

**COMMUNICATION OF THE EUROPEAN COMMISSION
TO THE COUNCIL AND TO THE PARLIAMENT ON
A EUROPEAN COMMUNITY BIODIVERSITY STRATEGY**

I. INTRODUCTION

A) The challenge

1. Biological diversity (biodiversity) is essential to maintain life on earth and has important social, economic, scientific, educational, cultural, recreational and aesthetic values. In addition to its intrinsic value biodiversity determines our resilience to changing circumstances. Without adequate biodiversity, events such as climate change and pest infestations are more likely to have catastrophic effects. It is essential for maintaining the long term viability of agriculture and fisheries for food production. Biodiversity constitutes the basis for the development of many industrial processes and the production of new medicines. Finally, biodiversity often provides solutions to existing problems of pollution and disease.

2. It is estimated in UNEP's Global Biodiversity Assessment that, on a global level, biodiversity is decreasing at a faster rate now than at any other time in the past. The situation in Europe is also a cause for concern. The rich biodiversity of the European Union has been subject to slow changes over the centuries, due to the impact of human activities. The scale of this impact has accelerated dramatically in the last few decades. The Assessment by UNEP confirms that in some European countries up to 24% of species of certain groups such as butterflies, birds and mammals are now nationally extinct.

3. The reasons for this decline in biodiversity in Europe mean that it is likely to accelerate unless action is taken. The European Environmental Agency states in its "Dobris Assessment" that "the decline of Europe's biodiversity in many regions derives mainly from highly intensive, partially industrial forms of agricultural and silvicultural land use; from an increased fragmentation of remaining natural habitats by infrastructure and urbanisation and the exposure to mass tourism as well as pollution of water and air. Given the projected growth in economic activity, the rate of loss of biodiversity is far more likely to increase than stabilise".

4. In spite of past efforts by the Community and its Member States to address the problem of biodiversity reduction or loss, existing measures are insufficient to reverse present trends. It is therefore both essential and urgent for the Community to develop a strategy and take action towards the conservation and sustainable use of biodiversity.

B) The response

5. The global scale of biodiversity reduction or losses and the interdependence of different species and eco-systems across national borders demands concerted international action. The framework for this action is the Convention on Biological Diversity (CBD). The European Community ratified the CBD on 21 December 1993. The CBD pursues three objectives, namely the conservation of biodiversity, the sustainable use of its components and the fair and equitable sharing of the benefits arising out of the utilisation of genetic resources. Biodiversity is defined in the CBD as "the variability among living organisms from all sources, including, inter alia, terrestrial, marine, and other aquatic ecosystems and the ecological complexes of which they are part; this includes diversity within species, between species and of eco-systems".

6. Article 6 of the CBD specifically requests each party to:

- "develop national strategies, plans or programmes for the conservation and sustainable use of biological diversity or adapt for this purpose existing strategies, plans or programmes which shall

reflect, inter alia, the measures set out in this Convention relevant to the Contracting Party concerned; and

- “integrate as far as possible and as appropriate, the conservation and sustainable use of biological diversity into relevant sectoral or cross-sectoral plans, programmes and policies.”

The Conference of the Parties has provided additional guidance for the elaboration of such strategy¹.

7. The European Union plays a leading role world-wide in furthering the objectives of the Convention. It does so to respond, not only to the legal obligations under the Convention, but also to the expectations and aspirations of its citizens, which in addition to the proven economic and environmental values of biodiversity, include the ethical principle of preventing avoidable extinctions.

8. The Community Biodiversity Strategy set out in this Communication will provide the framework for developing Community policies and instruments in order to comply with the CBD. The “First Report from the European Community to the Conference of the Parties of the CBD” provides a summary assessment of the importance and status of biodiversity in the European Union. It also provides a comprehensive overview of on-going and planned Community initiatives and instruments relevant to achieve the objectives of the CBD. This report therefore constitutes an important background document for the strategy.

9. The Council of Ministers in its conclusions of 18 December 1995 has considered that “with regard to matters within the field of its competence and in close co-operation with its Member States, the Community should elaborate a Community Strategy to identify gaps in the European Community conservation policy, and to promote biological diversity into the policies of the Community, complementary to strategies, programmes and plans of the Member States, in order to ensure the full implementation of this Convention”.

10. All Member States of the Community are Contracting Parties to the CBD. As a consequence, they have either already developed their respective national biodiversity strategies or are in the process of doing so. By developing and implementing their national strategies Member States make an essential contribution to achieve the aims of the Convention. Many Member States have established a national biodiversity co-ordinating body, assembly or committee. All have integrated, or intend to integrate, conservation and sustainable use of biodiversity into relevant sectoral or cross sectoral plans. Policy sectors concerned and the approach taken vary from country to country in response to the specific characteristics of their biodiversity and relative importance of pressures affecting them. Environment, agriculture, forestry and fisheries policies are generally perceived to have the greatest priority. Science and technology, energy, industry, transport, tourism and recreation, health, education and defence are also considered in many cases. In their national strategies Member States place different emphasis on various themes contained in the CBD. A first assessment on the implementation by the Member States of the different measures contained in the CBD has been made by the European Environmental Agency². A more up to date review is contained in the Member States’ reports to the Conference of the Parties on the implementation of the CBD.

11. Successful implementation of the CBD requires co-operation both within Member States and at Community level. To develop and implement national strategies in all Member States is essential, but

¹ Decision II/7 of the Second Conference of the Parties to the CBD and Decision III/9 of the Third Conference of the Parties to the Convention on Biological Diversity.

² European Environmental Agency. The UN Convention on Biological Diversity. Follow-up in EEA Member Countries. Copenhagen, 1996.

a number of Community policies and instruments also have an important impact on biodiversity. The Community therefore needs to take action in these areas to both complement and avoid frustrating national efforts. The Community strategy focuses on the further development and implementation of Community policies and instruments.

C) Scope and objectives of the strategy

12. As a key player on the international level, it is evident that the Community must ensure that its own policies and instruments, many of which impact significantly on biodiversity, reflect concerns about and contribute to the conservation and sustainable use of biodiversity.

13. The proposed Community Biodiversity Strategy therefore aims to anticipate, prevent and attack the causes of significant reduction or loss of biological diversity at the source. This will help both to reverse present trends in biodiversity reduction or losses and to place species and eco-systems, which includes agro-ecosystems, at a satisfactory conservation status, both within and beyond the territory of the European Union.

14. The Community Biodiversity Strategy is an element of the 5th Environmental Action Programme "Towards Sustainability"; and must be viewed also in the context of the obligations to integrate environmental concerns into other sectoral policies, in accordance with article 130R (2) of the Treaty. It is in line with the strengthened commitments to sustainable development contained in the Amsterdam Treaty which establishes that "environmental protection requirements must be integrated into the definition and implementation of Community policies and activities, in particular with a view to promoting sustainable development". The strategy also takes into account a number of Council conclusions and the relevant objectives from the Pan-European Landscape and Biological Diversity Strategy.

