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# AGREEMENTS ON CONSERVATION AND SUSTAINABLE DEVELOPMENT

## INTERNATIONAL CONVENTIONS

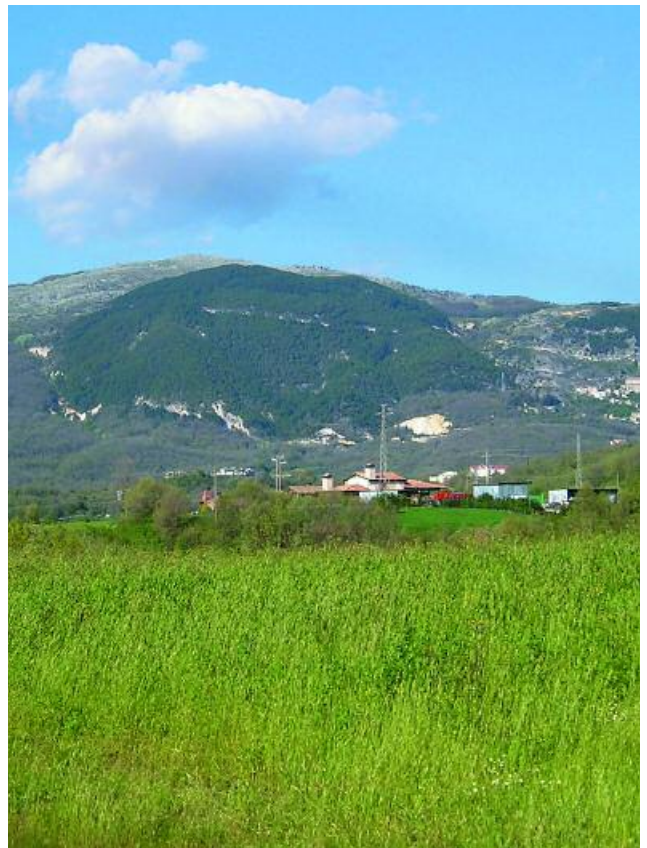
[Goffredo Filibeck, Stefano Gomes, Michela Marignani,  
Antonio Maturani]

In 1964 the first attempt was made to intervene on the organisation of the international economic order which took account of the problems posed by developing countries. The United Nations General Assembly established the Conference on Trade and Development (UNCTAD) in order to promote equitable benefit sharing and the integration of developing countries into the world economy<sup>1</sup>. However, the political efforts made by international organisations to mitigate the economic and social imbalance have not led to significant results.

The first decade of the UN's policy on development in the 1960s emphasised an industrial and urban development which, contrary to the expected outcome, led to a reduction in the rate of economic growth and an exponential demographic growth. Under these circumstances, many countries were unable to satisfy their own internal food demand.

With the failure of this first decade's policy, a critical revision of the development process was carried out. A current of thought emerged that supported the need to formulate new objectives along with a strategy based on the use of renewable resources.

This approach characterised the philosophy of the second decade: the concept of *ecological development* was created which by the late 1980s became known as *sustainable development*, that is, maintaining that delicate balance between the human need to improve lifestyles and feeling of well-being on the one hand, and preserving natural resources and ecosystems on which we and future generations depend.



Agricultural landscape of the Central Apennines (Photo by P. Di Marzio).

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<sup>1</sup> In 1966, the General Assembly of the United Nations with Resolution 2029 created a body to guarantee assistance to developing countries and to accelerate their process of economic and social growth, with particular attention to the problems of recently developed countries, that was called the *United Nation Development Programme* (UNDP). Most of the projects elaborated by the UNDP were assured/guaranteed by specialised agencies within the United Nation's system such as the FAO, the *United Nations Industrial Development Organisation* (UNIDO), etc.

