Commission cover the following topics :

(i) a five-year programme on wood as a renewable raw material, managed by DG XII and to be rolled forward for 1986-89;

(ii) environmental protection and climatology, another DG XII programme extended to the end of 1985 and dealing in particular with measuring atmospheric pollution in woodland and evaluating the effects on trees;

(iii) under FAST II (1984-87) projects are under consideration on the integrated development of renewable natural resources;

(iv) the agricultural research programme for 1984-88, under which four of the seven programme committees each have provision for forestry projects;

(v) within the framework of the Communities Energy Directorate-General's demonstration programme on alternative energy sources and energy economies, demonstration actions are presently engaged in the biomass sector to optimise, both technically and economically, the harvesting of forest biomass, as well as its utilisation by combustion processes, production and utilisation of derived combustibles, gasification and pyrolysis. These actions would allow a better exploitation of forest resources, in simultaneously contributing in a sensible manner to the protection of the forestry environment.

Annexes XXII and XXIII contain tables summarizing these research programmes and giving their duration, allocation of budget funds, types of contract, etc.

119. The following objectives have been proposed as suitable for inclusion in a future common research programme :

(i) increasing output of timber and improving quality;

(ii) developing the necessary technology in the wood-processing industry to optimize its operations and encourage a more prudent use of timber, particularly as a source of energy and chemicals;

(iii) obtaining the scientific data needed to produce legislation to protect the environment, especially silviculture;

(iv) optimizing land-use on the basis of the physical characteristics of land and the needs of the various sectors competing for land resources.

120. The remaining Community legislation consists of a Directive on self-employed activities in forestry, Directive 68/89/EEC on the classification of raw timber and a 1966 Directive on forestry reproductive material. Directive 77/93/EEC of 1976 dealing with plant health, which has gone through numerous amendments, has made a major contribution to protecting the Community against the introduction and spread of many diseases to which trees are prone.

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Main thrust of forestry action by the Community

121. Action by the Community in forestry takes place at two complementary levels :

- the coordination of national forestry policies,
- Community forestry schemes.

a) Coordination of forestry policies

122. The aim of coordinating the forestry policies of the Member States is to bring about a general improvement in their effectiveness in the Community context. The intention is to render them more compatible with each other and with action undertaken by the Community. The means employed are the traditional ones of information exchange, comparing experience, studies, recommendations and regulations. The principal bodies concerned are the Committee for the Coordination of Forestry Policies (COFOR), which brings together the chief executives for forests in the Member States twice a year, and the Advisory Committee on the Wood Chain, which also meets twice a year and comprises representatives of the various commercial interests in the sector.

123. Coordination, however, runs up against one major difficulty, which is the lack of a clear structure within most of the national policies. An effort is thus still required from the Community, with the support of the Member States, to secure a better picture of forestry policies at national level. There is a need in particular to define their aims, approach, instruments deployed and degree of success in order to be able to bring them into line as far as possible with Community interests.

124. This coordination of policies is intended to bring the forestry sector within the ambit of the European integration process, in the light of the various objectives set out in the EEC Treaty (free movement of goods, elimination of quantitative restrictions, free movement of persons, services and capital, the policies on agriculture, transport, competition, tax harmonization, etc.) and using all the means which the Treaty puts at the disposal of the Community institutions.

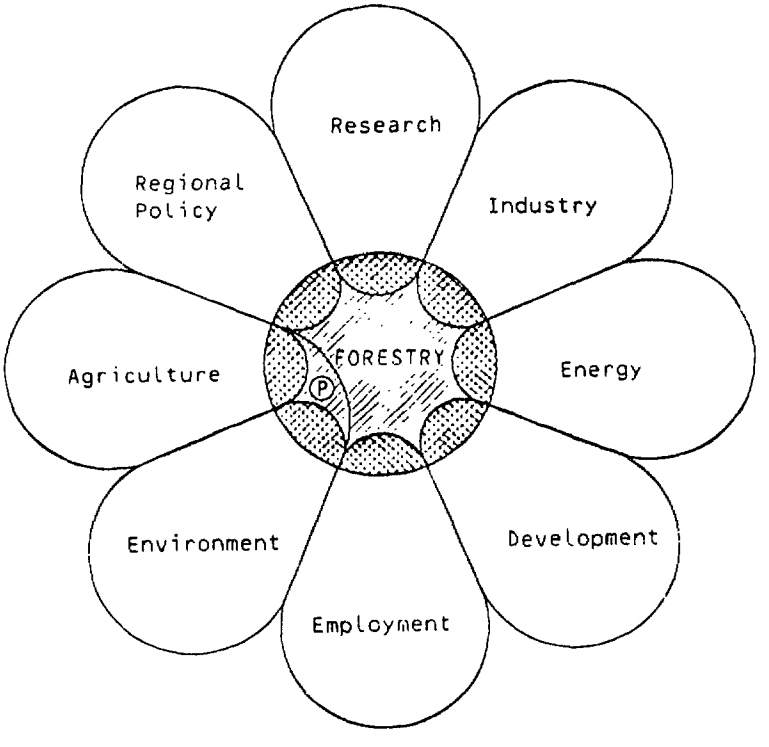
b) Community forestry schemes

125. The Community's own forestry schemes are designed to complement the coordination of national policies. They involve projects undertaken jointly with Member States, other bodies and in some cases private individuals. The purpose is to stimulate activities which, without participation by the Community, would receive only low-key support in the Member States or not be embarked on at all.

126. In the absence of a fully-fledged forestry policy, the Community has been confined until now to forestry schemes initiated under other Community policies. These have taken the form of special projects in a variety of fields (agriculture, research, environment, energy, regional policy, development policy, etc.). While some schemes have related directly to woodlands, most have been adopted and carried out in order to achieve primary goals not specifically concerned with forestry. At most, the preparatory schemes to protect forests against fires and acid depositions could be considered as related more particularly to forestry.

127. The diagram below summarizes the present state of Community action in the forestry sector.

COMMUNITY FORESTRY ACTIONS



128. Improving the efficiency of forestry has therefore not been the main purpose of most of the Community's forestry schemes since each has been directed in the first place towards a goal in another field. A further result has been the lack of continuity - essential if such schemes are to have a real impact on forestry as a whole - because they have for the most part been the outcome of negotiated agreement relating to a short timescale. Consequently, it would be of great benefit to combine all these activities in an overall programme to be based on generally accepted principles geared to a more effective Community forestry sector.

CHAPTER III - PROPOSALS PENDING BEFORE THE COUNCIL

129. 1982 was a year devoted to a reconsideration of the issues after the Council stopped work, without taking a decision, on a proposal for a resolution concerning the objectives and principles of forestry policy which had been put before it by the Commission several years earlier (at the end of 1978 in fact)[1].

1983 brought new proposals. The Commission laid before the Council a whole series, the subject-matter of which indicates an important change of approach :

(a) proposal to include products of silviculture in the new version of Regulation (EEC) No 355/77 on common measures to improve the conditions under which agricultural products are processed and marketed;

(b) proposal for extra funding under Regulation (EEC) No 269/79 establishing a common measure for forestry in certain Mediterranean zones of the Community;

(c) proposal for a new policy on agricultural structures, to include forestry schemes undertaken on farms;

(d) proposal introducing integrated programmes for the Mediterranean regions, with an important section on forestry;

(e) proposal for measures to protect woodland against fires and acid rain;

(f) proposal for a resolution on Community policy for the timber industry.

1984 saw intense negotiations within the Council on most of these proposals. The original six proposals were joined during the year by a seventh :

(g) proposal to extend Regulation (EEC) No 269/79 by a further year.

1985 has been a year when decisions were taken. Almost all the proposals under consideration were either adopted or rejected by the Council.

Four proposals were adopted : these were (b), (c), (e) and (g) above. In the case of (b), (d) and (g) the Council accepted the forestry parts of the Commission's proposals in full. In the case of (c) it accepted the principle of some action but diluted the incentives considerably.

Three proposals were rejected : the Council did not adopt (a), (e) and (f). In the case of (a) this was a clear-cut decision, as the proposed Regulation was passed without the addition of silviculture. In the other cases, the Council merely postponed further consideration indefinitely.

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1 This proposal for a resolution was coupled with another inviting the Council to set up a Standing Forestry Committee. The latter proposal suffered the same fate as the proposal on which it depended.

Meanwhile, the Commission has itself taken two decisions, namely :

- to set up an Advisory Committee for the "Wood Chain",
- to set in train a number of preparatory schemes to protect forests and woodland.

130. Consequently, the following proposals are still before the Council, consideration of them having been discontinued at different dates (these dates are given in brackets after each title) :

a. Proposal for a Council resolution concerning the objectives and principles of forestry policy[1] (1981)
The Special Committee on Agriculture (SCA) last discussed this proposal in mid-1981; the text received the unanimous agreement on the technical group set up by the SCA to review it apart from some of the recitals. Since then, the proposal has been on ice despite pressure from Parliament to persuade the Council to take a decision (see Parliament's Resolution of ... October 1983)[2].

b. Proposal to set up a Standing Committee on Forestry[1] (1981)
This proposal was coupled with the previous one and suffered the same fate. No decision has been taken, so that it is still under consideration by the Council. In the mean time, the Commission has continued to benefit from the advice of COFOR (Committee for Coordinating Forestry Policies), a body which has had no offical standing since it first met in 1959 but which has provided a framework within which the Directors General responsible for forests in the Member States have been able to meet twice a year.

c. Proposal for a Council resolution on a Community policy for the timber industry (1984)
The Council's Working Party on Economic Questions completed its discussions at the end of 1984 with agreement on a compromise proposal from Ireland, which held the Presidency. The compromise proposal has not been discussed yet by the Permanent Representatives' Committee (COREPER). The countries which have held the Presidency since have evidently had little enthusiasm for this issue. Neither Italy, nor after it Luxembourg, have made it one of their priorities for the Presidency.

d. Proposal for a Council Regulation to increase protection of forests in the Community against fires and acid depositions (1985)
The first time the agriculture ministers considered this proposal at a meeting of the Council, they regarded it as important and urgent. It has been debated at the highest level three times, most recently on 16 September 1985. At this last meeting, however, the Council was forced to conclude that agreement could not be reached on the compromise texts prepared by the Presidency.

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[1] COM(78) 621 final of 1 December 1978
[2] OJ C 307, p. 123 to 127.

To sum up then, four proposals on forestry matters remain before the Council, consideration of which has been postponed indefinitely.

It will be noted that all four specifically deal with forestry and the timber industry while most of the proposals already adopted involve policies in other fields.

The fact that these proposals are currently held up should not obscure the rest of the regulatory framework available to the Commission; this is quite substantial now that the other proposals mentioned above have been adopted (see Annex XVII) and these instruments must of course be taken into account in drawing up the forestry action programme.

PART III

A FORESTRY STRATEGY FOR THE COMMUNITY

131. The findings in Parts I and II lead to the conclusion that, despite the efforts invested so far by the Member States and the Community in forestry and the forest industries inside and outside the Community, considerably more needs to be done to ensure that the panoply of activities involved match contemporary needs more effectively.

The Community as such has a role to play in supplementing the policies of individual Member States so that our forests and the activities connected with them enjoy the full benefits of the process of European integration and so that the sectors concerned best meet the aspirations of the sections of the population which are affected.

132. There are three main objectives of Community action on forestry.

- Protection of woodland :

  . preventing damage to and destruction of woodland ecosystems with the attendant adverse impact on the environment;
  . reducing losses of timber as a raw material;
  . ensuring the survival of the productive, environmental and recreational functions of woodland;
  . maintaining economic activities dependent on woodland.

- Better exploitation of forests and forest products :

  . making more efficient use of woodland as a major source of renewable primary commodities;
  . enhancing the value of forest and wood industry products;
  . contributing in this way to the balanced development of forestry and the forest industries in the Community and improving the incomes and living standards of those employed in these sectors.

- Woodland development :

  . increasing commercial timber production;
  . promoting other functions of woodland, in particular social and recreational amenity;
  . conserving and improving the environment;
  . contributing towards alternative types of agricultural production.

Community action should also enable forestry to make a contribution in other fields such as :

. regional development, especially in the less-favoured areas;
. creating employment, particularly in rural areas;
. land-use planning.

A further contribution would be to the conservation and development of forests in the rest of the world, especially in the developing countries.

PRINCIPLES AND AIMS OF A COMMUNITY FORESTRY STRATEGY

The Community's forestry strategy aims to support the Member States in developing their policies and to step up action at Community level while ensuring that the measures are compatible. The ultimate goal is to optimize the uses made of forests and woodland across the Community as a whole.

133. If Community action in the forestry sector is to show consistency, continuity and ultimately be effective at Community level, it must be embedded in a general framework of mutually agreed principles. Throughout the rest of this document, this framework will be called the Community's forestry action programme (FAP).

The general principles which should guide the framing of the FAP have already been discussed at length. They have formed the substance of several amendments to the Commission's original proposals. At the stage now reached, there are no further objections to them within the Council - apart from the wording of the recitals which has held up final approval of the main proposal - and the Commission's clear task, having endorsed the text setting out these principles as agreed on unanimously by the Council's working party, should now be to draw up the forestry action programme on the basis of them (see Annex XXVIII). Each of the schemes it puts forward under the programme will of course be related back separately to the principles and full justification given for the various objectives.

The FAP should be geared over the medium and long term to quantitative and qualitative improvement in respect of the three main functions of forest and woodland, to be made the subject of a European outline plan for forestry agreed jointly between the Community and the Member States and updated at regular intervals. It should cover a five-year period, renewable for subsequent periods. The first FAP would run from 1986 to 1990.

In line with undertakings given by the President, Mr. Jacques Delors, in his speech to Parliament in January 1985[1], the Commission will not produce new proposals until it has decided what action to take on those still under consideration by the Council (see 130). The following options are open to it :

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1 "[The Commission] will not hesitate to withdraw a proposal if it considers that its content has been too watered down, or if it notes a refusal, express or implied, to debate it."

- formally to withdraw the proposals for Council resolutions on
  . the objectives and principles of forestry policy (see 130(a)),
  . a Community policy for the timber industry (see 130(c));
- formally to withdraw the proposal for a Council decision setting up a Standing Committee on Forestry. (The Commission would be empowered to do this itself if it sees fit);
- resumption of discussions within the Council on the most recent compromise texts, with a view to adoption (or rejection) as soon as possible.

This would clear the way completely for serious work to start on drawing up the forestry action programme, with three main sections : protection of woodland, improved exploitation of forests and development of the forestry sector.