15. The Strategy defines a framework for the actions necessary to fulfil the European Community's legal obligations under article 6 of the CBD. The relevant obligations of the CBD for the European Community are set out in section II of the strategy, in the context of four major themes. The objectives to be achieved in the context of the relevant Community policies and instruments in order to meet these obligations, are specified in section III.

16. The implementation of the CBD by the Community calls for a two-step process. The adoption of this strategy containing the general policy orientation is the first step. The second is the development and implementation of Action Plans and other measures by the Commission through its services responsible for the policy areas concerned. This second step will enable to translate into concrete actions the objectives derived from the Convention.

17. The Action Plans and other measures will develop further the links between the objectives under each theme and the objectives in each policy area. By establishing a mechanism to ensure the integration of biodiversity concerns into other policy areas and instruments the strategy contributes to fill a gap in existing Community conservation policy.

18. Action Plans and other measures to achieve the objectives should build on and complement existing policies and planned initiatives. The development of Action Plans will need to take into account the objectives and actions envisaged by Member States strategies to ensure real value added, consistency and complementarity. How this can best be done will only be clear once all Member States strategies are available.

19. As the Community and its Member States participate in a number of international conventions and agreements relevant to the objectives of the Convention on Biological Diversity, this strategy

provides guidance to ensure coherence in initiatives taken in different international fora. Implementing this strategy, therefore, will help achieve Community objectives under other Conventions.

20. Progress in the implementation of the strategy and the performance of the Action Plans and other measures will be monitored and assessed using biodiversity indicators and measurable targets in order to measure the effectiveness of actions taken and to provide guidance as to further actions needed. The process of further development, implementation and monitoring is described in section IV.

II. STRATEGY THEMES

1. The Community Biodiversity Strategy is developed around four major Themes. Within each Theme the specific objectives that will need to be achieved in the context of Action Plans and other measures are highlighted. These objectives emerge from and qualify the specific obligations relevant for the Community contained in the CBD.

Theme 1. Conservation and sustainable use of biological diversity.

2. Under this Theme, the Community should seek the conservation and, where relevant, restoration of ecosystems and populations of species in their natural surroundings. It should also focus on the conservation of the ecosystems where crop species and varieties and domestic animal breeds have developed their distinctive properties. Conservation in situ needs in some cases to be complemented by additional ex-situ initiatives³. This Theme also refers to the measures required to ensure that use made of natural resources is sustainable.

In-situ conservation

3. The Community will continue supporting the establishment of networks of designated areas, particularly the EU NATURA 2000 network. However, for a large number of wild species, crop species and varieties and domestic animal breeds, the establishment of a system of protected areas alone is not sufficient or appropriate. Therefore, in-situ conservation requires that the Community within relevant sectoral and horizontal policy areas, considers impacts on the conservation and sustainable use of biodiversity across the rest of the territory outside protected areas. This aspect constitutes one of the major gaps in the existing Community conservation policies. The Community should therefore where appropriate seek:

- to promote and support conservation of ecosystems characteristics.
- that the population size, structure, distribution and trends of wild species that occur naturally are in a satisfactory conservation status, and also to support recovery plans for the most threatened species.
- to take measures to maintain the genetic pool of wild and domesticated species and prevent processes of genetic erosion.

4. The presence or introduction of alien species or sub-species can potentially cause imbalances and changes to ecosystems. It can have potentially irreversible impacts, by hybridisation or competition, on native components of biodiversity. Applying the precautionary principle, the Community should take measures pursuing to prevent that alien species cause detrimental effects on ecosystems, priority species or the habitats they depend on and establish measures to control, manage and, wherever possible remove the risks that they pose.

³ Article 2 of the CBD defines "in-situ conditions" as the conditions where genetic resources exist within ecosystems and natural habitats, and, in the case of domesticated or cultivated species, in the surroundings where they have developed their distinctive properties. "Ex-situ conservation" means the conservation of components of biological diversity outside their natural habitats.

5. Also, while biotechnology in general presents a number of potential benefits to society, the introduction of genetically modified organisms into the environment can have negative impacts on biodiversity. Applying the precautionary principle, the Community has established mechanisms notably under directives 90/219/CEE and 90/220/CEE to assess, regulate, manage or control the risks associated with the use and release of genetically modified organisms resulting from biotechnology which may affect biodiversity. Moreover, the Community takes the lead to finalise a Protocol on Biosafety under the CBD by the end of 1998. The Protocol should establish at the international level procedures in the field of safe transfer, handling and use of living modified organisms, specifically focusing on transboundary movement of any living modified organism resulting from modern biotechnology that may have adverse effect on the conservation and sustainable use of biodiversity, and should set out in particular appropriate procedure for advance informed agreement.

Ex-situ conservation

6. Gene banks, captive breeding centres, zoos and botanical gardens can play a very valuable role if their activities are integrated in the framework of co-ordinated re-introduction or integrated conservation schemes. For crop species and varieties, including plants used for forestry, as well as for domestic animal breeds, there is a need to avoid genetic erosion and maintain a diverse genetic pool to ensure the future viability and improvement of the qualities of the varieties and breeds involved. The maintenance of adequate gene banks within the Community will require, in some cases, the collaboration of third countries. The Community should :

- encourage within and outside the Community adequate ex-situ conservation of both wild species and genetic resources of wild crop relatives, wild plants and domestic animal breeds useful for food production, whenever they cannot be conserved in situ or whose conservation in situ is under serious threat.
- encourage zoos, aquariums, botanical gardens, gene banks and collections to keep species, crop varieties and domestic animal breeds, under satisfactory standards that guarantee their conservation and integrate their work in co-ordinated action plans which aim at the restoration of the species to a satisfactory in-situ conservation status.

Sustainable use of components of biodiversity

7. Human activities may have positive or negative impacts on the sustainable use of biodiversity. A good assessment of the impact of strategies, policies, programmes, plans and projects on biodiversity is key to the promotion of sustainability. In the first instance activities with a potential negative impact need to be identified in order to find solutions that will avoid or minimise such an impact. Secondly, the most efficient options for meeting the needs of biodiversity should be identified. The Community therefore should:

- consider the objectives of this strategy in the environmental assessment of its sectoral and cross-sectoral strategies, plans, programmes, policies and projects.
- develop where feasible cost-effectiveness analyses of relevant Community strategies, plans, programmes, policies and projects to ensure the achievement of the objectives of this strategy.
- develop appropriate methods and techniques to enable stakeholders to participate in assessment procedures and in the implementation of remedial and preventive actions.

8. Economic and social incentives such as subsidies, taxes and duties may have a considerable effect on biodiversity. In some cases they may be used as instruments to change or maintain patterns of production and consumption relevant to biodiversity. The Community encourages methods to promote that well-informed consumers can take as much as possible individual decisions benefiting the conservation and sustainable use of biodiversity. The recent Commission Communication on Green Levies defines some proposals to achieve these objectives. The Community should therefore aim to promote where feasible:

- the internalisation of the values of biodiversity in costs/benefit analysis.

- eco-labelling schemes based on life cycle analysis for products whose production, distribution, use or disposal could affect biodiversity.
- the integration of biodiversity concerns into liability mechanisms.