## THE UNITED NATIONS STOCKHOLM CONFERENCE ON THE HUMAN ENVIRONMENT

The 1970s witnessed the birth of the environmentalist movement on a world-wide scale. The first important scientific document that took account of the instances raised by this movement was the study carried out by a group of experts from the *Massachusetts Institute of Technology* (MIT), published under the title “The Limits to Growth” (MEADOWS *et al.*, 1972). The summary of their conclusions includes the following: “If the present growth trends in world population, industrialisation, pollution, food production, and resource depletion continue unchanged, the limits to growth on this planet will be reached within the next one hundred years... It is possible to alter these growth trends and to establish a condition of ecological and economic stability that is sustainable far into the future.” With this “steady state economy” the material needs of the world population would seem to be guaranteed, and the faster this decisive change takes place, the greater its success would be.

Economist Herman DALY, an originator of this view, defined sustainable development as development without growth beyond environmental carrying capacity, where development means qualitative improvement and growth means quantitative increase. Professor DALY writes, “The power of the concept of sustainable development is that it both reflects and evokes a latent shift in our vision of how the economic activities of human beings are related to the natural world — an ecosystem which is finite, non-growing, and materially closed.... This change in vision involves replacing the economic norm of quantitative expansion (growth) with that of qualitative improvement (development) as the path of future progress” (DALY, 1981). Professor DALY goes on to say that the principal property of sustainable development is that the scale of the economic subsystem is within the carrying capacity of the ecosystem.

In 1972, while the debate regarding hypotheses formulated by the MIT researchers was still in full swing, the first international conference was held in Stockholm which convened the world governments to consider environmental issues linked to development policies: the *United Nations Conference on the Human Environment*<sup>2</sup>.

At the Stockholm Conference, the developing countries declared they were unable to sustain the costs of environmental protection and the conversion towards sustainable development alone. A controversy also emerged:

the industrialised countries affirmed that the great demographic growth registered in those years was the principle cause for the economic imbalance and the depletion of natural resources, while the third-world countries pointed towards the massive exploitation of resources by developed countries as being the primary cause.

On December 15 1972, the General Assembly of the United Nations<sup>3</sup> set up an Agency to coordinate environmental action, with headquarters in Nairobi: UNEP (*United Nations Environment Programme*).

### UNEP's mission and strategies<sup>4</sup>

UNEP's mission is to promote the wise use and sustainable development of the global environment in collaboration with numerous partners from within the UN, international organisations, national governments, the private sector, civil society and non-governmental organisations (NGOs).

UNEP work encompasses:

- assessing global, regional and national environmental status and trends,
- developing international and national environmental instruments,
- strengthening institutions for the wise management of the environment,
- facilitating the transfer of knowledge and technology for sustainable development,
- encouraging new partnerships and mind-sets within civil society and the private sector.

To ensure its global effectiveness, UNEP supports six regional offices (Europe, Africa, North America, Asia and the Pacific, Latin America and the Caribbean, west Asia), as well as a growing network of centres of excellence such as the *Global Resource Information Database Centre* (GRID) and the *World Conservation Monitoring Centre* (UNEP-WCMC).

UNEP, as the principal institution of the United Nations for the Environment, has taken on a fundamental role in promoting biological diversity conservation, in application of Chapter 15 of Agenda 21 (see following section), promoting initiatives for the protection of genetic resources, species and habitats.

<sup>2</sup> *Declaration of the United Nations Conference on the Human Development* of June 16 1972.

<sup>3</sup> *General Assembly Resolution 2997 (XXVII)* of December 15 1972.

<sup>4</sup> This section was edited by Miriam Marta.

Together with the Council of Europe (see specific section), the *Regional Office for Europe* (REO) work on a project for the reciprocal support and coordination between the CBD and the PEBLDS (*Pan-European Biological and Landscape Diversity Strategy*), operating as Secretariat for the last mentioned and establishing a European framework for the implementation of conventions that are relevant to biodiversity.

Recently, UNEP together with IUCN and the Regional Centre for the Environment, promoted the establishment of an institution providing a “service for the implementation of action plans and national strategies concerning biodiversity” which has the integration of global, regional and national instruments for the conservation and sustainable use of biodiversity in the European Union countries as its mission.