CHAPTER I

IMPROVED PROTECTION OF FOREST AND WOODLAND

134. The dangers to the Community's forests on a European scale which threaten widespread damage, preventing woodland from functioning with full efficiency, derive from five major sources :

- biotic factors (diseases, insect pests, game, etc.),
- atmospheric pollution (acid depositions),
- forest fires,
- certain types of natural disaster,
- various practices which destroy or degrade woodland.

To the biotic factors one could add the problems in some forests of the Community caused by excessive populations of game, particularly red deer and roe deer.

135. The protection of forests and woodland against these threats calls for sustained Community intervention in a number of fields, given the scale of the damage and the greater effectiveness of taking certain types of action at Community level as opposed to the Member States acting alone and independently of each other.

Biotic factors

a) Insects and micro-organisms

136. The damage caused to woodland by insects and micro-organisms takes a variety of forms. Infestations tend to come in waves at different times and in different regions. The Community should be ready to intervene rapidly as required each time one of these threats reaches serious proportions exceeding national capacity to deal with them. The Community has already taken two types of action in this area :

- The introduction of legislation on plant health protection (Directive 77/93/EEC), which set up a Standing Committee on Plant Health that is consulted whenever a new biotic threat or the resurgence of an endemic disease is reported. Regulatory steps have been taken, for example, to protect the Community against the introduction of the pests responsible for oak wilt in the United States of America.

- The initiation of various research projects, for example on Dutch elm disease.

137. These efforts should be pursued and stepped up by :

- developing specific research programmes on individual diseases which have a major economic impact, and on appropriate measures of prevention and control; to this end, a inventory of the main diseases affecting forestry species should be drawn up at Community level, giving the areas in which they occur, their biological and commercial impact and the current state of research on them.

- developing monitoring systems designed to reduce as far as possible the risks of new diseases affecting Community tree species being introduced or spreading and devising methods of screening imported timber; the experience gained in protecting Community forests from American oak wilt is an example to be followed whenever other such threats appear.

b) Game

138. Better control of the population levels of certain species of game is needed to protect forest ecosystems agains serious damage. Excessive numbers of large game animals (red deer, roe deer, wild mouflon sheep) cause considerable destruction every year in the woods and forests of most Member States. The animals can destroy whole plantations and damage stand of trees by browsing on saplings and stripping off bark.

139. In order to provide better protection of trees (and crops) against such attacks, there should be a more general introduction throughout the Community of compulsory culling programmes. These would force the game-shooting community to undertake more effective control of populations of large game animals in forest areas.

140. The Community should encourage research and demonstration schemes dealing with the balance between sylviculture and hunting/shooting, particularly in tracts of forest straddling national borders, with a view to developing at Community level rules of wild animal management and a hunting code which will help to maintain a harmonious equilibrium and in addition enable better use to be made of woodland.

Atmospheric pollution (acid depositions)

141. The forest dieback generally attributed to what is loosely termed "acid rain" is a subject of major concern at Community level. The damage involved is considerable and is not confined within national borders.

142. The Council, as part of its Environment Programme, has already made a number of undertakings to reduce emissions of pollutants in the Community and has adopted some measures. Parallel steps should be taken on the forestry side, initially in the form of systematic observations of dieback in the main tracts of forests in the Community so that action can be more effective.

The Commission for its part has put forward new proposals for directives dealing with emission standards for large power stations and for motor vehicles which have been approved by the Council. More particularly, the second piece of legislation requires the fitting of catalytic converters to vehicles of certain engine capacities.

143. In conjunction with the above, it is important to take action on the forestry side; primarily this means systematic observation of dieback in the main tracts of forest in the Community so that suitable steps can be undertaken.

To this end, the Commission has presented the Council with a draft Regulation under which regular surveys would be made of new damage based on a network of observation plots in wooded areas. Pending a decision by the Council in the near future, a programme of preparatory work is currently under-way. Several of these schemes involve testing various types of monitoring networks in the field.

144. To accompany the establishment of an observation network, it should be the Commission's job to ensure that the methods used for observing damage and measuring atmospheric pollution in forests are harmonized, so that reliable data can be obtained for an objective analysis at Community level of the causal links between air pollution and dieback with a view to taking appropriate preventive or remedial action.

Some of these preparatory schemes are specifically designed to test various types of monitoring units to measure atmospheric pollution in forests.

The surveying of tree damage in connection with atmospheric pollution is thus one of the priorities for Community action.

Forest fires

145. In contrast to the effects of air pollution, forest fires and the devastation caused by them are a familiar phenomenon. They often make the news headlines during the summer months. Despite the efforts made by the countries particularly affected, fires still ravage large areas of woodland.

The Commission has proposed to the Council a Community scheme to enhance protection against forest fires. The measures cover both prevention and firefighting, aiming to facilitate cooperation between the Member States in these fields.

The Commission has taken advantage of the scope provided by the preparatory schemes to organize a joint exercise to evaluate ground-based and aerial firefighting equipment. It was held near Florac in central France from 7 to 15 February 1985 (hence the title "Florac 85"). The exercise brought together 450 firefighters, 140 vehicles and 17 aircraft from the six countries most directly concerned. This first operation of its type was a full success and the Commission was able to draw useful information from if for drafting further measures which it is hoped the Council will adopt.

146. Other preparatory schemes have involved the Commission in a variety of experimental projects such as the building of a tactical and operational command centre in Valabre near Marseille and the setting up of a early-warning fire detection systems in two very vulnerable areas of Italy and France.

The Community's role in this field has been to organize more systematic cooperation between Member States so that the means of prevention and control can be applied more efficiently. Community action should cover the following aspects :

- the prevention of fires by removing undergrowth;
- the early detection of fires;
- the establishment of operation centres in high-risk areas;
- the training of personnel directing fire control operations;
- the improvement of equipment and materials used in fire prevention and control.

Natural disasters

147. The forests of Europe are devasted each year by gales which do not stop at national borders and which can affect wide areas of the Community. These gales cause considerable damage to woodland. They bring with them added problems of disposing of windfall timber, protecting the health of surviving trees in affected areas and reafforestation. They also entail a sudden flood of timber on the Community market. Remedying the damage often calls for measures beyond the scope of a single country, for example the invoking of safeguard clauses to limit imports from outside the Community.

148. Where necessary, at the request of the Member States concerned, the Community is called on to encourage support from other Community countries or to institute temporary protection of the market. The effectiveness of Community intervention in such cases depends in particular on how quickly and effectively it can be implemented.

It would therefore be useful to set up a Community emergency plan graduated to deal with damage of different types and seriousness so that, when a disaster of this kind occurs, the Community is able to mobilize appropriate action without delay, according to a prearranged plan, in order to salvage the timber blown down and reconstitute the stands which have been destroyed.

Practices which destroy or devalue woodland

149. Various practices of man himself can destroy or degrade woodland. Three of these practices should receive particular attention from the Community :

150. a) Unnecessary felling

To prevent the area under forest being reduced by unnecessary felling, the Community should make appropriate arrangements to encourage the Member States to harmonize their legislation in this field and make it as restrictive as possible.

To this end, provision should be made that :

- forest clearance for whatever reason is offset by equivalent new plantings in areas recognized as suitable for afforestation;
- those responsible for such clearance are required, by appropriate regulations, to meet the cost of replacement planting.

151. b) Genetic improvement

New techniques for the vegetative multiplication of forest material could result in reducing the genetic variability within our forests and woodland. The danger is a considerable one, and existing Community legislation on the genetic quality of reproductive material (in particular Directive 66/404/EEC) should be supplemented by a code of conduct applying to forest tree nurseries in the Community in order to guarantee genetic diversity in new plantations.

The Community should also actively pursue its activities aimed at the creation and development of forestry gene banks.

152. c) Destruction of tropical forests

The Communtiy should make its contribution to meeting the challenge of spreading desertification in tropical regions caused by the destruction of more and more woodland by helping to safeguard tropical forests.

153. The issue of tropical forests is dealt with in more detail below (see Chapter III, section IV), where the concern about their gradual destruction is followed up.

CHAPTER II

INCREASING FORESTRY'S ADDED VALUE

154. Increasing forestry's added value means increasing the overall value added resulting from forestry's three main functions: economic, environmental and recreational.

In increasing the added value of each of these functions (considered in isolation) account must therefore be taken of the constraints exercised on that function by each of the two others. These constraints can vary depending on the region or the locality.

Increasing the added value of one of the three functions must never be done to the lasting detriment of forestry's ability to perform both of the other two. Particular care must be taken to ensure that optimizing the timber yield or using forests for recreational purposes does not in the long run affect their ecological stability and thus threaten their survival.

I. INCREASING THE ADDED VALUE OF FORESTRY'S ECONOMIC FUNCTION

155. The timber yield of Community forests is low, at only 2.1 m^3 per hectare a year on average. It varies considerably from one country to another, however, and even from one region to another : in France where there is a large proportion of hardwoods, the figure is only 1.9 m^3 against 4.1 m^3 in Denmark, where softwoods predominate and enjoy exceptionally favourable conditions.

The yield of all species could be improved. This must be done without impeding the attainment of forestry's other objectives (protection of the environment and recreation). Woodland's production potential must be fully and rationally exploited and the value of forest products must be enhanced in such a way that the efforts made result in a general improvement in the income and living conditions of the persons employed in forestry.

156. In many cases timber is the principal forest product. It tends to be removed from the forest if it can achieve a satisfactory price on the market. It stays in the forest, on the other hand, if its selling price is close to or less than the cost of producing it. This is often the case with little selection woodlands which are not exploited. The future of the stands in question and hence the quality and value of their produce are adversely affected by this situation. The absence of thinning gradually downgrades the forest ecosystem and in certain cases can lead to deterioration of the soil.

157. Increasing the value of timber when it leaves the forest depends in the first instance on the efficiency of the timber industry. All sections of the industry (nurserymen, woodland owners, timber growers, timber merchants, sawmills, wood processors) have a vital role to play in increasing the value of forestry products.

The Community, for its part, should help to improve the conditions in which the timber industry operates and ensure, by its forestry action programme, that this is reflected in its various policies (policy, competition policy, regional and social policy, research policy, transport policy, industrial policy, etc.).

158. In addition to timber, forestry's principal commercial product, other products like cork are worth exploiting better and upvaluing. The Community can contribute to improving efficiency in these sectors, too.

1. Reinforcing the measures aimed at the production of quality seedlings and guaranteeing the origin of reproductive material

159. A study of the prices of forest products shows that high-quality products always carry a premium and that the prices of these products are much less sensitive to erratic market fluctuations. The first condition for obtaining a final product of high quality is to be found at the level of the nurseries, the first stage in the production chain.

160. New methods of breeding higher-performance varieties (vegetative multiplication) and progress in the mechanization of nursery operations are likely to lead to a market increase in productivity in this sector.

This recent progress should be followed up by a re-examination of the Community provisions on forest seeds and seedlings, in force since 1968, with a view to improving them so as to provide a surer guarantee of phenotypic and genotypic quality and of the origin of the seedlings used by foresters.

2. Encouraging maintenance work in forests

161. Forest owners should be given incentives to improve their woodland, particularly where it is run-down, in order to improve the quality of forest products and in the final analysis to achieve better commercial results.

These incentives should be aimed in particular at the introduction of high-value species and, where appropriate, the development of mixed stand of hardwoods and softwoods suited to the local soil and climate.

162. Appropriate schemes could take the form of information campaigns, perhaps backed by financial aid, to encourage :

- cleaning operations in young stands,
- initial thinning in conifer stands,
- the introduction into single-species stands of clumps of species recommended on account of the quality or properties of their timber.

Such aids would obviously be conditional on the forest being managed ecologically and on the implementation of a simple management plan (cf. 4 below).

3. Encouraging improvements in forest infrastructure

163. The yield of some stands, particularly those situated on steep slopes, is low because the timber they produce is not always accessible and therefore cannot be removed from the forest. The development of suitable methods of extraction and an adequate network of forest roads should make it easier to move the timber available in such forests and hence to increase their yield.

The Community should extend the aids already granted for this purpose in the Mediterranean regions[1] to other regions, in particular the less-favoured areas which lack a satisfactory forest road network.

4. Encouraging the preparation of simple management plans

164. If the exploitation of woodland is to be improved it is essential that private woodland owners prepare and implement a simple management plan having as its objective an improvement in productivity which does not disturb the fundamental balance of the forest.

Management plans also make it easier to evaluate supply, which is a vital factor in improving market organization.

The Community should therefore encourage the preparation of simple management plans by making aid for afforestation and related work conditional on the existence of such a plan for the woodland concerned. Special grants could be made toward the drawing up of plans.

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[1] Regulations (EEC) Nos 269/79 and 1975/82, Integrated Mediterranean Programmes

5. Lending greater "transparency" to the timber market

165. In many areas of the Community, the timber market is highly partitioned and subject to anachronistic practices, as a result of which the advances in productivity made in certain sectors of the timber industry are not being felt throughout the industry and at forest level in particular.

These practices are partly attributable to the small size and extreme fragmentation of private woodlands and to woodland owners' lack of information as to the real value of their products. If smallholders were to pool their sales, the market would become more transparent which would be in the interest of all. The establishment of forestry producer groups (see Chapter II) where they do not exist ultimately also satisfies this need. Where they do exist, such voluntary trade associations have shown their worth.

6. Improving the standardization of forest products

166. The Community's Directive on the approximation of the laws of the Member States concerning the classification of wood in the rough[1], which has not yet been applied throughout the Community, should be subjected to a thorough examination and, where appropriate, adapted in order to remove those bottlenecks which still impede the free movement of forest products.

At a more advanced stage in processing, standardization at international level, or failing that at Community level, holds out the promise of major increases in productivity.

Once the consultations under way between the Advisory Committee on the Wood Chain and the trade circles directly concerned are complete, proposals will be drawn up by the Commission and placed before the Council as soon as possible.

7. Developing a system of contracts ensuring security of supply for industries

167. Some large-scale wood-consuming industries, particularly pulp and paper mills, are concerned to establish as reliable a source of raw materials as possible.

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[1] Directive 68/89/EEC, which applies in Greece after 31 December 1985 but has still not been implemented in the United Kingdom.

The impending arrival on the market of products resulting from the first plantings made after the Second World War should encourage the more intensive development of forest-based industries in a number of Member States. This trend should therefore be promoted by ensuring a certain security of supply both for new plants and for existing plants which wish to extend their capacity. In the Member States publicly owned woodlands can admittedly play a major role in this respect. However, where the products in question are obtained from privately owned forest, the owners should be encouraged to conclude long-term supply agreements with the industries concerned since this would offer security to both owners and industry.