9. Alongside the identification and introduction of incentives to support conservation and sustainable use of biodiversity, it is necessary to consider removing incentives which have a negative impact. This includes reviewing certain systems of property and use rights, contractual mechanisms, international trade policies, and economic policies. Therefore, the Community should in particular focus on:

- shifting incentives to encourage positive effects on the conservation and sustainable use of biological diversity, rather than negative ones.
- contributing to the social and economic viability of systems supporting biodiversity as well as to the removal of incentives with perverse effects on the conservation and sustainable use of biodiversity.

Theme 2. Sharing of benefits arising out of the utilisation of genetic resources.

10. The sharing of benefits arising out of the utilisation of genetic resources relates to the implementation of the CBD in a number of aspects, i.a. access to genetic resources and distribution of the benefits of biotechnology including research and commercial partnerships between providers and users of genetic resources; transfer of technology; technical and scientific co-operation; knowledge, innovations and practices of indigenous and local communities embodying traditional lifestyles.

11. In relation to genetic resources, the CBD reaffirms the sovereign right of Parties over their genetic resources. It also stipulates that Parties should not impose inappropriate restrictions and that access should be on mutually agreed terms. Correspondingly, a whole range of solutions regarding access to these resources needs to be considered. Therefore, the Community should :

- promote appropriate multilateral frameworks.
- promote guidelines for bilateral co-operation on a voluntary basis to be applied particularly in cases where only some countries have or need access to the genetic resource in question.
- support the countries of origin of genetic resources to develop national strategies on bioprospecting and access taking into account relevant multilateral frameworks and instruments.

12. Technology transfer should be understood in a broad sense encompassing technology co-operation with respect to access to and availability of technologies as well as institutional development and capacity building to identify and use appropriate technologies, including indigenous and local technologies. Objectives are based on the fact that useful technologies exist in the public as well as in the private domain and that an adequate legal and economic framework, including intellectual property regimes, is necessary in order to facilitate technology co-operation and transfer. The need for relevant technology is especially present in developing countries. The Community should therefore endeavour to:

- increase the development of technology for the conservation and sustainable use of biodiversity.
- facilitate transfer of technology for conservation and sustainable use of biodiversity to developing countries.

13. Technical and scientific co-operation should in particular aim at strengthening the basic capacities in developing countries for the conservation and sustainable use of biodiversity and its components and the establishment of joint research programmes, in particular as regards identification, monitoring and exchange of information. The Community should:

- promote both within and outside the Community the wider application of knowledge and technologies for conservation and sustainable use of biodiversity, including knowledge, innovations and practices of local and indigenous communities.

Theme 3. Research, identification, monitoring and exchange of information

14. It is widely recognised that the current incomplete state of knowledge at all levels concerning biodiversity is a constraint on successfully implementing the Convention. This should not however slow down ongoing activities based on the existing state of knowledge. It is therefore necessary to strengthen efforts to identify and monitor the most important components of biodiversity as well as pressures and threats on them, paying special attention to the indicative list of categories of important components set out in Annex I of the CBD. It is also necessary to strengthen basic research into biodiversity, its principles, concepts and fundamental mechanisms.

15. Tasks and targets identified in the Action Plan and other measures in this area should be incorporated in the activities within the Framework Community Programme on Research and Development. The importance of data held by the NGO community, Member States, their agencies and private collections should be taken into account .

16. Research initiatives should build in particular upon the work of the Ad hoc European Working Group on Research and Biodiversity (EWGRB) established in the framework of the European Commission DG XII “Environment and Climate Research Programme” and could focus on:

- establishing a network between European centres of excellence in biodiversity research in order to foster basic research into the importance and functioning of biodiversity on all levels.
- promoting the implementation of appropriate research activities concerning the functional mechanisms of the natural evolution of biodiversity, including tools and methods needed to implement the biodiversity policy objectives.
- increasing knowledge about how to safeguard biodiversity in nature, agriculture, forestry and fisheries and its wider role in life-support systems;
- increasing the understanding of how the biosphere functions at different spatial scales: global, regional and local level and understanding of the effect of human activities on life-support systems.
- assisting in identifying the necessary changes in legislation, programmes and political actions for the conservation and sustainable use and equitable sharing of the benefits arising from the use of biodiversity. This should include addressing the policy, organisational and management factors affecting the sustainable use and conservation of biodiversity in Third Countries, in the context of economic globalization.
- promoting research activities using molecular methods in biodiversity measurement and validation of these technologies.
- promoting the creation of tools and choices for partners in the conservation and utilisation of biodiversity, including research on clean technologies and on ex-situ conservation technologies.
- promoting the evaluation of the various forms of biodiversity from the perspective of all societal actors.
- supporting the development of a global interface with Third Countries, addressing in particular the sustainable use and management of biodiversity in transition economies, as well as in emerging ones and developing countries.

17. With respect to identification the Community will promote further support activities by the European Environmental Agency and its Information and Observation Network (EIONET) including tasks to:

- develop a baseline study to identify and catalogue important components of biodiversity that exist - in situ or ex situ-, or that have become extinct in the last 50 years.
 - identify the conservation status and trends of components of biodiversity.
 - identify relevant pressures and threats, together with their causes, on components of biodiversity.
 - apply modern taxonomy to build scientific tools for policy on conservation and sustainable use, aiming , inter alia, to fulfil gaps in taxonomy knowledge.
18. As the monitoring and continuous assessment of all the components of biodiversity in the Community, as well as of the pressures and threats that may affect them would be impractical, it is proposed to promote the development of a system of indicators based on a species and ecosystems approach⁴ .
19. The Community will support research on this system in its research programme and such work will be included in the new Multi-annual Work Programme of the European Environmental Agency and its Network. In addition, Eurostat is developing indicators of pressures affecting biodiversity in the context of its Pressure Indices Project⁵ . The identification of these indicators and the monitoring of their evolution is an essential element of this strategy because it will provide the required information to assess the performance and impact of the Action Plans and other measures. They should therefore include:
- the identification of a set of indicators to assess how components of biodiversity are affected by the sector and assess progress on the implementation of the strategy.
 - the mechanisms for monitoring the evolution of the indicators having regard, inter alia, to activities causing habitat degradation, unsustainable harvesting, emission of pollutants and release or spread into the environment of alien species and genetically or living modified organisms.
20. The importance of assessments and of international exchange of information for achieving the objectives of the CBD is underlined by the cross-border nature of many ecological processes, the interdependence between ecosystems, the migratory behaviour of various wild species, the need for international collaboration to maintain genetic pools of crop varieties and domestic animal breeds as well as the cross-border nature of many pressures and threats affecting biodiversity. The strengthening of cross-border co-ordination in between Member States as well as with other Parties to the CBD, on a bilateral or regional basis, is therefore an important objective.
21. This includes support for consolidation and further development of the Clearing House Mechanism⁶ (CHM) which is established as the prime vehicle for international information exchange on biodiversity. The European Environmental Agency and its Information and Observation Network (EIONET) should consolidate and further develop the Community CHM in order to become an efficient vehicle for promoting and facilitating technical and scientific co-operation. This should be needs-driven, decentralised and allow for provision of information useful for meta-data levels of analyses. The provision of information by the CHM is of particular importance for the compilation of national and Community reports and for information on progress in implementing concrete measures for biodiversity. The Community CHM will establish links to the Member States CHM focal points.