The principal activities of UNEP with regards to safeguarding biodiversity are the following:

- *Convention on Biological Diversity (CBD)*;
- *Convention on International Trade in Endangered Species (CITES)*;
- *Convention on Migratory Species (CMS)*;
- *Agreement on the Conservation of African-Eurasian Migratory Waterbirds (AEWA)*;
- *EUROBATS – Agreement on Conservation of Bats in Europe*;
- *Great Apes Survival Project (GRASP)* - An innovative and ambitious project of UNEP and UNESCO with an immediate challenge - to lift the threat of imminent extinction faced by gorillas, chimpanzees, bonobos and orangutans;
- *Global Programme of Action for the Protection of the Ma-*

*rine Environment from Land Based Activities (GPA)* - It aims at preventing the degradation of the marine environment from land-based activities by facilitating the duty of States to preserve and protect the marine environment;

- *Coral Reef Unit*;
- *The International Coral Reef Action Network (ICRAN)* - Established in 2000, is a global partnership of coral reef experts who are working to halt and reverse the decline of the health of the world's coral reefs. ICRAN partners have created a globally integrated action plan to manage and protect coral reefs, based on recommendations from the International Coral Reef Initiative (ICRI);
- *The International Centre for Integrated Mountain Development (GRID-ICIMOD)* - ICIMOD was established in 1983 to promote the development of an economically and environmentally sound mountain ecosystem and improvement of the living standards of mountain populations of the Hind Kush-Himalayan (HKH) Region;
- *The UNEP-GEF Project on Development of National Biosafety Frameworks* - A three-year project designed to assist up to 100 countries to develop their own National Biosafety Framework to comply with the Cartagena Protocol on Biosafety;
- *Global Environmental Outlook (GEO)* - GEO-3, the most recent version, provides an overview of the main environmental developments over the past three decades, and how social, economic and other factors have contributed to the changes that have occurred. It addresses land, forests, biodiversity, freshwater, coastal and marine areas, atmosphere, urban areas, and disasters.

## THE RIO DE JANEIRO CONVENTION ON BIOLOGICAL DIVERSITY

The last years of the 20th century witnessed a new international gathering on the problems regarding the environment and development, held in Rio de Janeiro from June 3 - 14 1992: the *United Nations Conference on Environment and Development* (UNCED), also known as the "Earth Summit".

Twenty years after the Stockholm Conference, it is considered the most important international event for global environmental policies, compelling the political world to confront itself with the concept of sustainability.

The primary objective of this Convention was to set up a global agenda that would lead the world economy along a path of achieving sustainable development that would not deplete the environment for the present and future generations.

The results of the Rio Conference led to the undersigning of the following documents by government representatives:

1. The *Rio Declaration on the Environment and Development*: a set of 27 principles covering environmental protection and responsible development for the creation of a sustainable future;
2. *Agenda 21*: a fundamental document regarding the theory of sustainable development which contains the necessary actions to transform the declaration into guiding principles, connected to the international conventions undersigned during the Earth Summit;

3. The *Climatic Change Convention* (UNFCCC) to limit the increase of carbon dioxide in the Earth's atmosphere which is the principal cause of global warming;
4. The *Convention on Biological Diversity* (CBD) proposes a global ecosystem approach for the protection of all levels of diversity of living being, in an attempt to overcome the fragmented approach which resulted from existing conventions;
5. The *Convention to Combat Desertification* (UNCCD);
6. The *Declaration of Principles regarding Forests*, which gathers general guidelines formulated in the impossibility to reach the signing of a legally binding Convention.

The summit on sustainable development "Rio +10" held in Johannesburg (South Africa) in 2002, ten years after the Earth Summit in Rio, was an opportunity for today's leaders to adopt concrete steps and identify quantifiable targets for better implementing Agenda 21.

The governments convened on this occasion adopted resolutions, established specific objectives to pursue within certain set periods, among which there is the 2010 target to reach a significant reduction in the current rate of biodiversity loss.