This issue will have to be considered in depth with the aid of the main bodies concerned and in the light of experience both in the Community and elsewhere.

8. Organizing the cork industry

168. Cork is one of the few forest products for which a common organization of the market could be set up under the common agricultural policy. It is listed in Annex II to the Treaty of Rome (list of products covered by the CAP). However, to date no special provisions (organization of the market or other provisions) have been adopted in respect of this product.

The enlargement of the Community, which will radically change the situation in this field, raises the question as to whether the provisions of Articles 38 et seq. of the Treaty should be applied immediately so as to enable the European cork industry to satisfy more of the world's growing demand for this product.

169. There could be every justification for introducing Community measures to this effect in order to revitalize this stagnating sector of forestry production.

This could be achieved by means of coherent series of measures relating to both cork growing and industrial processing of cork. Such measures could include :

- as regards cork growing :
  . greater protection for cork oaks
  . incentives for the improvement of production techniques;

- at industrial level :
  . modernization of industrial structures
  . standardization
  . vocational training
  . search for new outlets.

170. As from 1 January 1986 the Community should make it its concern to apply the instruments available under the Treaty in order to expand what, as a result of enlargement, is to become an important Community sector and enable it to regain the position which it has gradually lost.

The Community should therefore undertake a thorough examination of the cork industry and, after consulting the appropriate authorities and professional bodies, submit proposals on this subject to the Council.

9. Enhancing the value of non-timber woodland products

171. Woodlands are also a source of non-wood products, especially in some less-favoured areas; these tend to be specialized products collected by hand, with no properly structured market. These products are on the whole used for food or pharmaceutical purposes such as resins, compost, mushrooms and game, to mention but a few.

By promoting experiments and demonstration projects to encourage the more efficient organization of some of these non-wood forest products and facilitating their marketing, the Community could give a boost to what are, in the main, less-favoured areas.

172. Shooting, too, deserves attention. Where there are organized groups for shooting purposes, considerable additional income is generated by this activity. It provides a yearly source of income whereas income from timber is available only after many years.

The Community would therefore do well to devote special attention to shooting activities in relation to woodland inasmuch as they provide a certain amount of employment and a substantial turnover which could be increased (see also 69 to 71).

Efforts should be made to identify features of existing national arrangements which could be applied at Community level in order to manage woodlands optimally as habitats for wildlife, including encouraging the formation and development of forestry/shooting associations.

II. Increasing the value added of forestry's environmental function

173. The woodlands of the Community play a considerable role in nature conservation, soil protection and regulation of the water cycle. This role, although not remunerative, is of crucial importance.

The measures planned in this context are intended to enable woodlands to fulfil their ecological and in particular protective role as effectively as possible.

1. Making the public and the public authorities more aware of the environmental role of forests

174. A large section of the public still fails to realize or underestimates the vital role played by woodlands in the protection of the environment. Community action must be directed first and foremost at increasing the awareness of the public and the public authorities of the importance of woodlands and the need to safeguard this heritage on which the quality of life of future generations depends.

2. Aid for the establishment and maintenance of protective forests

175. Those forests which play a particularly important role from the point of view of protection are rarely those which are most suited to the production of timber since they are generally located in places where the soil is poor and where the terrain does not lend itself to maintenance or exploitation, mainly owing to steep slopes.

Protection forests play a particularly important role in preventing erosion by water or wind. They reduce the risk of landslides or flooding, they stabilize sand dunes, etc. In order to ensure the survival of such forests, Community measures should be directed at encouraging the improvement of derelict protective woodland and also the establishment of new protection forests in areas where they are indispensible, particularly certain watershed basins.

3. Environmental code of conduct for forests

176. In some cases, excessive emphasis on the commercial function of woodlands may have direct or indirect harmful consequences for flora and fuana and adverse effects on the fertility of woodland soil and the long-term producitivity of woodlands.

The establishment of an environmental code of conduct for forests should help them to continue to fulfil all their functions.

177. This code should introduce rules whereby forests are managed in such a way as to :

- safeguard the fertility and long-term productivity of the soil and their role in regulating the water cycle;
- ensure the conservation of wildlife;
- take account of characteristic landscapes;
- maintain an adequate diversity of species and wide genetic diversity within large woodland areas.

These requirements imply the following :

- the need to control the scale of clear-felling;
- measures to prevent fires and the spread of tree and animal diseases;
- choosing the correct species of trees for particular sites;
- controlled use of pesticides and fertilizers in forests;
- special protection for certain biotopes which are rare or particularly important for the conservation of flora and fauna;
- setting technical constraints for certain types of forestry machinery and the specifications with which forestry mechanization in general must comply.

4. Encouragement for the creation of hunting reserves and nature parks

178. To complement the measures of ecological protection already undertaken[1], Community action must serve to encourage the establishment of nature reserves and parks so as to provide greater protection for certain rare or endangered woodland biotopes (for example, certain alluvial forests or forest wetland) and promote the development or safeguarding of certain areas which are of particular value from the point of view of landscape, tourism or flora.

By encouraging tourism, the establishment of nature reserves will also help to improve the employment situation in rural areas.

5. Encouragement for the establishment of resting and grazing areas for wildlife

179. In order to ensure greater protection for wildlife it is important that certain parts of woodlands be reserved for wildlife where animals can withdraw to feed and reproduce undisturbed. This is particularly important in intensively exploited forestry areas.

Alongside the grazing areas generally created and paid for by hunters, Community action should be particularly directed at the establishment of game reserves where culling would be carried out systematically by the competent authorities and public access to which would be restricted.

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1 See the 1979 Directives on this subject and Regulation (EEC) No 797/85 on improving the efficiency of agricultural structures.

III. Increasing the value added of forestry's recreational function

180. Unrestricted public access and the establishment of leisure infrastructures such as picnic areas, car parks, information centres, footpaths or horsepaths, etc., have become major features not only of forestry policy but also of social policy. This trend should therefore be encouraged, particularly in densely populated areas, and more especially in the form of pilot and demonstration projects.

1. Opening of forests to the public

181. Unrestricted access to forests may help bring about greater public understanding of woodlands and nature in general. However, it also increases the risk of damage, the cost of which woodland owners are generally unprepared to bear.

The right to refuse access to woodlands is interpreted in various ways from one Member State to the next and even within each Member State. Public forests are generally accessible in all Member States. However, the situation varies where privately owned woodlands are concerned.

The aim of Community action must be to promote the opening up of forests to the public in the Community. A major information campaign with this in mind must be directed at the public and woodland owners. More particularly a good conduct code for visitors must be drawn up.

The rights and responsibilities of the visitor, the woodland owner or the public authorities concerned will have to be clearly laid down in rules which, whilst complying with specific national and local requirements, should be reasonably uniform throughout the Community.

2. Encouragement for the establishment of reception, access and information infrastructures for the public

182. Public interest in woodlands is growing hand in hand with an increasing demand for infrastructures such as parking and picnic areas, footpaths, etc.

Reception and information centres can provide the public with detailed explanations concerning woodlands and thus contribute to a better public understanding of woodlands and their various functions. They also offer the advantage of "channelling" the public toward certain areas and preventing people from ranging throughout a tract of forest.

The most desirable arrangement is generally for access to forests to be mainly on foot, leading from parking areas situated outside the forests.

The Community measures should aim at helping to establish such infrastructure in certain areas on the basis of pilot or demonstration projects, thus facilitating public access to forests and enabling the public to take full advantage of their recreational and educational potential.

The measures may also contribute to the development of tourism in certain regions and thus improve the employment situation.

CHAPTER III

PROMOTING THE DEVELOPMENT OF FORESTRY

183. The development of forestry is essential to the Community both within its own frontiers and in the countries from which it imports timber, and in particular the developing countries.

Over the past few years the Community has made a special effort to develop forestry, particularly in the Mediterranean regions (Regulations (EEC) Nos 269/79, 1975/82) and in the developing countries (EDF, EIB). These efforts must be continued and intensified.

184. The purpose of measures to develop forestry within the Community and in the developing countries is to enable the woodland areas to fulfil more completely their three essential functions. Such measures are designed to

- develop agro-forestry, in particular by expanding the woodland areas of agricultural holdings;
- expand the woodland areas which do not form part of agricultural holdings, wherever this is technically feasible, economically justified and ecologically and socially desirable;
- develop proper sectoral structures and industrial infrastructures;
- promote forestry in the developing countries.

I. DEVELOPING AGRO-FORESTRY

185. The links between agriculture and forestry have become gradually more tenuous since the beginning of this century; in some cases there have even been conflicts of interest. The present agricultural crisis and the new interest in forestry could make for stronger links between the two sectors and, in the end, a better competitive balance between these two activities which cover a very substantial proportion of the land area. In some cases, therefore, the development of forestry should be more closely linked with agriculture.

The Community still has large areas of uncultivated or unproductive land where afforestation should be encouraged. For such land, the growing of trees would be a valid alternative to agricultural use.

186. On non-marginal agricultural land the cropping of trees with a rapid growth rate could in certain circumstances offer an alternative to those lines of agricultural production which are in structural surplus.

187. Community action on forestry should thus help to strengthen cooperation between agriculture and forestry by aiming to :

- modernize the woodlands on holdings of the agro-silvo-pastoral or agro-silvicultural type;
- encourage the afforestation of certain areas of agricultural holdings;
- encourage the growing of ligneous plants as part of the agricultural rotation of crops;
- develop the growing of widely-spaced ligneous crops in combination with grazing or rotational cropping.

1. Modernizing forestry of the silvo-pastoral or agro-silvicultural type

188. In certain upland and less-favoured areas of Europe, farming is a complex system in which arable farming, stockfarming and forestry have a close symbiotic relationship.

Community action on forestry must take account of the special problems posed by the woodlands which are an essential part of such holdings and must help with the modernization of these woodlands.

The Community should take appropriate measures to ensure that the agro-silvo-pastoral or agro-silvicultural systems can take full advantage of technological progress without losing their identities, since these systems meet the needs of the regions in question and thus help to maintain a balance within the Community. In this respect, the Community could follow the examples of nearby countries such as Switzerland, Austria or (somewhat further afield) Finland.

2. Afforestation of certain areas of agricultural holdings

189. The afforestation of farmland should be developed along three main lines :

- encouraging the implementation of the recent agro-forestry measures

As part of the new measures to improve agricultural structures, the Council recently adopted[1] measures to encourage persons engaged in farming as their main occupation to plant trees on certain parts of their holding.

Since implementation of these measures by the Member States is optional, the Commission must first persuade the national authorities to implement them. The relevant information must then be made available to the farmers concerned, to encourage them to undertake afforestation.

190. In this context, priority should be given to encouraging the afforestation of derelict land but also marginal or under-used land. In such cases timber production could be extensive or intensive.

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[1] Regulation (EEC) No 797/85, OJ No L 93, 30.03.1985.

Depending on the quality of the soil and local conditions, Community action should encourage the following types of production :

. intensive mass production of timber for industrial or energy purposes
. production of medium-quality timber, and in particular saw timber
. intensive growing of trees, primarily deciduous trees for the production of high-quality commercial timber and veneer wood
. widely-spaced ligneous crops in combination with grazing or arable farming.

3. Extending the recent agro-silvicultural measures to all owners of land suitable for afforestation

191. The abovementioned forestry measures, which apply only to certain categories of farm since they form part of the policy on agricultural structures, should be extended to other categories of owner wishing to plant trees on their land. This would widen the mainly agricultural objective pursued by the Regulation on improving the efficiency of agricultural structures and would take specifically forestry- related objectives into account.

4. Encouraging ligneous crops on agricultural holdings

192. The progress made with the production of rapidly-growing ligneous crops indicates that, in certain agro-economic circumstances and subject to appropriate financing arrangements, ligenous plants could be given a more prominent place in the crop rotation.

Rapidly-growing species such as the poplar or the eucalyptus, on which a great deal of reserach works has been done, should probably receive more sustained consideration from the Community, which could encourage their development by means of pilot projects or demonstrations and certain incentives.

Studies should begin as soon as possible on the financial arrangements whereby farmers going over to ligenous crops in particular and afforestation of farmland in general could be assured some continuity of income.

II. EXPANSION OF WOODLAND AREAS NOT FORMING PART OF AGRICULTURAL HOLDINGS

193. There is considerable scope for increasing the woodland area within the Community. There are three possibilities :

- Community participation in afforestation or large-scale forestry operations
- the creation of woodlands on the periphery of urban areas.

1. Participation in afforestation programmes and large-scale forestry operations

194. In line with the objectives mentioned above and with rational land use[1], the Community should take a more active part in afforestation operations :

- either in the form of specific programmes
- or in the form of large-scale operations.

195. - Participation in afforestation programmes

In view of certain afforestation programmes in which the Community has already particpated and which were very successful, new Community measures should be taken to grant financial aid to institutions and private individuals carrying out afforestation work, subject to certain conditions, in particularly difficult areas where such afforestation makes a direct contribution towards balance within the Community[2]; the types of geographical area most suitable for such Community development measures would be areas subject to especially intense erosion, certain frontier areas and the watershed areas in which rivers of European importance have their source.

In this connection the Commission will propose that Regulation (EEC) No 269/79 on Mediterranean forestry, which expires at the end of 1985, should be renewed for a further five years and extended where necessary to other underdeveloped regions.

196. - Participation in large-scale forestry operations

A Community financial contribution could be made toward large-scale afforestation or reafforestation operations in hilly, coastal or arid areas where there is a considerable risk of erosion.

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1 Community measures to develop forestry should also form part of a regional development strategy, with particular reference to the balanced allocation of land for urban, agricultural and forestry purposes. Forestry development measures should thus be accompanied by incentives for the zoning of land so that forestry development takes place where it is really appropriate, in the light of natural conditions and the requirements of the local population.
Forestry measures should therefore be accompanied by incentives for the prior subdivision of territory into areas suitable for forestry. This indispensable precaution would prevent conflicts between forestry and other sectors (particularly agriculture) which might be detrimental to the effectiveness of the measures.

2 In this context, the areas covered by the Integrated Mediterranean Programmes would naturally have to be given consideration.

These large-scale operations, which could also be implemented in the structurally handicapped regions of the Community, in areas threatened with depopulation or in areas where the conservation of the countryside is necessary, would be designed with a view to regional development and in particular the improvement of the employment situation.