⁴ Examples of indicators at local level could be decline of a species, use of pesticides or change in pesticide use. Examples of indicators at Community level could be percentage of threatened species per known species, fragmentation of habitats by linear transport infrastructure or sites designated under NATURA 2000.

⁵ Described in the Communication from the Commission to the Council and the European Parliament (COM(94) 670 final). Directions for the EU on Environmental Indicators and Green National Accounting: the Integration of Environmental and Economic Information Systems.

⁶ The concept, aims and objectives of the Clearing House Mechanism are established in article 18 of the CBD and developed through the decisions I/3, II/3 and III/4 of the Conference of the Parties.

22. Consequently Action Plans and other measures should help to :

- identify and review existing mechanisms to facilitate the exchange of relevant information through the Community Clearing House Mechanism.
- establish or strengthen systems for the exchange of information at national and international level and make existing knowledge of biodiversity available and useful to the public and decision makers.

Theme 4. Education, training and awareness

23. Many of the pressures and threats on the conservation and sustainable use of biodiversity have their origin in human perceptions, attitudes and behaviour. Similarly, the biodiversity strategy could be difficult to implement if actors involved are not aware of the problems affecting biodiversity and their possible solutions. Changing these factors requires long term concerted efforts in education and public awareness.

24. Public awareness is essential to ensure the success of many actions in favour of biodiversity, e.g. a consumer policy promoting the conservation and sustainable use of biodiversity. Therefore, public awareness campaigns and the main instruments available to achieve the CBD objectives should be considered. In all these aspects NGOs play a very important role.

25. Finally, the implementation of any strategy on biodiversity will require specific up-to-date technical expertise on the part of the various actors involved. This expertise can only be obtained if relevant training schemes are adequately adapted to scientific, technical and technological progress.

26. The Community should therefore encourage the development of:

- programmes for public information, education and awareness raising on conservation and sustainable use of biodiversity.
- programmes to ensure the training required for the human resources involved in the implementation of this strategy at Community, National and local levels.
- capacity building to monitor, assess and report on the impact of Community strategies, plans, programmes, policies and projects on biodiversity in third countries.

III. POLICY AREAS

1. In the following paragraphs the importance of different policy areas and sectors for the conservation and sustainable use of biological diversity are highlighted, and objectives for the Community are identified in order to achieve the objectives of the Convention as described in section II.

1) Conservation of Natural Resources

2. The conservation and sustainable use of natural resources involves specific measures for wild species, including the establishment and management of NATURA 2000 ecological network:

OBJECTIVES:

- *To fully implement the Habitats Directive⁷, as well as the Birds Directive⁸*
- *To support the establishment of networks of designated areas, particularly the EU NATURA 2000 network, and to provide adequate financial and technical support for their conservation and sustainable use.*
- *To develop management plans for selected threatened species and some huntable species.*

⁷ OJ N° L206, 22.07.92

⁸ OJ N° L103, 25.04.79

- *To implement the EC CITES⁹ Regulation and to adapt it to reflect further decisions by the Conference of the Parties to CITES.*

3. Initiatives for biodiversity across the rest of the territory outside protected areas need to be developed and promoted. The Community does not have a comprehensive legal instrument in this field but efforts have been made as part of the implementation of the 5th Action Programme to promote the integration of environmental considerations into sectoral and cross-sectoral policy areas. In this context, the Commission's recent proposal for a Council Directive establishing a framework for Community action in the field of water policy is especially relevant. Water quantity and quality (particularly in relation to pollution by pesticides and fertilisers) are essential parameters for the functioning of all ecosystems. The competing and potentially conflicting demands of this limited resource from different sectors, make water policy highly strategic to the conservation and sustainable use of biodiversity. Wetlands also have outstanding importance for the conservation and sustainable use of biodiversity, as recognised in the Ramsar Convention and in the Commission's Communication on wetlands.

OBJECTIVES:

- *To develop in co-operation with Member States instruments to enhance the conservation and sustainable use of biodiversity across the territory outside protected areas.*
- *To use the Water Framework Directive as a tool for the conservation and sustainable use of biodiversity and in this context to develop analyses of water quantity and quality versus demand for every river basin including agricultural irrigation, energy generation, industrial, drinking and ecological uses.*
- *To enhance the ecological function of land cover, including riparian and alluvial vegetation, to combat erosion and maintain the water cycle supporting ecosystems and habitats important for biodiversity.*
- *To protect wetlands within the Community and restore the ecological character of degraded wetlands.*

4. A number of global processes have serious impacts on biodiversity in particular climate change, desertification, ozone layer depletion. The impact of climate change on some sensitive ecosystems and crop varieties as well as the effects of some actions to combat climate change, for example can be relevant to the objectives of the CBD, these reforestation and afforestation initiatives should incorporate measures that ensure additional benefits for biodiversity. Moreover, policies related to the conservation and sustainable use of biodiversity should take into account changes that could occur in ecosystems as a consequence of the accelerated rate of change in climate. The effects of ozone layer depletion on marine productivity and on fisheries, as well as on some crop varieties and the impact of the use of some ozone depleting substances on local biodiversity are equally important. Desertification has significant impact on soils, the maintenance of the hydrological cycle and the conservation of different ecosystems. It leads to decreasing soil productivity and the potential local extinction of wild species. Problems caused by desertification are particularly relevant in the Mediterranean and other regions outside Europe.

OBJECTIVES:

- *To promote better co-ordination between different initiatives in the international fora in the field of climate change, ozone layer depletion and desertification to avoid duplication of efforts, in particular with respect to reporting procedures.*
- *To identify interactions between the CBD and activities under other existing international agreements in order to optimise the opportunities for synergy.*

⁹ OJ N° L61, 03.03.97

2) Agriculture

5. Land use patterns and practices have a major influence on biodiversity in Europe and around the world. In some cases land use patterns and practices support the conservation and sustainable use of biodiversity, while in others they cause serious threats. In this context, agriculture generates both benefits and pressures on biodiversity depending, in many cases, on practices, biogeography, grazing periods, etc.

6. The agricultural sectors are heavily influenced by varying degrees of government intervention, employing measures that have often led to levels of commodity production and the adoption of farming practices that have not been conducive to sustainability, or have discouraged more sustainable practices. The increase in productivity is being achieved in many cases at the cost of degrading natural capital (fertile soil, clean water, natural and semi-natural ecosystems). In addition, the factors behind the decline of biodiversity can be understood by considering the incentives and disincentives facing a country or an individual farmer with regard to sustainable use of genetic resources

7. On the other hand, some externalities generated by agriculture have positive characteristics of a “public good”. Fields and pastures, along with forests and natural areas, form part of the rural landscape. Agricultural land often provides and creates important habitats for wildlife. Land, or the soil itself, plays an important function in the hydrological cycle and in cleansing the air of noxious gases, such as ammonia.