In summing up what has been stated, Figure 1.1 lists the United Nation Agencies which deal with the process of implementing international policies on the environment and sustainable development.

UNEP carries out an important role in the process of coordinating actions, dealing with environmental programmes at both an international and regional level.

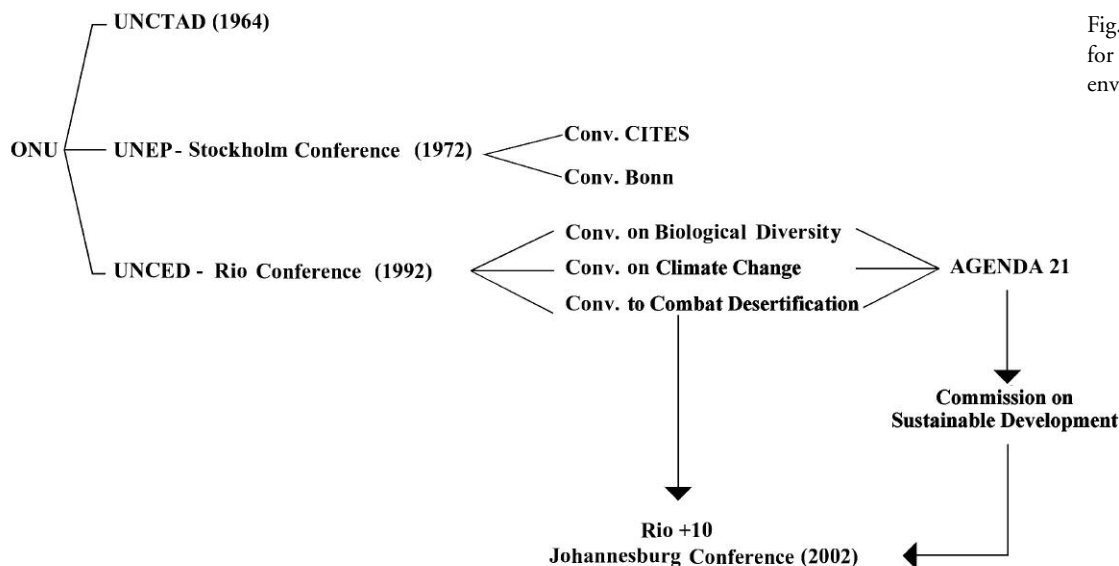


Fig. 1.1 - Mechanisms for international environmental policies.

## The Convention on Biological Diversity

The Convention on Biological Diversity (CBD) establishes three goals: the conservation of biological diversity, the sustainable use of its components, and the fair and equitable sharing of the benefits from the use of genetic resources. Each Contracting Party shall, as far as possible and as appropriate, cooperate with other Contracting Parties, directly or, where appropriate, through competent international organisations, in respect of areas beyond national jurisdiction and on matters of mutual interest, for the conservation and sustainable use of biological diversity.

This is a Convention of extraordinary importance in that its mission is the conservation of biodiversity and it identifies sustainable development and the fair and equitable sharing of the benefits arising out of the utilisation of resources as the primary objectives of the Convention itself.

What is surprising is the difference between the importance of the Convention and the degree of awareness and the propagation of the Convention. There are about 187 Contracting Parties to the Convention, though even today, when one speaks about biodiversity, one thinks it is an important issue which essentially interests only voluntary associations, ecologists and possible ecologists by profession. However, the Convention reaffirms that the conservation of biodiversity is a scientific, biological and ecological problem, as well as an economic, political and social one that is a common concern of humankind.

Italy formalised its participation in the Convention in 1994. Each Contracting Party shall, in accordance with its particular conditions and capabilities (art. 6):

- 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;
- identify components of biological diversity important for its conservation and sustainable use;
- monitor, through sampling and other techniques, the components of biological diversity;
- identify processes and categories of activities which have or are likely to have significant adverse impacts on the conservation and sustainable use of biological diversity, and monitor their effects;

- maintain and organise data derived from identification and monitoring activities.