2. Creation and development of woodlands on the periphery of urban areas

197. Community measures should encourage the creation and expansion of woodlands for recreational purposes in the vicinity of large conurbations.

III. DEVELOPMENT OF PROPER SECTORAL STRUCTURES AND INDUSTRIAL INFRASTRUCTURES

198. The smallness of many forest estates, their excessive fragmentation and the lack of technical training among most forest owners is an almost impossible handicap to overcome unless there is a proper structure within the private forestry sector, and this should be encouraged and facilitated.

199. The following have a key role to play :

- forestry associations
- undertakings specializing in forestry work.

At the timber-processing stage, dynamic industrial infrastructures are also needed. The aim of Community action must be to modernize existing industries and to encourage the establishment of new firms which can cope with the expansion of production and with changes in demand whilst keeping pace with international competitors.

1. Aid for the establishment and development of forestry associations

200. Forestry associations (free associations of private owners) should make it possible to end the technical and economic isolation of the private forestry sector. Such associations, the purpose of which is to help private owners manage their woodlands by providing them with relevant information, forestry services or marketing assistance, ought to be established throughout the Community. In may arreas, however, there are no such organizations as yet.

Provided they satisfy certain generally recognized criteria of commercial efficiency, forestry associations could not only offer private owners valuable assistance in drawing up and implementing their forestry management plans but could also perform a worthwhile function as agents for the sale of their products (group sales).

201. The form of the associations would be a matter for the parties concerned. It could vary according to the objectives pursued and trends in production and marketing techniques, or depending on the size of the undertakings with which they have to negotiate the processing of forest products[1].

202. The Community should encourage the establishment and development of such associations so that all forest owners, no matter what the size of their woodlands, and all those engaged in the wood industries can benefit from this type of organization, without which the private forestry sector cannot prosper.

2. Facilitating the establishment of undertakings specializing in forestry work

203. The establishment and maintenance of woodland requires a great variety of work. Apart from planting, the operations concerned include the preparation of the soil, the maintenance of stands and regular cropping. Many owners are themselves unable to carry out such operations, which must however be performed at the proper time if the woodland areas concerned are to remain in good condition.

Specialized firms could assist owners to carry out these tasks which they often neglect and which, if not performed, compromise the future of their woodlands. The success of private forestry is thus dependent on the existence of such firms.

204. Aid should be granted by the Community to encourage the establishment or development of undertakings specializing in forestry work in conjunction with its efforts to promote small and medium-sized enterprises. Community measures should also be taken to ensure that the development of such undertakings is not impeded by social security and tax legislation at national level.

3. Facilitating the modernization of the wood-processing industries and the provision of new industrial capacity

205. The recent measures adopted by the Council to improve the processing and marketing of agricultural products did not include (as proposed by the Commission) assitance from the EAGGF for the modernization of the industries engaged in the primary processing of silvicultural products (saw mills, charcoal plants, refining of resins, etc.), not because the development of such industries deserved no support but because the wood-processing industries were not eligible for assistance in the context of legislation to implement agricultural policy.

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1 A forestry association consisting of owners possessing 150 to 200 hectares is probably viable if it is mainly concerned with forest management. On the other hand, it would be 500 to 1000 times too small if it were to try to negotiate on an equal footing with a pulp factory using modern equipment.

206. In the short time, the emergence of higher forestry output in several regions of the Community will create favourable conditions for the development of the primary-processing industries.

The development of such industries should therefore be encouraged provided that they can be established or adapted to cope with the coming increase in the supply of forestry products in their region and provided that outlets are available for the goods thus manufactured.

207. The industries engaged in the later stages of wood-processing should also receive the Community's attention. If measures were adopted to facilitate the restructuring necessitated by technological progress and changing demand and if the raw materials and manufactured products could be standardized to a greater extent, this would help to improve the industrial fabric of the timber sector generally and would be in the Community's best interest.

IV. PROMOTION OF FORESTRY IN THE DEVELOPING COUNTRIES

208. The Community imports large quantities of timber, particularly tropical woods, and timber derivatives from the developing countries. In its own interests, but also in the interests of its trading partners, it must ensure that the sources of renewable raw materials on which its supplies depend are safeguarded and consolidated.

According to a recent FAO study, the tropical forests which supply a substantial proportion of the Community's timber requirements and which covered a total of 1935 million hectares in 1980 (1200 million ha of dense forests and 735 million ha of open forests) have been decreasing in area by some 11.3 million ha per year since that date. Thus, each year the area of tropical forest is diminishing by the equivalent of about half the total woodland area of the present Community.

209. This gives cause for concern on several counts. Its is a problem for the Community not only because it could eventually jeopardize timber supplies to this part of the world but also, and above all, because it has dramatic consequences for the local populations who are totally dependent on woodland for their survival and whose extreme poverty nevertheless leads them to the irrevocable destruction of this vital resource, which is gradually being transformed into desert.

The Community should embark as soon as possible on a detailed study of the impact of its development aid and trade policies on tropical timber. Above all, however, it should undertake vigorous steps to halt this unsettling trend. It needs to devise a strategy to conserve and enhance the value of tropical forests and set in motion the appropriate means to this end. The Community must therefore devise a strategy for the development and conservation of the tropical forests and must employ appropriate means to achieve this end.

1. Drawing up a Community strategy on the tropical forests

210. The problems posed by the development and conservation of tropical forests are of three kinds : technical and biological problems; economic, administrative and organizational problems; social, institutional and political problems.

211. As a forestry action programme for the developing countries, the Community follows the five main guidelines defined in collaboration with the main international bodies concerned and recently approved by the 9th World Forestry Congress in Mexico.

These five guidelines (priorities) are as follows :

1. Expanding the role of forestry in land use :
   - by agro-silvo-pastoral development;
   - by integrated watershed management;
   - by desertification control;
   - by land use planning and forest resources assessment.

2. Developing forest-based industries :
   - by intensification of resource management development;
   - by appropriate raw material harvesting;
   - by the establishment and management of appropriate forest industries;
   - by the reduction of waste;
   - by the development of capability for marketing forest industry products.

3. Making full use of fuel wood :
   - by support to national fuel wood/wood energy programmes;
   - by the development of commercial wood-based energy;
   - by regional training and demonstration programmes;
   - by an interregional programme for intensification of wood energy research and development.

4. Conserving tropical forest ecosystems :
   - by the development of national networks of protected areas;
   - by assistance in the planning, management and development of individual protected areas;
   - by in situ conservation of plant genetic resources;
   - by active promotion of research in the management of forests for sustainable production.

5. Strengthening the role of institutions which promote forestry :
   - by the formulation of forestry policies and the creation of a legal framework;
   - by the establishment of strengthening of educational and training systems;

- by further research and extension work;
- by the establishment or development of public forestry administrations;
- through institutions supporting local participation, local organizations and the private sector;
- by integrating institution-building into the formulation and execution of programmes and projects.

212. Clearly, such a strategy should aim to satisfy human needs and should be based on the full and wholehearted participation of the population affected by the forest management and conservation measures. The strategy should also take into consideration the stability of trade patterns between the developing countries and the Community.

2. Action on several levels

213. The Community should play a special role in promoting forestry in the developing countries :

- within the framework of the recent International Tropical Timber Agreement, to which the Community itself is a signatory. By ensuring greater concertation among the Member States in accordance with the guidelines mentioned above, the Community would make an essential contribution toward development within the framework of this Agreement;

- through the European Investment Bank;

- by helping to draw up valid plans for integrated forestry development;

- together with the bilateral agencies in the Member States which have already cooperated with the Commission in drawing up a joint strategy to prevent desertification, with a view to the implementation of the Lomé III Convention;

- by ensuring that the Community's commercial policy contributes as much as possible toward this strategy, since the latter may be influenced by timber imports, particularly those of tropical timber;

- by encouraging the wood-processing industries to adopt an environmental code of conduct for the exploitation of tropical forests; such a code would include requirements concerning reafforestation and management aid, which would guarantee the conservation of forests and would represent a departure from the old ways, namely wholesale felling of tropical forests;

- by carrying out in its own tropical forests[1] pilot projects and demonstrations of good management to which both those providing finance and the recipient countries themselves could refer in maaters concerning the design, execution and follow-up of projects.

3. Conditions for success

214. The success of the measures taken to implement the Community's strategy for the expansion of forestry in the developing countries, including the fight against desertification, depends on certain conditions being met and certain precautions being taken, including the following :

- the existence of a national policy on the conservation of nature and an overall plan for the development of rural areas;

- keeping costs to a minimum (economic viability should take precedence over financial viability);

- the presence of staff capable of proper forest management;

- in predominantly arable or pastoral areas, the care of existing natural stands, with priority being given to multi-purpose shrubberies;

- the protection of natural forests as special conservation areas for the resources in situ;

- consideration of the unfavourable effects which will follow from the reintroduction of tree cover.

215. The implementation of forestry measures to assist the developing countries should also be preceded by :

- a thorough investigation of the local context, the environment, the priority needs of the population, etc.;
- measures to heighten awareness and provide information and training at the various levels of political decision-making.

The measures must :

- be based on decentralized technical units;

- link the satisfaction of short-term priority requirements with long-term investments;

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1 Within the Community (in French Guiana) there are over 7 million hectares of tropical forests - the equivalent in area of all the forests in Germany; this considerable expanse could be used as a testing ground for Community trials and demonstrations on the management of tropical forests.

- provide for various forms of remuneration for the work performed by the local population;
- ensure links between investment, future management and use of products;
- organize mass production of the necessary propagating materials.

The measures should be concentrated at specific points in terms of geography and should rapidly achieve the critical mass at which they can influence the local situation and make their mark on the countryside.

Lastly, it will be necessary :

- to strenghten coordination between the various financing authorities, not only those in Europe and the Community in particular, but also those elsewhere, so that bilateral and Community aid can be distributed in such a way that the overall effectiveness is maximized;

- to make full use of the intermediaries provided by non-governmental organizations.

CHAPTER IV

BACK-UP MEASURES

216. If the aims of forest protection, exploitation and development defined above are to be achieved in the best possible conditions, the Community will have to take a certain number of measures to back up those advocated in the foregoing chapters. Such measures will form an integral part of the Forestry Action Programme and influence its general effectiveness. They involve two major areas of Community activity :

- research
- statistics and information.

I. EXPANSION AND COORDINATION OF FORESTRY RESEARCH

217. Part II of this document contains information and comments relating to the Community forestry and woodland research programmes carried out or under way in the Community. These programmes together constitute a considerable investment by the Community, an appraisal of which will have to be made as soon as possible. From such an appraisal it will be possible to improve programming and step up coordination in forestry research as well as develop demonstration and dissemination projects which are soundly based.

1. More and better coordinated research

218. Without awaiting the above appraisal, it can already be said that the Community research effort is very inadequate in view of the ground that needs to be made up and the scale of requirements.

Provision must hence be made to step up future forestry research in the Community. Works should focus on the topics below, the priority and weight given to each depending of course on their expected contribution to attaining the goals set out in the FAP.

- Protection of forests

219. The protection of woodlands from damage caused by biotic or abiotic factors cannot stop at national frontiers. Effective prevention and control depend on measures at Community level and even on wider international cooperation in which the Community should take a constructive leading role.

Subjects of Community-wide interest are :

. atmospheric pollution
. environmentally acceptable methods of combatting tree diseases and insect pests (particularly biological control)
. the relationship between woodland and game
. damage caused to forests by gales (windthrow)
. forest fires.

- Forest genetics

220. In this field more than any other, research can help to increase the productivity of woodlands in the Community. Specific research activities can be carried out in the following fields :

. trials of species and varieties and genetic improvement
. plant breeding and micropropagation
. conservation of the wealth of species and genetic diversity (also overseas)

- Better use of land

221. The main aim is the rational improvement of land-use by substituting forestry for agricultural activities, where the latter are the cause of surpluses, afforestation of marginal agricultural land and increased production of timber so that farmers can remain in possession of their land whilst putting it to adequate productive use.

The following are potential areas of research :

. measures to facilitate the afforestation of land no longer required for agriculture
. silviculutre in small wooded areas with a view to the intensive production of quality timber
. study of the productivity of short-rotation plantations for energy purposes, with different soil types
. use of remote sensing in forestry surveys
. study of agro-silvo-pastoral systems.

- Silvicultural methods and harvesting operations
  Technico-economic studies
  Use of timber

222. Timber production can be increased without harming the environment in a number of ways.

For example, in close cooperation with the timber-processing industry, the research and development programme "Timber as a renewable raw material" which deals with all aspects of timber-based industries should be extended in the industrial processing sphere to cover the following :

. properties of wood and improvement of timber preservation techniques
. improvement of the manufacture and processing of pulp and paper and the chemical components of timber.

Research into timber as a source of energy should also be continued.

223. In promoting forestry research at Community level, attention should be paid to two main considerations :

(a) More intensive coordination of national research activities as a way of reducing the time and money wasted by duplication of work;

(b) Promotion of a greater number of joint research projects which would otherwise be beyond the capabilities of the individual Member States and which comply with the aims of the Community forestry action programme.

2. Development of demonstration projects and advisory services

224. The results of Community-aided forestry research should give rise to a programme of demonstration projects and advisory services supported by the Community.

In this way the Community would help to disseminate the results of research so that they could be applied in practice as soon as possible to the immediate advantage of woodlands throughout the Community.

II. Statistics and information on forests

225. The statistics and other information on forests are currently inadequate for the needs of a Community action programme as here envisaged. Efforts will need to be made to provide the Community with the data and information resources it cannot do without.

1. Development of forestry statistics at Community level

226. The information required in order to implement the Community's forestry measures effectively should be used to draw up a Community forestry statistics programme as an integral part of the general programme of the Statistical Office on the European Communities (SOEC), to be put into effect in conjunction with the national statistical institutes.

Forestry statistics should be based on a regional breakdown.

227. The aim of the forestry statistics programme would be to :

- fill the present gaps in the forestry statistics tables published by the SOEC;

- harmonize the Community's forestry statistics with those of the FAO-ECE;
- transfer forestry statistics onto Cronos (Eurostat chronological series);
- assemble information on requirements in the form of data relating to the various sectors of the wood industry;
- draw up detailed statistics of the structure and output of private woodlands;
  First stage : survey of woodlands forming part of agricultural holdings so as to obtain information relevant to the application of Regulation (EEC) No 797/85 on improving the efficiency of agricultural structures (forestry measures, Article 20);
- provide information needed in order to carry out other Community measures proposed under the FAP, particularly those relating to the development of private woodlands.