8. Farming communities have an intrinsic interest in ensuring that land use practices are sustainable and contribute to the conservation and sustainable use of biodiversity. Some semi-natural habitats can be preserved only if appropriate farming activities are continued. In many situations where agriculture production is a key element of sustainable ecosystems, abandonment of agriculture would lead to the irreversible degradation of different habitats. There has been an increasing awareness among farmers on the gains to be made by adopting environmentally sound agricultural practices, which have been underpinned by rapid advances in “green technologies”. However, such practices will not be adopted to the extent necessary unless agricultural and environmental policies give farmers complementary signals.

9. Because of the interaction of sustainable agriculture and rural development, with the conservation and sustainable use of biodiversity and the need for integrated land-use planning as mentioned in Agenda 21, the conservation and sustainable use of agro-biodiversity should be based on the combination of two mutually coherent approaches:

10. First, the conservation and sustainable use - in situ and ex situ - of the genetic resources of species, varieties, domestic animal breeds and microbial life-forms with actual or potential value as agricultural commodities and the equitable sharing of benefits arising from the utilisation of genetic resources in agriculture requires a wide range of in and ex-situ actions. Firstly, in-situ conservation of local species, varieties and domestic animal breeds requires an adequate system of economic and social incentives, combined with increased consumers awareness. Some farming and breeding activities help to maintain endangered plant and animal species. Secondly, gene banks in the Community are not as well developed as elsewhere and action should be taken to improve the situation. These initiatives would help to meet present and future requirements for global food security and they should focus on the key elements of the Global Plan for Action for the Conservation and Sustainable Use of Plant Genetic Resources for Food and Agriculture.

In the Action Plan for agriculture, Community initiatives in the field of genetic resources should, inter alia, build upon the existing legislation.

OBJECTIVES:

- *To formulate policy measures, programmes and projects which promote the implementation of the Global Plan of Action for the conservation and sustainable use of plant genetic resources for food and agriculture.*
- *To promote the development of technologies assessing levels of diversity in genetic resources.*
- *To reinforce the policy of conservation -in situ and ex situ- of genetic resources of actual or potential value for food and agriculture.*
- *To promote the development of adequate gene-banks useful for the conservation in situ and ex situ of genetic resources for food and agriculture so that they will be available for use.*
- *To endeavour to ensure that legislation does not obstruct the conservation of genetic resources.*

11. Secondly, the conservation and sustainable use of agro-ecosystems and their interface with other ecosystems. Agriculture is an important element of the ecosystems where it takes place. Sometimes it also influences other ecosystems in the surroundings or downstream. In both cases interactions could be positive or negative for the conservation and sustainable use of biodiversity. Agriculture has played and continues to play a major role in the diversity of ecosystems and in the creation and maintenance of semi-natural ecosystems. Therefore the conservation and sustainable use of agro-ecosystems require:

- a) The maintenance and further development of farming with a view to optimising its positive impact on the conservation and sustainable use of biodiversity; recognising and supporting the role of farming communities in the creation and maintenance of semi-natural habitats; taking into consideration the positive role of non-intensive agricultural systems for wildlife and wild plants habitats; and optimising the positive impacts of agricultural practices and production systems on the conservation and sustainable use of biodiversity. In particular, the maintenance of some well established traditional methods of extensive agriculture, sometimes in marginal areas, is essential to preserve the value that such areas have for biodiversity.
- b) The mitigation of negative impacts of agricultural activities on biodiversity. In particular, certain land use practices, the use of agro-chemicals, the overgrazing and pollution consequences of excessive livestock intensity, monoculture, the elimination of wetlands and hedgerows, and the use of heavy machinery, has serious effects for biodiversity. Pesticides, for example, can have a negative effect on the conservation of biodiversity not only in the place where they are applied but also in other ecosystems (i.e. by pesticide run-off).

12. In this context, the Action Plan on agriculture should build upon the existing policies and those foreseen in Agenda 2000 and complement them so that they contribute to biodiversity.

13. OBJECTIVES:

- *To encourage the ecological function of rural areas.*
- *To integrate biodiversity objectives into the relevant instruments of the CAP.*
- *To promote farming methods enhancing biodiversity, by linking agricultural support to environmental conditions where appropriate.*
- *To promote good agricultural practice standards with a view to reducing the risk of pollution and of further damage to biodiversity.*
- *To increase awareness among all producers of the polluting potential of specific agricultural practices both short and long term and the need for all producers to be protectors of both environment and biodiversity. This includes the development of an integrated strategy for the sustainable use of pesticides.*
- *To promote and ensure the viability of those crop species and varieties and domestic animal races which have to be farmed to conserve the ecosystems of priority wild species.*
- *To promote and support low-intensive agricultural systems especially in high natural value areas.*

- *To further develop the agri-environment measures to optimise benefits on biodiversity by:*
 1. *reinforcing targeted agri-environment measures*
 2. *assessing its performance against a specific set of biodiversity indicators*
 3. *increasing the relevant budget and resources, as proposed in Agenda 2000*

14. The impact of trade policies on agricultural commodity production and land use is particularly relevant for biodiversity conservation. Direct investment by producers should be a strong force in promoting sustainable development and biodiversity. Implementation of global, regional and bi-lateral trade agreements is certain to have effects on land use in many countries. The global process of trade liberalisation leads to important changes in existing subsidies and protective mechanisms. Together with changes in the pattern of trade, changes in global and regional patterns of agricultural production are likely to entail displacement or abandonment of some long-established local production systems, or lead to their intensification to maintain competitiveness, or to supply new markets.

15. In this field legislation on quality labels can also contribute to biodiversity. It helps to maintain a genetic pool of rustic domesticated species and plant varieties contributing to prevent genetic erosion. It also helps to maintain land use practices beneficial for biodiversity. Organic farming should also be supported by certification systems. Protection of geographical indications and designations of origin and specific characters for agricultural products and foodstuffs is also important and can contribute to the conservation of special agro-ecosystems enhancing biodiversity.

16. OBJECTIVES:

- *To promote trade related agricultural policies and disciplines which respect the needs for conservation and sustainable use of biodiversity as well as the principles of the World Trade Organization.*

3) Fisheries¹⁰

17. The increasing pressure exercised by human activities on marine and coastal environment stresses the importance of integrating biodiversity concerns into marine resource policies, including fisheries, and into agreements on the protection of coastal and marine environment and on fisheries. The conservation and sustainable use of marine and coastal ecosystems is essential to maintain the livelihoods of fishermen and fishing communities.

18. Indeed, while fisheries policies have a major impact on the conservation of biodiversity and sustainable use of biological resources, the Common Fisheries Policy has not yet fully achieved the objective of sustainable fishing. Achieving this objective requires implementation of upper limits of exploitation rates (fishing mortality rates) and minimum levels of stock biomass, so that there is a high probability of ensuring viability and sustainability of fishing for a species or group of species. Once the maximum exploitation rate to be allowed in respect of each species is defined, the mechanisms to keep it below the critical level will need to be defined. The tools to limit exploitation rates should be defined, as appropriate, as maximum levels of fishing effort, as total allowable catches or as combinations of these two instruments. The Common Fisheries Policy provides the necessary operational tools to define both allowable exploitation rates and the associated ancillary measures.