Each Contracting Party shall, as far as possible and as appropriate, adopt economically and socially sound measures that act as incentives for the conservation and sustainable use of components of biological diversity.

Moreover, the Convention promotes and encourages research which contributes to the conservation and sustainable use of biological diversity.

Each Contracting Party shall, at regular intervals present to the Conference of the Parties (COP), reports on measures which it has taken for the implementation of the provisions of this Convention and their effectiveness in meeting the objectives of this Convention, and moreover they shall respond to requests made by the *Subsidiary Body on Scientific, Technical and Technological Advice* (SBSTTA).

### *The Evolution of the Convention through the Conference of the Parties<sup>5</sup>*

The Conference of the Parties (COP) is the governing body of the Convention on Biological Diversity. Its principal task is to advance implementation of the Convention through the decisions it takes (see box *Summary of the decisions taken during the various COP meetings and the CBD Ecosystem Approach*). In doing so, the Convention has set up working groups and liaison groups to implement the work and to address specific issues. Table 1.1 lists the main issues identified up to the present time.

The decisions adopted by the COP are principally based on indications provided in the recommendations produced by the Subsidiary Body on Scientific, Technical and Technological Advice (SBSTTA). This Body creates groups of *ad hoc* technical experts which elaborate on priority issues of the Convention, and whose activity is established for a certain set time (Table 1.2).

The COP has set out a series of items for its agenda, namely: budget approval, assessment of national reports, adoption of protocols, annexes, and the development of guidelines for financial mechanisms.

Moreover, whenever the COP has convened (Table 1.3), it has developed a number of thematic work programmes and action plans and identified a series of key cross-cutting issues relevant to all work programmes (see box *Mountain ecosystems*), and periodically it establishes a review of these programmes in order to advance their implementation and increase their effectiveness.

<sup>5</sup> This section was edited by Goffredo Filibeck, Michela Marignani, Miriam Marta, and Francesca Blasi.

<b>Ad Hoc working groups</b>
Working Group on Article 8(j)
Working Group on Access and Benefit-Sharing (ABS)
Working Group on Biosafety
Working Group on Review of Implementation of the Convention
<b>Liaison groups</b>
Liaison Group of Technical Experts on the Biosafety Clearing-House
Liaison Group on Alien Invasive Species
Liaison Group on Biological Diversity of Inland Waters
Liaison Group on Ecosystem Approach
Liaison Group on Identification, Monitoring and Indicators
Liaison Group on Global Strategy for Plant Conservation
Liaison Group on Agricultural Biological Diversity
Liaison Group on Capacity-Building for Biosafety
Liaison Group on Drylands
<b>Expert groups</b>
Expert Group on Access and Benefit-Sharing (ABS)
Expert Group on Access to Genetic Resources and Benefit-sharing
Expert Group on Handling, Transport, Packaging and Identification of Living Modified Organisms (Article 18, paragraph 2.a)
Expert Group on Clearing House Mechanisms for Biosafety
Expert Group on Capacity Building
Expert Group on Clearing-House Mechanism
Expert Group on the Ecosystem Approach

Table 1.1 - COP supporting groups (source: &lt;www.biodiv.org&gt;).

Ad Hoc Open-Ended Working Group on Protected Areas
Open-ended Working Group on the Montreal Protocol
Ad hoc Technical Expert Group on Dry and Sub-Humid Lands
Ad Hoc Technical Expert Group on Traditional Knowledge and Clearing-House Mechanism
Ad-Hoc Technical Expert Group on Biological Diversity and Climate Change
Ad-Hoc Technical Expert Group on Marine Biodiversity
Ad Hoc Technical Expert Group on Mountain Biodiversity
Technical Expert Group on Marine and Coastal Protected Areas
Technical Expert Group on Forests

Table 1.2 - Supporting groups to SBSTTA.