228. The forestry statistics programme should also be amplified by micro-economic data concerning forestry undertakings of various types and in various regions assembled through an accountancy data network, based on the forestry accountancy networks existing in the Member States and developed at Community level as an extension of the Farm Accountancy Data Network (FADN).

2. Establishment of a forestry data bank based on harmonized and regionalized national forestry surveys

229. One of the main deficiencies of the forestry/timber sector is the paucity of information on the state of standing timber and forecasts in this field. The main sources of information on this subject are in the national forestry surveys.

These surveys are not harmonized and the data which they provide are not comparable. Furthermore they are not enough to provide a clear picture for operators in all sectors of the timber industry.

This is a vital task for the Community and the success of many of the measures referred to above will depend on it. It will demand a considerable amount of work and sufficient finance if an effective contribution is to be made by the Member States.

The data obtained from such harmonized and modernized surveys would provide the basic material for the establishment of a Community forestry data bank, which is indispensable for the purpose of drawing up projects and forecasts (cf. 116).

230. The data bank would also include foreign trade statistics and at the same time satisfy information requirements concerning trade flows in timber and derived products.

3. Thorough survey of forestry economics and woodland taxation systems in the Community

231. In many respects forestry is a rather opaque sector. Only one of its functions, that of timber production is generally remunerative. Its ecological and recreational function also provides a minor source of revenue in the form of fees paid by hunters to woodland owners. Its value to the environment and society is difficult to appreciate since a large part of the services and advantages it provides are not the subject of commercial transactions. No price can therefore be put on these functions but they must be taken into account if a more accurate appraisal is to be made of the overall economic importance of this sector.

232. It would be useful to collate the projections for the forestry sector made independently in each Member State. This would enable a framework to be established for producing medium-term projections for the Community as a whole, supplying a valuable wood-industry management and policy-making tool.

An analysis of the effects of the taxation systems applied to woodland in the Member States and the distortions of competition which they may give rise to between public and private woodland would also help to guide political decision-makers and bring forestry activities in the Member States more into line with each other.

4. Promoting information about forests among civil servants, woodland owners and the public

233. In order to encourage and facilitate cooperation between the various ministries involved in the forestry strategy as envisaged by the Community, provision should be made for the systematic dissemination of information about Community activities in this field, thus stimulating coordination at all levels.

Information packages should also be devised to enhance public awareness of forestry problems.

These packages should be aimed at :

- young people (schools and colleges, youth organizations)
- adults (all target groups).

5. Supporting the development of regional "forestry and environment" associations

234. With a view to preventing the misunderstandings which often arouse conflict and frustrate the best intentions, it would be desirable to encourage the development of facilities within which the partisans of forestry could meet with environmentalists for constructive dialogue of benefit to both forestry and the environment.

Regionally-based "forestry and environment" associations would seem to offer the most appropriate structure for this approach. Societies of this kind could contribute to improving mutual understanding and lending support to the Community's forestry activities. The Community should therefore encourage the creation of such associations where they do not already exist.

6. Supporting schemes to promote timber as a material

235. The Community's forestry strategy should aim to promote timber as a renewable resource, especially for uses where wood competes with other materials such as metal or plastic. An important part of this activity should be devoted to information campaigns stressing the features of wood as a versatile material in many different applications. Such campaigns would be prepared in collaboration with specialist bodies in the field and be extended to cover all the countries in the Community.

7. Improving the training of woodland owners and forestry workers

236. The Community strategy should contribute to improving the training of those responsible for managing and exploiting woodland, particularly in the private sector.

The personnel in charge of public woodland generally receive a good quality of training in specialized forestry schools, whereas private owners and the staff they employ are, with some exceptions, often trained to a very inadequate level.

This activity would be geared particularly to encouraging the development of training courses aimed at owners of private woodland and at forestry workers.

CHAPTER V

THE RESOURCES OF THE COMMUNITY'S FORESTRY STRATEGY

237. The means available to the Community for implementing a comprehensive forestry strategy fall within the scope of the standard array of Community resources. These resources are not only legal, financial and administrative but also politicial in nature.

238. From a legal point of view, the Treaty makes adequate provision (including, as a last resort, Article 235) for all of the planned measures. The range of legal acts to which the Community institutions may normally have recourse is also sufficient to meet requirements. Accordingly, no prior amendment of the Treaty is required to embark upon a comprehensive forestry strategy. The argument that has often been used in the past, according to which the Community was devoid of powers with regard to forestry owing to the fact that there was no explicit provision for a forestry policy in the Treaty, does not stand up to either textual analysis or an examination of the facts; it is actually fallacious. There is, therefore, no legal obstacle or interdict to prevent the Community from taking action in this area.

239. Forestry measures are normally costly and the prospects for a return on investments have to be seen in the long term.

It is evident that a general debate about the development of a forestry policy can only be realistic if it takes into account the budgetary availabilities, which are limited; forestry, like other sectors, has to find its place in the overall budget strategy of the Community.

However, it must be stressed that forestry actions form an integral part of newly adopted Community programmes such as for instance the Integrated Mediterranean Programmes. So even within existing budgetary means there should be some scope for development of forestry actions.

The development of forestry actions is closely linked to other policies, notably the CAP. Therefore one of the tasks to be fulfilled during the consultations period will be to carry out cost/benefit analysis that shows more clearly the interrelationship to other policies.

241. From a political point of view, forestry has in recent years won a greater degree of support at European level than ever before. Within the Community institutions, the Commission attaches particular importance to forestry, as is shown by this report, as does Parliament, which has adopted several motions on this question. Support is also forthcoming for forestry from the Economic and Social Committee. Only the Council has, until now, remained hesitant to say the least, because two or three countries are determined to oppose a Community forestry policy.

One of the main reasons for the Council's reticence has that there is still no appropriate forum where all the ministers responsible for forestry can get together. It may now be the right moment to encourage one.

Likewise, provision should be made for an outline plan for forestry and timber at Community level that would serve as a general point of reference for the whole of the planned strategy.

1. Standing Forestry Committee

242. Together with its 1978 proposal for a resolution on forestry policy, the Commission proposed that a Standing Forestry Committee be set up. This proposal is still pending before the Council. Such a Committee does, in fact, already exist on an informal basis. This is the Committee to Coordinate Forestry Policies (COFOR), a forum in which chief forestry executives have been meeting since 1960. The Committee has no legal basis and is without a mandate, and for now its existence is only justified by the importance of the exchanges of information that it occasions.

The formal establishment of such a Committee would mean that it could be entrusted, in addition to the role of coordinating forestry policies which it could only assume with a mandate from the Council, with the tasks of a management committee for Community forestry measures. Each time that such tasks were provided for in the Regulations introducing the said measures, reference could be made to the Council decision setting up the Committee.

The institutionalization of the said Committee would make it possible to ensure the cohesion that is desirable between the various forestry measures taken by the Community and would avoid numerous ad hoc committees being set up as decisions were taken on the launching of separate new forestry measures. It is greatly to be hoped that the Council will finally state its position on this matter without any further delay. The Commission is thus upholding this proposal and asks the Council to adopt it.

2. Regular reports on the forestry situation in the Community

243. As is the case with other sectors, in particular agriculture, the Commission would submit to the Council a report on the forestry situation in the Community and on forestry policies and measures. This report would review the steps taken by the Community and the results achieved. It would, in principle, be drawn up every two years; attention would be paid to ensuring that the time at which it was presented matched the times at which major decisions on forestry matters had to be taken. This report would also be sent to Parliament and the Economic and Social Committee.

3. Medium-term forestry programme for the Community

244. The Community cannot develop a comprehensive strategy in an area as complex as that of forestry without an outline programme setting out quantitative and qualitative objectives; within this context each of the various sectors would help attain the said objectives.

This programme would cover the coming two decades and would be broken down into five-year stages, the first of which would coincide with the period covered by the Forestry Action Programme (1986-90). This programme would be re-examined and re-adjusted where necessary every five years.

4. Forestry Council

245. The lesson suggested by the discussions in the Council over a number of years is that when the Council is called upon to examine such proposals it is desirable that its composition should be appropriate to the occasion. This requirement results from the fact that ministerial responsibilities for matters relating to forestry do not always come under the same ministry in all countries[1].

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1 Forestry comes under the aegis of the Minister of Agriculture in the following Member States : the Federal Republic of Germany, Italy, Greece, the Netherlands, France and Ireland. In the two last-mentioned countries, forestry comes under the direct responsibility of a Minister of State and Junior Minister respectively of agriculture and forestry on the one hand and of forestry and fisheries on the other.
In Denmark and Luxembourg the Minister of the Environment has responsibility for forestry.
In Belgium and the United Kingdom responsibility lies with the regional authorities.

The formal submission of the Community Forestry Action Programme by the Commission will undoubtedly provide an opportunity for holding a first-ever informal meeting of "forestry ministers". Such a meeting would be a logical, albeit much delayed, follow-up to the meeting arranged in Brussels by the Commission in 1959 (a quarter-century ago and more), the results of which make interesting reading; most are still relevant today.

CHAPTER VI

PRELIMINARY COMMUNITY FORESTRY ACTION PROGRAMME

246. To ensure consistency and compatability between the actions recommended in the foregoing chapters, they should be encompassed in a five-year programme, specifying for each scheme : priority, type of action (coordination or Community action), legal basis, dates foreseen for their launch and duration as well as the means to be used (financial and administrative).

247. The following table gives the outline of a programme which covers the years 1986 to 1990.

This table is structured according to the general outlines of the Community action described previously. The schemes are grouped according to their primordial objective :

- protection of forests
- increase in the value of the forest
- development of the forest.

The table also shows the general supporting activities as well as the steps to be taken in order to implement the F.A.P.

The table demonstrates the benefits of an overall, integrated approach to Community forestry activities in responding adequately to the challenges currently facing the Member States and the Community in the forestry field.

OUTLINE OF A FORESTRY ACTION PROGRAMME
1986 - 1990

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
N°s § § chapters I to V	Proposed Community actions	Priority (* *)	Type of action: Co-ordination	Type of action: Community actions	Legal basis (Art. Treaty)	Type of act (*)	Proposed date Year/ Quarter	Duration of action (years)	Source of finance (* * *)	Other means
	I. FOREST PROTECTION									
136 137	Reinforcement of plant health protection of forests	2	x	x	43	MAN	86.3	PERM	EAGGF	PLANT HEALTH COMMITT.
136 137	Development of research programmes into forest tree diseases	1	x	x		RES	86.1	5	BUDG	REFOR
136 137	Development of plant health inspection systems	2		x		MAN	86.2	PERM	EAGGF	PLANT HEALTH COMMITT.
140	Establishment (or augmentation) of a network of forest observation plots and putting into action the collection and treatment of data gathered	1		x	235	MAN	85.4	1	BUDG 3880	COMMIT. FORESTRY PROTECT.
141	Harmonisation of measuring methods of atmospheric pollution in the forest and the presentation of periodic reports on observed damage and their relation to atmospheric pollution	1	x		235	MAN	85.4	1	BUDG 3880	COMMIT. FORESTRY PROTECT.

(*) REGL (regulation) - DIR (Directive) - COUN DEC (Council Decision) - COM DEC (Commission Decision) - REC (Recommendation) - MAN (Management by Committee) - ADM (administrative acts authorised by the Commission) - STUDM (Commission Study) - RES (Research) - DEM (Demonstration) - RESOL (Resolution)

(* *) N°s 1=very high level 2=high level 3=medium level 4=low level of priority

(* * *) BUDG (Budget).

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
										COMMITT.
143	Implementation of regulation concerning the protection of forests against fire	1	x	x	235	MAN	85.4	1	BUDG 3880	FORESTRY PROTEC.
144	Engaging means of intervention at various levels in case of forest disasters	2	x			ADM	86.3	0,5		COMMITT. FORESTRY PROTEC.
147	Production of a Community measure aimed at protecting the forest against abusive felling	3	x		235	DIR	87.1	1	-	COMMITT. FORESTRY PROTEC.
148	Production of "Good Conduct Rules" concerning the genetic variety of reproductive material	3	x		43	MAN	86.3	0,5	-	PLANT HEALTH COMMITT.
148	Inventory of measures taken or projects foreseen regarding a forestry genebank in order to avoid a reduction in genetic variability	3	x	x	43 and 235	ADM	86.1	1	BUDG 3840	REFOR
148	Encouragement of the creation of gene banks for rare and threatened forest ecotypes	3		x	43 and 235	REGL	86.4	5	BUDG 3840	REFOR
208 209	Examination of the impact of development aid and related measures to trade in the tropical forests	2	x			STUDY	86.1	1	FED	
151 152 153	Control of game population density (hunting plans) and the establishment of a European code for shooting in the forest	4	x		235	DIR	87.1	5	-	-

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
152 153	Development of a programme of research and development concerning the balance between forestry and wild fauna	2	x		43 and 235	RES	86.1	5	BUDG 3840	
	II. IMPROVED UTILISATION OF THE FOREST									
157	Concerted actions between the different common policies contributing to the improvement of conditions of establishment and functioning of the various sections of the forest-related industries	1	x			ADM	85.4		BUDG	CCFB
159 160	Reexamination of the Community measures concerning forest seeds and plants in force since 1968	1	x		43	MAN				SEED COMMITT.
161 162	Incentives to : - cleaning in young stands - first thinnings in conifers - species diversification in certain stands	2		x	43 and 235	REGL	86.2	5	BUDG chap. 38	
163	Prolongation till 1986 and thereafter geographic extension of aids agreed up to 31.12.85 in certain Mediterranean zones of the Community	1		x	43 and 235	REGL	85.4	5	EAGGF	COMITE FEOGA + CPSA
164	Encouragement to forest owners to establish and follow simple management plans	2		x	43 and 235	REGL	86.1	5	BUDG	

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
165	Encouragement of the creation of forestry groups conforming to common criteria	1		x	235	REGL	86.1	5	BUDG Chap 38	
166	Establishment of common norms for - conifer sawnwood - other sawnwood - other wood products	1 2 4	x x x			DIR	86.1 86-4 87-2			CCFB CCFB CCFB
167	Updating of a contractual system to guarantee supply of wood to processing industries		x			STUDY	86.1			CCFB
168 169 170	Proposal for a cork industry market organization	2	x	x	43	REGL	86.2	5	EAGGF	COMITE DE GES-TION LIEGE (A CREER
171	Experiments and demonstrations concerning non-wood forest products	4	x		235	RES	86.2	5	BUDG Rech.	REFOR
172	Encouraging forestry/shooting associations									
174	Organisation of information campaigns making the public and public authorities aware of the forest	2				ADM	86.2	3	BUDG INFORM	
175	Aid to improve maintenance in neglected protection forests and the creation of new protection forests in watershed basins	2		x	43 and 235	REGL	86.3	5	EAGGF	
176 177	Establishment of a European good conduct code concerning ecology of the forest	2	x		235	RES	86.3	-	-	