19. Research efforts should ascertain how to ensure that irreplaceable genetic resources are not lost by genetic contamination affecting indigenous populations by hybridisation or competition. Moreover, the integration of CBD objectives within the fisheries policy sector requires action at three different levels: a) the conservation and sustainable use of fish stocks, b) the protection of non-target species

¹⁰ In this section the words fisheries, fishing and fish stocks make reference, where appropriate, not only to fish species but also to molluscs, crustaceans, marine mammals and other marine or stuarine animals.

from fishing activities; and c) the prevention of impacts of aquaculture on different ecosystems. These different levels should also be considered in the context of Community fisheries agreements with third countries.

20. OBJECTIVES:

- *To promote the conservation and sustainable use of fish stocks and feeding grounds.*
- *To promote the establishment of technical conservation measures to support the conservation and sustainable use of fish stocks. Measures available include inter alia fishing exclusion areas (mainly for the protection of dense aggregations of juvenile fish), and mesh sizes. Each measure should be applied according to its merits and expected conservation effect.*
- *To reduce the impact of fishing activities and other human activities on non-target species and on marine and coastal ecosystems to achieve sustainable exploitation of marine and coastal biodiversity.*
- *To avoid aquaculture practices that may affect habitat conservation through occupation of sensitive areas, i.e. mangroves in third countries and inter-tidal areas within the Community, pollution by inputs and outputs from fish farms and genetic contamination by possible releases or escapes of farmed species or varieties.*

4) Regional policies and spatial planning

21. The Commission's Communication "Europe 2000+: Co-operation for European territorial development" highlights how spatial planning can contribute to conservation and sustainable management of ecosystems. Indeed, spatial planning can play an important role, in the conservation and sustainable use of biodiversity across the entire territory:

- a) at the local and regional level, by pointing out the benefits to be expected from sustainable land-use -notably in socio economic terms- when it can facilitate partnership between the local/regional authorities, economic actors, local and indigenous communities, NGOs and biodiversity conservators; and
- b) at the strategic level, spatial planning highlights the inter-linkage between the different tiers of Government and between different policies competing for the same natural resources. Spatial planning means setting out a common set of longer term objectives to be carried out through mutually compatible measures tailored to the socio-economic and environmental characteristics of the space to which they apply.

22. Spatial planning should promote sustainable land use while ensuring a more balanced geographical distribution of economic activities. It should help avoid excessive pressure on certain parts of the territory and take account of ecological requirements everywhere. The Commission has incorporated and integrated spatial planning approach into its Demonstration Programme on Integrated Coastal Zone Management which is considering, among other things, biodiversity. In order to further develop a European-wide approach to spatial planning, the European Spatial Development Perspective is being drawn up and the first official draft was endorsed at the Nordwijk informal ministers meeting in June 1997. It addresses biodiversity under the heading "Continuing pressure in Europe's natural and cultural heritage". It underlines that specific local factors should be taken into account when implementing policies with a spatial impact to avoid further losses of biodiversity.

23. In general, in the context of regional aid, a comprehensive and integrated approach is the best way to ensure the long term conservation and sustainable use of biodiversity. In eligible regions, in particular those characterised by high biodiversity, the promotion of sustainable development could be included in regional development strategies and Structural Funds programmes.

24. In this context, a particular attention should be given to the rural areas where, in many cases, the continuation of agricultural activities is necessary to avoid losses of biodiversity and habitat degradation. A rural development policy has the potential to protect and enhance these environmental assets. By encouraging land conservation and higher environmental standards of land use, the agri-environmental measures are an essential instrument for the sustainable development of land use, enabling conservation and sustainable use of biodiversity.

25. OBJECTIVES:

- *To promote the policy options identified in the spatial planning initiatives which can assist in conserving and enhancing biodiversity throughout the European territory. Particular attentions should be paid to:*
 - *Ecological corridors and buffer zones*
 - *Unprotected, sensitive areas with high level of biodiversity such as mountains, coastal areas and islands.*
 - *Rural areas in order to ensure a better synergy between the objectives of economic development and conservation of biodiversity needs.*
- *In coastal zones, to develop integrated management and planning of both land and sea, including fisheries, shipping, coastal infrastructure and impacts from agricultural and forestry activities in the hinterland.*
- *To promote sustainable development based on an integrated spatial planning approach.*
- *To encourage sustainable regional development within the Operational Programmes as well as transnational co-operation programmes including measures to conserve and make sustainable use of biodiversity. These could be supported under the Structural Funds to preserve environmental quality particularly in eligible areas with high biodiversity.*
- *To ensure that interventions co-financed under the Structural Funds and the Cohesion Fund, which are mainly aimed at economic and social cohesion, do not infringe upon Community legislation of relevance for biodiversity.*

5) Forests

26. Globally, forests contain the greatest proportion of biological diversity in terms of species, genetic material and ecological processes and have an intrinsic value for the conservation and sustainable use of biodiversity. Furthermore, forests are important to combat climate change and minimise its impact on the conservation of other ecosystems. The livelihoods of many rural communities are based in the conservation and sustainable use of forests and they represent essential national resources for present and future generations. While recognising the importance of reforestation schemes to increase the forest cover, measures should be taken in relation to the afforestation or reforestation of areas to avoid endangering important and/or valuable ecosystems (e.g. wetlands, steppes, heathlands, etc) or the use of inappropriate tree species. It is therefore important to take into account in a balanced way, the need for ensuring the conservation and appropriate enhancement of biodiversity in forests, the need for the maintenance of forest health and ecological balance, the sustainable production of raw material for forest industries as well as of goods and services sought by society.

27. Conservation and sustainable use of biodiversity in forests can be considered at three different levels:

- a) On the global scale, tropical as well as some boreal forests are currently facing greater threats than at any time in history, with many areas undergoing rapid deforestation, degradation or loss of quality as a result of human activity. The Community has recognised the critical importance of halting and reversing this cycle of destruction, making sustainable forest management one of its focal points in development co-operation policies (see the chapter on development co-operation below). In

particular the implementation of the recommendations of the Intergovernmental Panel on Forests (IPF) are important for the objectives of the CBD. Also, the Community has promoted in the IPF and continues to support the development of a legally binding instrument on Forests, aiming among other things to integrate biodiversity conservation objectives with sustainable management of forests at national, regional and global levels.

- b) At Pan-European level the Community is a signatory party to the resolutions adopted at the ministerial conferences on the protection of forests in Europe. In this context general guidelines for the conservation of the biodiversity of European forests are defined in Resolution H2 of the Helsinki Conference for the protection of forests in Europe. Reference to conservation and appropriate enhancement of biodiversity is also made in Resolution H1 in which general guidelines for the sustainable management of forests in Europe are set out.