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
179	Encouragement of the creation of reserve rest and feeding areas for wild fauna	3								
178	Aid for the creation of natural parks	4		x	235	REG	87.1	5	ENVIR. BUDG	
181 182	Promotion of opening forests to the public and a European good conduct code for forest visitors and encouragement of the creation of reception and information centres	4	x		235	RES DEM	87.1 86.4	5	ENVIR. BUDG	
	III. DEVELOPMENT OF THE FOREST									
188	Community action to help modernise rural forests	2		x	43 and 235	REG	86.2	5	EAGGF	SCAS -
189	Organisation of an information campaign for farmers eligible for the forestry measures under (Article 20 of) Reg. 797/85	1		x	43	ADM	85.4	1	INFORM BUDG	SCAS
191	Extension of agro-silvicultural measures of Reg. 797/85 to all agriculturalists	2		x	43 and 235	REG	86.2	5	FEOGA	SCAS
192	Engaging financial measures assuring the continuity of revenue from agricultural holdings undergoing afforestation	1	x		43	STUDY	86.1	1	AGRIC. STUDY PROGR.	
192	Pilot projects and demonstrations concerning wood production (poplars - eucalyptus)	2	x		43	DEM	86.3	5	BUDG Chap 38	

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
193 to 196	Community participation in implementing large-scale regional forestry works of European interest	3		x	235	REG	87.1	5	BUDG +IMP	
197	Participation in the creation of forests near urban centres	4		x	235	REG	88.1	5	ENVIR. BUDG	
198 199	Aid for the creation and development of groups of private forest owners for management of their forest estates and the marketing of their forest products	1		x	235	REG	86.1	5	FORESTRY BUDG	
200 to 204	Facilitating the creation and development of enterprises specialising in forestry work	3	x		235 Reg. 1787/84	DEC COM	87.1		ERDF (1)	
205	Encouragement of the development of wood-processing industries and recovery of wood waste according to supply	3	x		235 Reg. 1787/84	DEC COM	87.1		ERDF	
209 to 212	Drafting of a Community strategy concerning tropical forests (in collaboration with developing countries)	3	x		LOME III	RESOL	87.1		EDF	
213	Establishment of a good ecological conduct code convention for the exploitation of tropical forests	4	x		LOME III Tropic. Timber	DIR	88.1			
213	Good management projects/demonstrations in the tropical forest of Guyana	4	x			DEM DEC COM	88.1		EDF ERDF (2)	
215	Organising the coordination between Community funds participating in forestry projects	2	x		LOME III	ADM	86.3	5	EDF	

(1) Within certain geographic limits
(2) Studies (preparatory), road projects

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
			IV. COMPLEMENTARY ACTIONS							
216 to 221	- Carrying out programmes and proposing programmes of research concerning : . wood as a renewable raw material (COM 85/399) . environment and climatology (COM 85/391) . biomass energy . Decision 83/641/EEC on the Agricultural Research Programme - Preparation and implementation of supplementary research projects not included in the foregoing programmes and corresponding directly with the objectives of the FAP	1	x	x	43 and 235	REGL	86.1	5	BUDG RES +3841	REFOR C.G.C. C.P.R.A
222 223 224	Establishment of a demonstration programme for forestry research results in the Community	4	x		43 and 235	DEM	89.-	5	BUDG RES	REFOR C.G.C. C.P.R.A
226 227	Establishment of a Community forestry statistics programme	1	x	x	43 and 235	REGL	86.1	5	BUDG +3841	GROUPE STATIST FOREST.
228	Creation of a forestry information and accounting network	4		x	43 and 235	REGL	89.-	PERM	BUDG	RICA COMMITT.
229 230	Creation of a European forestry data bank	4		x	235	DEC CONS	90.-	PERM	BUDG	CRONOS CPSA STATISTIQUES
231 232	Case study on the economy and fiscal aspects of European forestry (actual and foreseen)	1	x			STUDY	86.1	1	BUDG. STUDY	

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
234	Contribution to the development of regional "Forestry and Environment" Associations	4	x		235	REGL	89.1	5	BUDG	
235	Information campaigns for the promotion of wood as a material - European seal	4	x		235	RES	89.1	-	-	
236	Encourage training courses for forest owners and forest workers	3	x			DEC CONS	88.1			
	V. ESTABLISHMENT OF THE PAF									
242	Establishment of a Standing Forestry Committee	1	x	x	235	DEC CONS	86.1	PERM	BUDG	
242 243	Institution of an outline EEC forestry plan and a periodic report on the forestry situation in the Community	1	x	x	235	DEC	86.1	10	BUDG	
245	Reinforcement of the forestry department of the Commission	1				DEC CONS	86.1	PERM	BUDG	

SUMMARY OF ANNEXES

ANNEX I

DISTRIBUTION OF WORLD FOREST COVER BY CONTINENTS

CONTINENT / REGION	% OF TOTAL FOREST AREA (IE OF 4,100 MHa)	% OF TOTAL CLOSED FOREST AREA	CLOSED FOREST PER CAPITA (Ha)
U.S.S.R.	22.0 %	29.0 %	3.0 ha
AFRICA	19.5 %	7.5 %	0.4 ha
SOUTH & CENTRAL AMERICA	19.5 %	22.5 %	2.4 ha
NORTH AMERICA	15.9 %	17.6 %	2.0 ha
ASIA	14.0 %	15.0 %	0.2 ha
OCEANIA	4.9 %	3.2 %	3.6 ha
EUROPE	4.2 %	5.2 %	0.3 ha
EUR 10	(1.0 %)	(1.2 %)	(0.1 ha)
WORLD	100.000	100.000	0.7 ha

ANNEX II

COMPARISON OF FOREST AREA AS % OF TOTAL AREA FOR THE MAIN TRADING GROUPS

TRADING GROUP	POPULATION (TOTAL)	AREA - (TOTAL) (1000 HA)	WOODED AREA **		
			(1000 HA)	% OF THE TOTAL AREA	HA PER CAPITA
CANADA	23,340	992,217	436,400	47.6	18.7
UNITED STATES	233,982	933,072	298,076	32.7	1.3
AUSTRALIA	14,860	768,642	107,000	13.92	7.2
U.S.S.R.	268,844	2,240,200	929,600	41.7	3.5
JAPAN	117,169	372,300	25,053	6.7	0.2
REST EUROPE *	244,232	277,868	58,901	21.2	0.2
EEC 10	272,126	165,640	40,258	24.30	0.1
REST EUROPE *	196,300	218,178	43,414	19.89	0.2
EEC 12	320,058	225,330	55,745	24.74	0.2

SOURCES: FAO (Populations & Areas)
ECE (Wooded areas)

* Includes:- Austria, Switzerland, Yugoslavia, Bulgaria, Czechoslovakia, German Democratic Republic, Hungary, Poland, Romania, Portugal + Spain (less Portugal + Spain for EUR 12).

** i.e. total forest area, including "closed" and "open" forest whether exploited or not.

ANNEX III

COMPARISON OF EXPLOITABLE FOREST AREA BETWEEN MAIN TRADING GROUPS, BY SPECIES TYPE AND INCREMENT RATE.

TRADING GROUP	EXPLOITABLE FOREST AREA (x 1000 Ha)	CONIFEROUS FOREST AREA (x 1000 Ha)	BROADLEAVED ET AL AREA (x 1000 Ha)	ANNUAL INCREMENT PER Ha (m3)
EUR 10	29576	13158	16418	4.44
EUR 12	38655	19329	19326	4.41
REST OF EUROPE*	38618	18899	19719	4.02
SCANDINAVIA (NORWAY, SWEDEN, FINLAND)	48275	44267	4008	3.02
U.S.S.R.	534500	405900	128600	1.40
U.S.A.	195256	83537	111719	3.64
CANADA	214780	N.A.	N.A.	1.66
JAPAN	25200	N.A.	N.A.	1.40

SOURCE:- ECE 1985 - Base year 1980/81.

* Includes: Austria, Switzerland, Yugoslavia, Bulgaria, Czechoslovakia, GDR, Hungary, Poland, Romania.

ANNEX IV

WOODED AND FORESTED AREA OF THE COMMUNITY

Member State	Wooded Area (1)			Forested Area (2)			Cover (4)	
	000 ha	%	% (3)	000 ha	%	% (3)	Wooded %	Forested %
Belgium	613	1.1	42.8	600	1.6	19.5	20.1	19.7
Denmark	493	0.9	17.1	400	1.0	9.5	11.4	9.3
Germany	7,328	13.7	60.4	6,838	17.7	28.11	29.5	27.5
Greece	2,262	4.2	24.5	1,793	4.6	13.90	17.1	13.6
France	14,594	27.4	46.1	13,340	34.5	24.6	26.8	24.5
Ireland	318	0.6	5.6	347	0.9	5.0	4.6	5.0
Italy	6,099	11.4	34.2	3,868	10.0	12.8	20.2	12.8
Luxemburg	82	0.2	64.6	80	0.2	31.0	31.5	30.8
Netherlands	292	0.6	14.5	294	0.8	8.7	7.1	7.1
United Kingdom	2,141	4.0	11.4	2,017	5.2	8.4	8.8	8.3
EEC (10)	34,222	64.1	33.6	29,577	76.5	18.1	20.7	17.9
Spain	15,562	29.1	49.9	6,506	16.8	13.0	30.8	12.9
Portugal	3,641	6.8	89.2	2,590	6.7	30.0	39.5	28.1
EEC (12)	53,425	100	39.0	38,673	100	17.4	23.6	17.1

(1) Total wooded area: source Eurostat basic statistics '84 edition, base year 1982.

(2) 'Closed' forest, 25% of which at least is covered by tree canopy: source: ECE 1985, base year 1980/81.

(3) Relative importance (in %) of the wooded area in comparison with the agricultural area used.

(4) Amount of national/Community territory which is wooded or forested.

ANNEX V

WOODED AREA AS PERCENTAGE OF TOTAL LAND AREA

MEMBER STATE	TOTAL LAND AREA (x 1000 Ha)	EXPLOITABLE CLOSED FOREST (x 1000 Ha)	EXPLOITABLE CLOSED FOREST %
BELGIUM	3,080	600	19.48
DENMARK	4,230	400	9.46
FRANCE	54,319	13,340	24.56
GERMANY	24,322	6,838	28.11
GREECE	12,894	1,793	13.90
IRELAND	6,889	347	5.03
ITALY	30,126	3,868	12.84
LUXEMBURG	258	80	31.00
NETHERLANDS	3,394	294	8.66
UNITED KINGDOM	24,098	2,017	8.37
EUR 10	163,610	29,577	18.07
SPAIN	49,940	6,506	13.02
PORTUGAL	8,562	2,590	30.02
S + P	58,502	9,096	15.55
EUR 12	222,112	38,673	17.41

SOURCE: ECE 1985 - Base Year 1980/81.

ANNEX VI

ANALYSIS OF WOODED AREA BY SPECIES TYPE

MEMBER STATE	CONIFEROUS		BROADLEAVED & OTHERS	
	(1000 ha)	(%)	(1000 ha)	(%)
BELGIUM	283	47.16	317	52.84
DENMARK	252	63	148	37
FRANCE	4,405	33.02	8,935	66.98
GERMANY	4,592	67.15	2,246	32.85
GREECE	690	38.48	1,103	61.52
IRELAND	298	85.87	49	14.13
ITALY	976	25.25	2,892	74.77
LUXEMBURG	27	33.75	53	66.25
NETHERLANDS	191	64.96	103	35.04
UNITED KINGDOM	1,407	69.75	610	30.25
EUR 10	13,121	44.36	16,456	55.64
SPAIN	4,822	74.13	1,683	25.87
PORTUGAL	1,347	52.00	1,243	48.00
S + P	6,169	67.83	2,926	32.17
EUR 12	19,290	49.88	19,382	50.12

SOURCE: ECE 1985 - Base year 1980/81.

ANNEX VII

ANALYSIS OF OWNERSHIP BY NUMBERS OF OWNERSHIPS (1)

MEMBER STATE	TYPE OF OWNERSHIP			TOTAL
	STATE	OTHER PUBLIC	PRIVATE	
BELGIUM	186	626	107,066	108,878
DENMARK	69	229	25,698	25,996
FRANCE	1,486	14,154	(N.A.*)	15,640
GERMANY	1,225	16,643	515,025	532,893
GREECE	N.A.	N.A.	(N.A.***)	N.A.
IRELAND	238	13	(N.A.**)	251
ITALY	10,818	N.A.	826,401	837,219
LUXEMBURG	46	216	12,142	12,404
NETHERLANDS	400	1,053	20,243	21,696
UNITED KINGDOM	243	N.A.	51,440	c.51,683
EUR 10	14,711	32,934	1,558,015	1,605,660
ESTIMATED FINAL TOTALS	15,000	35,000	(4 to 5 million)	

SOURCE: Eurostat 1980 + ( ) : Estimations.

** Estimated several thousands

* Estimated several hundreds of thousands

*** Estimated several tens of thousands

(1) cf definitions annex XI

ANNEX VIII

ANALYSIS OF TYPE OF WOODLAND OWNERSHIPS (1)

(1000 ha)

MEMBER STATE	TYPE OF OWNERSHIP			TOTAL
	STATE	OTHER PUBLIC	PRIVATE	
BELGIUM	c.67	212	316	595
DENMARK	150	20	323	493
FRANCE	1,407	2,189	10,169	13,765
GERMANY	2,171	1,759	3,017	6,947
GREECE	N.A.	N.A.	N.A.	N.A.
IRELAND	277	2	80	359
ITALY	2,381	?	3,023	5,404
LUXEMBURG	5.7	31.2	45.7	82.6
NETHERLANDS	c.85	c.49	c.175	c.309
UNITED KINGDOM	915	?	1,150	2,065
EUR 10	7,458.7	4,262.5	18,298.7	30,019.6

SOURCE: Eurostat 1980.

(1) By forestry holdings is meant "the management unit". This latter comprises all forested areas which constitute a whole with regard to exploitation and management, regardless of the location of the various forested areas. When these are situated in several different inventory sectors all data are attributed to the sector where the holding itself is situated. The management unit also comprises all leased forested areas.

Only those forestry holdings which own and exploit forested areas are to be considered as forestry holdings, regardless of their size, including therefore small forested areas belonging to individuals. Tree-felling companies are not to be considered as forestry holdings.

ANNEX IX

WORLD PRODUCTION & EXPORT TRENDS IN INDUSTRIAL ROUNDWOOD 1963 - 81

millions m3 + %

PRODUCT	1963	1973	1979	1981
SAWNWOOD Mm3 (%) (% EXPORTED)	361 (34.28%) (12.7 %)	445 (32.72%) (15.9 %)	451 (31.21%) (18.2 %)	419 (30.27%) (16.9 %)
PLYWOOD Mm3 (%) (% EXPORTED)	20.2 (1.92%) (9.0 %)	42.2 (3.10%) (14.7 %)	42.3 (2.93%) (15.1 %)	37.9 (2.74%) (17.3 %)
PARTICLE-BOARD Mm3 (%) (% EXPORTED)	6.0 (0.60%) (3.3 %)	32.0 (2.35%) (7.3 %)	41.2 (2.85%) (7.8 %)	39.7 (2.86%) (5.9 %)
WOODPULP Mm3 (%) (% EXPORTED)	70.0 (6.65%) (16 %)	114.3 (8.40%) (15.7 %)	123.0 (8.51%) (16.2 %)	125.3 (9.05%) (16.1 %)
OTHER (INCL. SAWN WASTE, PARTICLES, VENEER, FIBRE-BOARD & SMALL ROUND WOOD) Mm3 (%)	595.8(56.58%)	726.5(53.42%)	787.5(54.49%)	762.1(55.06%)
TOTAL (% EXPORTED)	1053.0(100.0%)	1360.0(100.0%)	1445.0(100.0%)	1384.0(100.0%)

SOURCE: GATT 1984, after FAO.

N.B.: This table excludes all fuelwood production.

ANNEX X

ANALYSIS OF WORLD WOOD PRODUCTION IN 1979

	Mm^3	%
FUELWOOD (FOR COOKING AND HEATING)	1,576	52.20
SAWNWOOD, ASSUMING WASTE FACTOR OF 40 % 450.7 Mm^3 FROM	750	24.83
INDUSTRIAL ROUNDWOOD, INCLUDING :		
(I) PULPWOOD AND WOOD PARTI LES	356	11.79
(II) OTHER IND. ROUNDWOOD (POSTS, POLES, ETC.)	171.3	5.67
(III) MINING TIMBER	33.8	1.12
(IV) VENEER + PLY	58.0	1.92
(V) PARTICLE BOARD	41.2	1.36
(VI) FIBRE-BOARD	18.1	0.59
OTHER	15.6	0.52
TOTAL WORLD PRODUCTION (Mm^3) .	3,020.0	100.00

SOURCE: GATT after FAO.

ANNEX XI

EEC WOOD PRODUCTS TRADING ANALYSIS (1984)

PRODUCT GROUPINGS (INCLUDING NIMEXE CODES	IMPORTS (000 ECU)	EXPORTS (000 ECU)	BALANCE (000 ECU)
1) RAW MATERIALS including :- roundwood and pulpwood chips (44.01-44.04, & 44.09)	1056586	212557	- 844029
2) SAWNWOOD including veneer, plywood, sawnwood (44.05, 44.07, 44.14, 44.15)	5940919	401726	- 5539193
3) BOARDS, SEMI-FINISHED & FINISHED, including :- fibreboard, particle board; semi-finished and finished products. (44.11, 44.18, 44.12, 44.13, 44.16, 44.17, 44.19, 44.20-22, 44.24-25)	933456	230465	- 702991
4) PULP & WASTE PAPER (47.01, 47.02)	5021505	196127	- 4825378
5) KRAFTLINER (48.01 & 20-39)	1046007	5103	- 1040904
6) NEWSPRINT (48.01.01, 48.01.79)	912289	33121	- 879168
7) PAPER & PAPER BOARD (44.01 - 44.08 except 5) & 6) above)	4507434	2243811	- 2263623
8) OTHER including :- builders' carpentry & joinery (44.23), misc. wood ustensils & articles (44.26-28), paper & paper board products (48.09, 48.10, 48.16, 48.21) Special papers (48.11-48.14,48.15)	1291458	1559484	+ 268026
TOTAL	20709654	4882394	- 15827260

SOURCE - NIMEXE BASE YEAR - 1984.

ANNEX XII

RATE OF SELF-SUFFICIENCY 1970 - 1980

(Production in percentage of the apparent consumption)

Member States	Sawnwood		Panels from wood		Woodpulp		Paper and Cardboard	
	1970	1980	1970	1980	1970	1980	1970	1980
Belgium and Luxemburg	43	33	158	212	54	56	74	63
Denmark	41	42	56	58	67	65	39	31
Germany	70	69	92	87	52	46	72	79
Greece	36	41	93	105	-	23	66	72
France	89	79	98	92	61	54	86	83
Ireland	12	24	112	33	24	89	45	22
Italy	38	32	107	80	39	28	97	93
Netherlands	8	10	26	12	22	24	87	78
United Kingdom	13	21	17	24	12	14	68	56
EUR (9) excl. Greece	51	51	81	77	40	39	77	75
Spain	71	68	101	132	68	92	88	94
Portugal	133	180	186	139	368	254	77	128

Source: Timber Committee "Trends and Perspectives for Wood in Europe up to and beyond the year 2000".

ANNEX XIII

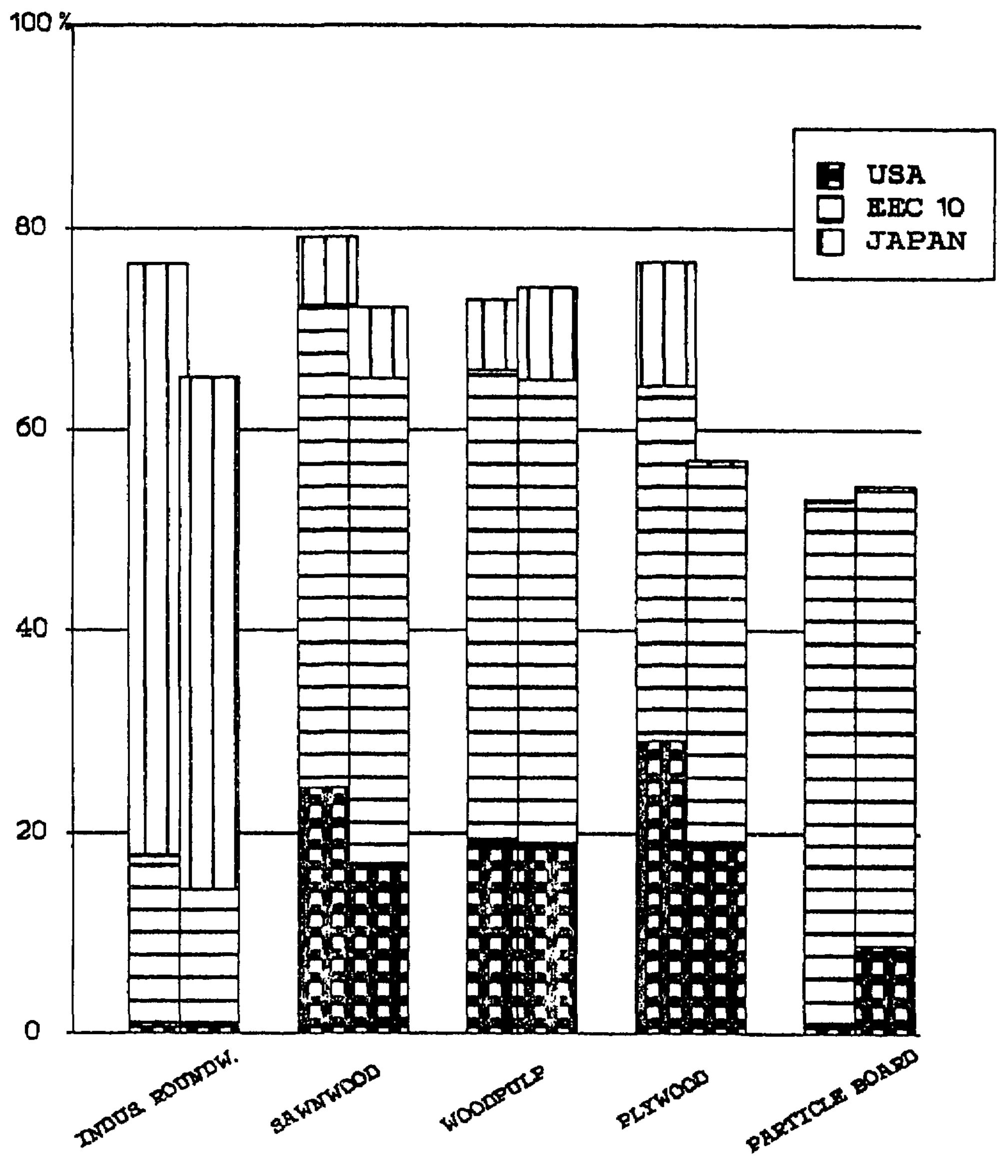
TRENDS IN MARKET SHARES IN DIFFERENT WOOD CATEGORIES
(% OF TOTAL WORLD EXPORT MARKET BY EEC, JAPAN, USA 1973-1981)

PRODUCT	COUNTRY	1973		1981	
		% OF WORLD MARKET		% OF WORLD MARKET	
INDUSTRIAL ROUNDWOOD, (MAINLY SAW & VENEER LOGS)	EEC (10)	17.0%	76.5%	13.0%	65.3%
	JAPAN	58.8%		51.2%	
	USA	0.7%		1.1%	
SAWNWOOD	EEC (10)	48.1%	79.1%	48.3%	72.2%
	JAPAN	6.6%		7.1%	
	USA	24.4%		16.8%	
WOODPULP	EEC (10)	46.5%	72.9%	46.0%	74.1%
	JAPAN	6.9%		9.1%	
	USA	19.5%		19.0%	
PLYWOOD	EEC (10)	35.4%	76.6%	37.3%	56.9%
	JAPAN	12.2%		0.5%	
	USA	29.0%		19.1%	
PARTICLE BOARD	EEC (10)	52.1%	53.1%	45.4%	54.5%
	JAPAN	0.2%		0.5%	
	USA	0.8%		8.6%	

ANNEX XIV

COMPARISON OF PERCENTAGE OF TOTAL WORLD EXPORT MARKET

FOR DIFFERENT WOOD CATEGORIES BY EEC, JAPAN & USA



ANNEX XV

WORLD TRADING TRENDS IN INDUSTRIAL ROUNDWOOD

(Mill m3)

	1963	1973	1979	1981
1. IND. RD. WD PRODUCTION	1053.0	1360.0	1445.0	1384.0
2. EXPORTS (INCL. PULPWOOD)	54.7	134.5	146.2	134.4
3. 2 AS % OF 1	5.2 %	9.9 %	10.1 %	9.7 %
4. PULPWOOD AS % OF 2	25.0 %	19.4 %	22.8 %	21.5 %
5. PULPWOOD AS % OF 1	1.3 %	1.9 %	2.3 %	1.9 %

SOURCE: GATT, after FAO.

ANNEX XVI

COMPARISON OF EXTERNAL TRADE

(MECUS)

TRADING GROUP (Population in brackets)	IMPORTS	EXPORTS	BALANCE
EUR 10 (271.766 u)	630,593	601,708	- 28,885
EUR 12 * (319.698 u)	672.547	626,968	- 45,579
U.S.S.R. (269.994 u)	79,343	88,843	+ 9,500
U.S.A. (232.057 u)	249,004	216,671	- 32,333
CANADA (24.625)	55,954	69,831	+ 13,877
JAPAN (118.449)	134,291	141,310	+ 7,019

Source : EUROSTAT, Database 1983.

* Enlarged Community, including Spain and Portugal (1983 base).

ANNEX XVII

COMPARISON OF EXTERNAL TRADE (WOOD AND WOOD PRODUCTS SECTOR) ■

TRADING GROUP	IMPORTS (000) US DOLL	EXPORTS (000) US DOLL.	BALANCE (000) US DOLL.
EUR 10	17,644.8	1,842.0	- 15,802.8
EUR 12 *	18,609.7	2,634.8	- 15,974.9
U.S.S.R. (1979)	201.0	2,249.0	+ 2,048.0
U.S.A.	7,408.4	7,042.3	- 366.1
CANADA	959.8	9,063.0	+ 8,103.2
JAPAN	10,694.6	237.6	- 10,457.0

* Incl. Spain and Portugal
■ Includes Wood and Wood Products + Pulp, but excludes cork and its derivatives.

Source : GATT 1984, after FAO '81.