In this context the participation of the European Community in the Third Ministerial Conference “Environment for Europe” which was held in Sofia in October 1995 is also especially relevant. It endorsed the Pan-European Biological and Landscape Diversity Strategy. A close co-ordination was subsequently established between both processes. A Common Work-Programme on the Conservation and Enhancement of Biological and Landscape Diversity in Forest Ecosystems has been proposed for the period from 1997 to 2000.

- c) Within the Community, forest policies are basically developed at national level. The Community has, however, taken a number of initiatives to promote forest conservation, in particular initiatives to protect forests against atmospheric pollution and fire, afforestation, the improvement of woodlands, the protection of forests, the development of forest infrastructure and the initial transformation of forests products, the conservation of genetic resources of forests collection and, where necessary, making comparable or complete forestry information from the Member States and forestry related research supported through specific European Community research programmes on agriculture, environment, biotechnology and energy.

28. The European Union Forestry Strategy called for by the European Parliament in its Resolution of 30 January 1997 should include actions to promote the conservation and enhancement of biodiversity in forests.

29. OBJECTIVES:

- *To promote the conservation and appropriate enhancement of biodiversity as an essential element of sustainable forest management at the national, regional and global levels*
- *To further develop the Council Regulation 2080/92 to enhance its benefits to biodiversity.*
- *To ensure that, while promoting a net increase in forest extension as a means of maximising their carbon sink function to combat climate change, afforestation is conducted in a manner that does not negatively affect ecologically interesting or noteworthy sites and ecosystems.*
- *To promote sustainable management of forests which respects the ecological characteristics of the areas affected and to promote the restoration and regeneration of areas that have suffered deforestation. Native species and local provenances should be preferred where appropriate. Wherever introduced species are used to replace local ecosystems, sufficient action should be taken at the same time to conserve native flora and fauna.*
- *To promote the development of specific, practical, cost effective and efficient biodiversity appraisal systems and methods for evaluating the impact on biodiversity of chosen forest development and management techniques.*
- *To promote international research into the impact of possible climate change on forest ecosystems, the possible adaptation of forest ecosystems to climate change and the mitigation of adverse effects*

of climate change by forest ecosystems as detailed in Resolution n°4 of the Helsinki Ministerial Conference on the Protection of Forests in Europe.

- *To promote the implementation of the general guidelines for the conservation of the biodiversity of European forests (Resolution H2 of the Helsinki Conference) and the recommendations of the IPF in relation to the conservation of biodiversity.*

6) Energy and Transport

30. The energy and transport sectors have a global and regional impact on biodiversity through climate change and acidification. Additionally, the development of infrastructures for transport and for energy production may have a more local impact on biodiversity.

- a) Emissions from fossil fuels have led globally to an increase in atmospheric concentrations of greenhouse gases. These changes are projected to lead to regional and global changes in climate. This will add an additional stress to ecological systems already affected by pollution, increasing resource demands and unsustainable management practices. Composition and geographical distribution of ecosystems will shift more rapidly than they have previously according to natural processes. Subsequently, the limited capacity of some species for adaptation to these changes will pave the way for increased losses in biodiversity.
- b) Regional effects of fossil fuel use are acidification of inland waters and soils (with effects also on vegetation and forest health) and degradation of forests. Acidification of lakes and water courses make them unsuitable for the survival of some species. Additionally, acidification of soils leads to changes in their chemical composition and structure and affects the ecosystems of which they form part.
- c) There may also be local effects due to the spatial impact of the development of infrastructures for the production and distribution of energy not only from conventional fuels. Any potential side-effect from the use of renewable energy sources (e.g. hydropower plants, unsustainable use of biomass or large scale energy plantations) should also be taken into account. In this context, attention should be paid to the links with water management policy because of increasing water demands for energy production. Transport, road and airport infrastructures may have a direct impact on spatial occupation of ecosystems and habitat fragmentation and have indirect impacts - including genetic isolation- and disturbances -including the presence of people, changes in light, wind, temperature, humidity and soil nutrients- on wild species. In addition, transformation of rivers into channels to allow fluvial transportation may increase the pressures on aquatic and fluvial ecosystems by spatial occupation and disturbance, habitat transformations and pollution. Sea transport and infrastructures also have an impact on marine pollution.

31. OBJECTIVES:

- *To implement acidification and climate change strategies with a view to minimising negative impacts on biodiversity.*
- *To minimise the impact on biodiversity of the development of infrastructures for energy from conventional and renewable sources.*
- *To assess the best options for biodiversity when deciding which energy sources are used to match demands at regional level.*
- *To minimize the impacts on biodiversity of transport infrastructure by optimizing the capacity and efficiency of the existing infrastructure and, for new infrastructure, giving full consideration to environmental concerns.*

7) Tourism

32. Tourism is closely linked to the preservation of a healthy environment, which in turn is an essential element of tourism development and helps to raise public awareness on some biodiversity issues. Tourism policies are developed at national and regional level and may have an important

impact on biodiversity and sustainability. On the one hand, tourism places direct and indirect pressures on, and threats to, the conservation of species and habitats, may cause disturbances on wildlife and increase pollution caused by transportation. On the other hand, sustainable tourism, in many areas, is providing extra resources and employment to local communities giving them additional motivation for the conservation of nature and protection of the environment.

33. Sustainable development in touristic areas needs to reconcile the interests of the tourism industry, tourism satisfaction and the conservation and sustainable use of biodiversity.

34. In this context it is important to identify to what extent some sensitive areas should be protected from additional human interference caused by tourism and the tourism-carrying-capacity of some habitats and ecosystems. It is also important to understand the limitations of a system of transfer of resources based on few tourists providing additional income to many members of local communities.

35. Tourism activities which directly or indirectly contribute to the conservation and sustainable use of biodiversity should be promoted. The public and the private sector have also much to gain by the exchange of best practice in this field. The private sector should be encouraged to apply guidelines and codes of conduct for sustainable tourism.

36. While policies on tourism are Member States' responsibilities, particular attention should be paid, to the impact of tourism on potential NATURA 2000 areas. Tourism also has important interrelation with the development of regional and spatial planning policies and some of these concerns could be reflected in the development of Action Plans for different sectors. On a global scale, the Berlin Declaration sets out the basis for the development of global guidelines for the sustainable development of tourism within the framework of the CBD.

37. The Community should in particular pursue the following objectives:

- *To encourage the assessment of the tourism carrying capacity of different ecosystems and habitats.*
- *To encourage the exchange of best practice among public and private tourism interests.*
- *To promote the development of international guidelines for sustainable tourism.*

8) Development and economic co-operation

38. Developing countries and economies in transition offer a wide spectrum of habitats and ecosystems, of which forests, grasslands and marine/coastal ecosystems are generally the most significant. Various kinds of human activities are harming biodiversity in terms of habitat loss and degradation. The underlying causes are numerous, and include poverty. Biodiversity in small island developing states is a particular problem because of the extremely small area of some local habitats, the high incidence of endemism throughout the islands, and the high vulnerability to natural disasters and habitat destruction.