ANNEX XVIII

WOOD AS % OF TOTAL EXTERNAL TRADE

TRADING GROUP	IMPORTS	EXPORTS	BALANCE
EUR 10	3.33	0.37	- 65.22
EUR 12	3.30	0.5	- 41.80
U.S.S.R.	0.3	3.-	+ 25.72
U.S.A.	3.55	3.9	+ 1.35
CANADA	0.2	15.5	+ 69.65
JAPAN	9.50	0.2	-177.7

ANNEX XIX

COMPARISON OF EXTERNAL TRADE (WOOD AND WOOD PRODUCTS SECTOR)

MECU

TRADING GROUP	IMPORTS	EXPORTS	BALANCE
EUR 10	21.047	2.197	- 18.850
EUR 12	22.198	3.143	- 19.055
U.S.S.R. (1979)	239	2.682	+ 2.443
U.S.A.	8.836	8.400	- 436
CANADA	1.145	10.810	+ 9.665
JAPAN	12.756	283	- 12.473

ANNEX XX

MINISTERIAL RESPONSIBILITY FOR THE SECTORS "FORESTS - WOOD - ENVIRONMENT"
IN THE MEMBER STATES OF THE COMMUNITY

Areas of responsibility	D C	D R	F	I C	I R	NL	B	L	UK	IRL	DK	GR
The definition of forestry policy determined by:												
- a specific ministry												
- Ministry of Agriculture	x	x	x	x	x		x	x			x	x
- Ministry of Environment											x	
- another ministry						x				x	x	
- an ad hoc organisation									x			
Environmental problems (a) national parks (b) hunting (c) nature protection handled by:												
- same ministry as forests		x			x	x (b)	x	x		x(b)(c)	x (b)	x
- a specific ministry			x			x (a)(c)			x		x (a)(c)	
- another organisation										x (a)		
Sawing industries come under:												
- ministry in charge of forests		x	x		x			x				x
- another ministry						x	x		x	x	x	
Other timber industries come under:												
- ministry in charge of forests	x											x
- ministry for industry			x					x	x	x	x	
- ministry for economy		x				x	x					
The ministry in charge of forests is concerned with problems relating to energy value of wood		x	x			x		x	x	x		x
The ministry in charge of forests is concerned with the problems of the international timber trade										x		
There is an ad hoc organisation for managemement of state forests		x	x		x				x			

C: country level
R: regional level (Länder-Regioni)

PUBLIC EXPENDITURE ON FORESTRY IN THE MEMBER STATES

1000 ECU at current prices
(index = national currency at current prices)

	1975	1976	1977	1978	1979	1980	NOTES (1)	NOTES (2)
GERMANY	5,826 (100)	5,884 (93)	6,360 (95)	8,400 (121)	21,309 (302)	28,479 (403)	247	1.9%
FRANCE	NA	NA	NA	NA	65,551	76,469	NA	2.8%
ITALY	54,578 (100)	39,904 (84)	51,614 (117)	97,216 (236)	104,739 (269)	131,375 (349)	156	4.6%
NETHERLANDS	(3,544.3) (100)	2,032.4 (57)	6,390.1 (180)	6,683.1 (189)	7,159.2 (202)	7,013.5 (198)	148	3.1%
BELGIUM	745.7 (100)	782.5 (99)	986.3 (119)	1,173.0 (139)	1,385 (163)	1,032.2 (123)	94	0.4%
LUXEMBOURG	48.3 (100)	46.2 (91)	56.4 (105)	44.7 (81)	39.2 (72)	41.4 (76)	55	0.2%
UNITED KINGDOM	98,704 (100)	96,368 (108)	66,544 (79)	75,329 (90)	107,049 (126)	117,581 (129)	67	11.2%
IRELAND	14,570 (100)	15,194 (116)	15,932 (128)	19,439 (158)	21,115 (173)	29,134 (239)	124	7.9%
DENMARK	1,042.0 (100)	1,180.3 (107)	1,426.2 (131)	1,648.6 (156)	2,833.2 (271)	2,082.6 (218)	143	1.3%

(1) Deflated index (CDP) 1980 (1975 = 100).
(2) Share of public expenditure on forestry as a proportion of public expenditure on agriculture in 1980.

NA Not available.

ANNEX XXII

SYNTHESIS OF FORESTRY-RELATED RESEARCH PROGRAMMES IN THE EUROPEAN COMMISSION - MAY 1985

NAME OF PROGRAMME	DG RESPONSIBLE	DURATION OF PROGRAMME	BUDGET AVAILABLE	TYPES OF PROJECT/CONTRACT, Nº OF CONTRACTS CONTROL METHOD
European R & D programme on Wood as a Renewable Raw Material (Bois I)	XII	1982-1985	12.5 MECU (of which 0.5 MECU from Sweden)	Jointly funded by the EEC and Sweden, this programme has 126 cost-sharing contracts in 6 areas of research : - production, harvesting, material, processing, fibre processing & chemical sources in wood. It is controlled by a management committee (CGC)[1] reporting to CREST (Council body). Switzerland exchanges information with this project but does not contribute funding.
" (Bois II)	XII	1985-1988	Not defined but likely to be a similar amount	Various cost-sharing contracts in 5 areas; control by CGC, reporting to CREST.
Environmental protection and climatology	XII	1981-1985 ('84-'85)	42 MECU + 7.3 MECU	Within the sub-programme "effects of atmospheric pollution on terrestrial & aquatic ecosystems". Both concerted and cost-sharing contracts are foreseen, with 6.0 MECU reserved for acid deposition. About 1.0 MECU for an "open-top" chamber network, plus contracts being negociated in 11 areas of the bio-chemical mechanisms of tree crop damage. Control by a CGC management committee.
F.A.S.T. II (Forecasting and assessment in science & technology)	XII (ie amongst others)	1984-1987	10.5 MECU	Developed from the FAST I survey, FAST II concentrates research in specific subject areas, amongst these the development of integrated systems for renewable natural resources. Projects are now being considered, following a call for offers and some forestry projects will probably be approved. Control by an ACPM of 12 including 6 scientifists having an information network and engaging research contracts.
New agricultural research programme 1984-1988	VI	1984-1988 (budget review due in 1986)	30 MECU (of which 0.5 MECU is for forestry only)	Coordination work is done by seven programme committees who recommend projects to S.C.A.R. for contracts. Forestry-related programme committees are : - agri-med, energy, landuse, plant productivity & other regions, the last one is not yet operational.
"Non-nuclear energy, sub-programme BIomass"	XVII	1983-1987 1984-1985	53 MECU (including biomass other than wood) 8.9 MECU (mainly wood)	Controlled by an ACPM, this sub-programme studies the fundamentals of biomass production, its availability, the systems in which it grows, its collection & transformation. Proposed research projects have been passed by Council and contracts are now being negociated.
"Non-specific"	VIII/XVI	N/A	N/A	Additionally DG VIII from time to time assists small forest projects.

(1) Council decision no. 84/338/Euratom/CECA, EEC of 29/6/64 (O.J. L 175/25 of 4/7/84) creating a Management and Coordination Committee (CGC) for the research programme, now termed "materials".

ANNEX XXIII

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FOREST DAMAGE: FOREST FIRES (1981) AND ACID RAIN (1985)

Member States	Forest Fires (1981)			Forest Die-Back (May 1985) (2)					
	Number	Area ha	Total Losses (1) (national currency)	Damaged Area (000 ha)				Importance with regard to exploitable forest area	
				Damage	Medium Damage	Trees dead/ dying	Total	Total damaged area	Dead/ dying
Belgium	33	36	1,894 MBF	17	2	1	20	3	0.2
Denmark	11	4	NEG	-	-	-	-	-	-
France	2193	27711	525 MFF	86	11	3	100	1	-
Germany	44	497	2.5 MDM	2424	1163	111	3698	50	1.6
Greece	1159	74570	?	?	?	?	?	?	?
Ireland	347	229	111,000 IR£	-	-	-	-	-	-
Italy	8150	86655	33,003 MLit	?	?	?	?	?	?
Luxembourg	2	1	?	25	5	-	30	37	-
Netherlands	88	17	40,000 NFL	80	20	-	100	34	-
United Kingdom	1228	1349	700,000 £	-	-	-	-	-	-
EUR (10)	13855	191069		2632	1201	115	3948		
Spain	10880	282734	9557 M.Pts.	-	-	-	-		-
Portugal	3038	87439	1196 M.Esc.	-	-	-	-	-	-
EUR (12)	27773	561242		2632	1201	115	3948		

Sources: (1) FAO - Timber Bulletin - vol. XXXVI - Suppl. 7. (2) Information EEC-ONU Press Release Timber Committee 21.10.85.

ANNEX XXIV

ANNEX XXV

Tentative Situation Regarding Forest Fires in 1985[1]

Country	Reference Date	Number of Fires	Area attacked by fire		Total area attacked by fire in ha.
			Forest area in ha.	Agricultural or natural area in ha.	
Italy	30/9/85	16,903	62,515	98,420	160,935
France	30/9/85	5,596	35,050	24,800	59,850
Greece	22/9/85	727	37,511	34,354	71,865
Spain	30/9/85	9,770	147,235	208,763	355,998
Portugal	30/9/85	5,459	81,475	54,095	135,570
Total		38,455	363,786	420,432	784,218

Losses in human life and material:

Italy	4 deaths	1 'plane G 222
France	19 deaths	1 'plane DC 6, 1 'plane Tracker, 1 damaged CL 215
Greece	4 deaths	1 'plane CL 215 damaged
Spain	2 deaths	-
Portugal	18 deaths	1 Hughs 500 helicopter

1) Data given by national organisations are rough figures and may be subject to change.

Brussels, 22.10.85.

STRUCTURAL CHARACTERISTICS OF AGRICULTURAL HOLDINGS WITH WOODLANDS IN THE COMMUNITY
1979/80

MEMBER STATES	Agricultural Holdings (total)		Agricultural Holdings with Woodlands						
	Total Area (000 ha)	Number (000)	Agric. Area Used (000 ha)	Wooded Area (000 ha)	Number Holdings (000)	Wooded Area per Holding (ha)	With regard to total number of holdings (%)	Wooded area in relation to: Total Area (%)	Wooded area in relation to: Agric. Area Used (%)
BELGIUM	1,421	115	85	10	4.8	2.1	4	1	12
DENMARK	2,920	123	737	140	19	7.5	15	4	19
FRANCE	29,278	1,255	14,514	2,402	537	4.5	43	7	17
GERMANY	12,212	850	6,723	1,658	394	4.2	46	11	25
GREECE	NA	NA	NA	NA	NA	NA	NA	NA	NA
IRELAND	5,049	224	403	37	9.8	3.7	4	1	9
ITALY	15,858	2,832	6,043	4,563	6,754	6.8	24	21	75
LUXEMBOURG	130	5	83	13	2.7	4.7	53	9	15
NETHERLANDS	2,037	149	94	38	4.5	8.7	3	2	41
UNITED KINGDOM	17,098	269	5,381	260	44	5.9	16	1	5
EUR (9)	86,003	5,821	34,063	9,122	1,691	5.4	29	9	27

SOURCE: Eurostat Studies on Structures of Agricultural Holdings 79/80.

ANNEX XXVII

COMMUNITY FORESTRY SCHEMES IN 1985 (Recapitulation)

The provisions currently in force are set out below :

- Standardization of raw timber

  . The Directive is applied in all Member States except UK and Greece.
  . Proceedings against UK for infringement have been suspended pending changes to the Directive.
  . Deadline for application in Greece : 31 December 85.
  . Work on revising the Directive has begun but no progress is being made for lack of staff.
  . Enlargement of the Community to include Spain and Portugal may bring new problems.

- Marketing of forest reproductive material

  . Recognition of equivalence for material from non-Community countries : approval only for Austria, applications from Romania, USA, Canada, etc. are being considered.
  . Designation of source areas : work has started on Douglas fir from USA, but no progress for lack of resources.

- Community plant health arrangements

  . Only measure involves protection against oak wilt (confined to oak imports from USA - fumigation).

- Aid for afforestation and woodlands improvements

  . Regulation (EEC) No 763/85 : Mediterranean regions of France and Italy (continuation of Regulation 269/79).
  . Regulation (EEC) No 1975/80 + 619 (Greece).
  . Regulation (EEC) No 1820 (Ireland).
  . Regulation (EEC) No 797/85 : efficiency of agricultural structures. Detailed implementing rules now being drawn up, implementation to start in autumn 1985.

- Research programmes

  . Wood as renewable raw material : five-year programme in course of being rolled forward 1985-1989.
  . Environment and forests : extended to 1985.
  . Agricultural research : new programme 1985-1989.

- Forestry schemes in the less-developed countries

  Several forestry schemes are currently running in LDCs, especially ACP countries, under the management of DG VIII.

ANNEX XXVIII

FORESTRY CONFERENCE ORGANIZED BY THE COMMISSION, JUNE 1959

Final resolution

1. Introduction

The Forestry Conference of experts from the Member States of the EEC met in Brussels from 9 to 11 June 1959.
Having approved the reports attached hereto, prepared by the three working groups which the Conference had set up, at its close the experts wish first of all to draw the attention of the Community authorities to the importance of woodlands in the common market.

Woodlands cover 21.6 % of the total surface area of the EEC. They provide the economy of the Member States with 75 million m3 of log equivalent each year, not including contributions from OCT forests, and thus make a large contribution (about 2/3) to meeting the overall industrial requirements of the Community of Six.

Economic expansion within the common market and the rising standard of living will certainly increase the future demand for timber in the EEC, which will lead to increased imports and greater use of internal resources.

2. OUTLINES OF A COMMON FORESTRY POLICY

In this context and bearing in mind the essential reciprocal relationship between woodlands and agriculture, the upland economy and the conservation of soil and water and the human habitat, the Conference stresses the need to implement a common forestry policy in all Member States in order to conserve, improve, increase the value of and possibly extend woodlands in the Community and the Associated Countries.

The outlines of such a policy should be as follows :

I. Production

1. - Study of shared production trends and management plan;

2. - Woodland restoration and extension plan :
   a) comparison and coordination of plans and programmes; speeding-up of reafforestation, supply of equipment and implementation of protective measures;
   b) inventory of necessary expenditure and procedures for additional financing;

3. - Protection of woodlands, including plant health protection; arrangements for harvesting seeds, marketing of saplings and cuttings;

4. - Coordination of research and information in areas directly connected with the common forestry policy;
5. - Development of education and extension services relating to woodlands;
6. - Comparative study of the various legislative measures and the possibilities for a bare minimum of harmonization to ensure the proper mamagement of woodlands more in line with the aims of the common market;
7. - Based on the above outline, study of a special plan for the development of OCT forests.

II. Marketing

8. - Complete liberalization of trade, in accordance with the wishes expressed by producers, by removing as quickly as possible the export restrictions still in force and doing so even before the deadline set by the Treaty;
9. - Possible use of the safeguard clauses in the Treaty to protect production in the Member States from the harmfull effects of abnormal pressure on international prices, in view of the tendency (noted in the course of discussion of list "G" of the Treaty) not to fix external customs duties for most of the products falling under heading 44 of the Brussels Nomenclature;
10. - Harmonization of production and marketing conditions for both standing and felled timber in order to draw up common rules on competition, including the various factors which are taken into account when determining the cost price, rules for product marketing (standardization) and methods of selling.

III. Privately-owned woodlands

11. - Investigation into possible legislation to prevent excessive fragmentation of privately-owned woodlands, to ensure without coercion that currently profitable woodland units remain intact and to encourage the formation of economic management units;
12. - Compilation of comparative data on fiscal and other charges currently in force in each of the Six Member States of the EEC, in order to determine their immediate and direct effects on privately-owned woodland.

3. WORKING METHOD

In order to implement the ideas outlined above, several of which call for more detailed study which will be lengthy and complex, the Conference wishes the Commission of the EEC to give very serious consideration to the need to ensure permanent continuity of the work of the Conference, possibly by setting up a Standing Committee whose form and composition would be determined by the Commission.
Groups of specialists experts should be called on to study certain problems.
If possible, the Directorate-General for Agriculture of the Commission should also set up a specialist forestry department.

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