39. The CBD recognises in Article 20 the principle of common but differentiated responsibilities of the Convention parties and the role of development co-operation. Furthermore, Article 3 of the CBD recognises the national sovereign right to exploit natural resources pursuant to their own environmental policies. In this context the Community development aid co-operation is an important instrument to support third countries in their efforts to achieve conservation and sustainable development of biodiversity. In particular, capacity building schemes are important to enable third countries to develop expertise for the development and use of technologies, including indigenous and traditional technologies, for the conservation and sustainable use of biodiversity. It will be equally important to explore ways to repatriate taxonomic information housed in collections in the Community.

40. Moreover, activities funded under the PHARE programme should pay attention to maintain areas of high value for biodiversity, in particular by stimulation of the adoption of the *acquis communautaire* in that area by the candidate countries.

41. OBJECTIVES:

- *To mainstream biodiversity objectives into Community development and economic co-operation strategies and policy dialogue with developing countries and economies in transition. Biodiversity objectives should be integrated in development projects across different sectors of the economy of the recipient countries ensuring greater coherence between Community development co-operation policy and other Community policies, such as international trade, agriculture and fisheries..*
- *To support sustainable use of natural resources, particularly in relation to forests, grasslands and marine/coastal ecosystems.*
- *To strengthen capacity of relevant agencies involved in conservation and sustainable use of biodiversity.*
- *To further integrate EIA practices into development and economic co-operation.*
- *To co-ordinate the implementation of this strategy and the Action Plans emerging from it, with third countries strategies ensuring coherence between Community support to third countries and the objectives of those countries' own biodiversity strategies.*
- *To ensure complementarity and co-ordination of policies and approaches in Community and Member States' aid programmes, as well as with other donors and international institutions, particularly the Global Environmental Facility, for a coherent implementation of the CBD.*
- *To provide sufficient funding for biodiversity on bilateral aid programmes as well as for international mechanisms (e.g. CBD)*
- *To promote schemes for the integration of biodiversity objectives into agriculture in accession countries.*

IV. THE DEVELOPMENT AND IMPLEMENTATION OF ACTION PLANS AND OTHER MEASURES

1. Within the framework of this strategy set out in this document, Action Plans of a sectoral and a cross-sectoral nature will have to be elaborated to ensure the implementation of the objectives set out in sections II and III.

2. Specific Action Plans are envisaged for conservation of natural resources, agriculture, fisheries, regional policies and spatial planning and development and economic co-operation. For the other policy areas, the objectives formulated under III will be taken directly into account for their further development and implementation. In the case of regional policies and spatial planning the specific Action Plan will have to ensure that the objectives pursued by the biodiversity strategy are directly incorporated in the future programming guidelines as well as relevant Community initiatives and this will not imply the development of specific new instruments. Proposals for action on forestry will be part of the proposal for a EU Forestry strategy. Energy and transport do not require new specific action plans as the development and implementation of the Community strategies on climate change and acidification, which have a focus on ecosystems, together with the implementation of adequate environmental assessment procedures should be adequate to achieve the biodiversity objectives in these policy areas. For tourism, the implementation of environmental assessments and initiatives to be taken in the field of regional policies and spatial planning should help achieving the biodiversity objectives.

3. These Action Plans should be practical tools to achieve the integration of biodiversity into sectoral and cross-sectoral policy areas and instruments relevant to the conservation and sustainable use of biodiversity within the Community. Taking into account Article 3 of the CBD, the Action Plans should also ensure that Community policies and instruments do not cause damage to the environment of third countries or of areas beyond the limits of national jurisdiction and help third countries in their efforts to achieve conservation and sustainable use of biodiversity.

4. Taking into account the assets that some of the associated countries of the Community in Central and Eastern Europe have with respect to biodiversity it should be ensured that Action Plans and other measures include a specific focus on enlargement issues.

5. Action Plans and other measures will pursue the respect, preservation and maintenance of knowledge, innovations and practices of indigenous and local communities embodying traditional lifestyles relevant for the conservation and sustainable use of biodiversity and promote their wider application with the approval and involvement of the holders of such knowledge, innovations and practices.

6. To implement this strategy, the relevant actors in the policy areas mentioned above will have to develop the Action Plans and other measures in view of the specific goals they are pursuing and with the specific mechanisms and procedures to which they are subject. The actors requested to elaborate or contribute to the elaboration of Action Plans and other measures are in the first instance the relevant Commission services responsible for the policy area concerned, working in close co-ordination with each other as well as in co-operation with other European institutions and bodies (such as the European Environmental Agency, the European Investment Bank, etc) and together with the national authorities where the responsibility for the definition and implementation of measures is shared. The Action Plans will take the form of Commission Communications to the Council and to the Parliament and, where appropriate, comprise proposals for legal instruments.

7. Action plans should be an integral part of the existing sectoral policy agendas and should make use of the existing agreements and international undertakings. Action Plans and instruments should implement the objectives indicated for the policy sectors in question and the objectives indicated under the different Themes of this strategy. In this way biodiversity concerns will be taken account of, inter alia,

- in the current review of the arrangements for the Structural Funds.
- in the CAP reform process announced in Agenda 2000; and
- in the new arrangements for development aid to be decided in 1998, especially through the new framework agreement between the EU and the ACP beyond the year 2000.

8. Action Plans should enhance collaboration and partnerships as well as a more efficient use of available resources. Interest groups such as industry associations and NGOs will be associated in the development and implementation of the Action Plans.

9. The development of the Action Plans normally will require a review of existing policies and instruments to determine how they affect species and ecosystems. They should identify the extent to which the aims and objectives indicated in this strategy are already incorporated and any gaps and additional initiatives that may be necessary. They should also set priorities for action. In the development and implementation of the Action Plans a precautionary approach should be taken in cases where incomplete knowledge exists. Socio-economic aspects of the implementation of the measures contained in the Action Plans should be evaluated. In order to set priorities and to justify chosen options when different alternatives are available. Action Plans should incorporate the necessary cost-effectiveness information.

10. Each Action Plan should as a general rule set out clear tasks, targets and mechanisms to assess their performance and to evaluate progress in the implementation of the strategy. The Commission will in co-operation with relevant bodies identify indicators in order to enable an evaluation ex ante and ex post of the implementation of the Action Plans. Species and ecosystems likely to be affected by each policy area mentioned in section III, and for which action is needed to ensure their conservation and sustainable use, will be the basis for the establishment of indicators. Economic indicators will also be considered.

11. Following the adoption of the Action Plans, it will be the responsibility of the relevant actors to ensure their implementation. The different sets of indicators will help the focal points to be established to follow the development, implementation and review of the strategy and Action Plans and ensure co-ordination and consistency on cross sectoral issues.

12. Assessments on the implementation of the strategy and the effectiveness and appropriateness of the Action Plans will normally be made on a three year cycle basis or in accordance with the planning cycles of the relevant policy. On the basis of these assessments the Commission will present a report to the Council and to the Parliament.

13. The development of Action Plans should be completed within two years after the adoption of this Communication by the Commission.