COP Meetings	Main themes
First Ordinary Meeting 28 November - 9 December 1994 Nassau, Bahamas	Guidance to the financial resources and mechanisms; Medium-term programme of work of the Conference of the Parties.
Second Ordinary Meeting 6-17 November 1995 Jakarta, Indonesia	Marine and coastal biological diversity; Access to genetic resources; Conservation and sustainable use of biological diversity; Biosafety.
Third Ordinary Meeting 4-15 November 1996 Buenos Aires, Argentina	Agricultural biological diversity; Financial resources and mechanism; Identification, monitoring and assessment; Intellectual property rights.
Fourth Ordinary Meeting 4-15 May 1998 Bratislava, Slovakia	Inland water ecosystems; Review of the operations of the convention; Implementation of Article 8(j), with the participation of indigenous peoples; Benefit sharing; <i>Jakarta Mandate</i> on marine and coastal areas; Forest Biological Diversity.
First Extraordinary Meeting (first part) 22-24 February 1999 Cartagena, Colombia	Discussion on the adoption of a draft Protocol on Biosafety – suspended to be continued at a subsequent date.
First Extraordinary Meeting (second part) 24-29 January 2000 Montreal, Canada	Adoption of the Cartagena Protocol on Biosafety (operative on the 11 September 2003).
Fifth Ordinary Meeting 15-26 May 2000 Nairobi, Kenya	Joined working programme for inland water ecosystems with the Ramsar Convention and the “River Basin Initiative”; Biological diversity in dryland, mediterranean, arid, semi-arid, grassland and savannah ecosystems; Sustainable use, including tourism; Access to genetic resources; Intergovernmental Commission for the Cartagena Protocol on Biosafety; Agricultural Biological Diversity.
Sixth Ordinary Meeting 7-19 April 2002 The Hague, Netherlands	Forest ecosystems; Alien species; Benefit-sharing; Strategic Plan 2002-2010; Global initiative on Communication, Education and Public Awareness (CEPA); Global Strategy for Plant Conservation (GSPC).
Seventh Ordinary Meeting 9-20 and 27 February 2004 Kuala Lumpur, Malaysia	Mountain Biological Diversity; Protected Areas; Transfer of technology and technology cooperation; Access to the genetic resources and benefit-sharing (ABS); Guidelines for sustainable management of resources.
First COP-MOP Meeting 23-27 February 2004 Kuala Lumpur, Malaysia	First Conference of the Parties on the Cartagena Protocol on Biosafety: discussion on the Protocol mechanisms and implementation procedures, information condision, definition of the work programme
Second COP-MOP Meeting 30 May – 3 June 2005 Montreal, Canada	Second Conference of the Parties on the Cartagena Protocol on Biosafety: definition of the implementation Protocol, risk evaluation and management, socio-economical aspects.

**Table 1.3** - Major themes at meetings of the Conference of the Parties from 1994 to 2004.



## SYNTHESIS OF THE DECISIONS ADOPTED DURING MEETINGS OF THE CONFERENCE OF THE PARTIES

[Miriam Marta]

**I COP** In this Conference, biodiversity is defined as a fundamental element of sustainable development. Hence, the conservation of biodiversity is a key objective in planning sustainable development and combating poverty. During this first meeting, the primary need to assess the status of biological diversity throughout the world was highlighted. The diversity and variability of genes, species, populations and ecosystems are considered necessary in order to guarantee the well being of the Earth and its ecological functions. Moreover, emphasis was given to the need to integrate Agenda 21 (see section *Rio de Janeiro Convention on Biological Diversity*) with the Convention on Biological Diversity, and to connect biodiversity to issues of deforestation and desertification.

**II COP** The developing countries declared the need to share the benefits arising out of the utilisation of genetic resources. Social, economic and cultural factors should also be considered when analysing biodiversity as it constitutes an aspect that improves the quality of life of the world's population.

Consideration was given to one of the first substantive issues: *marine and coastal biodiversity*, upon which the decision was taken to nominate a group of experts to promote models of integrated management and to define a work programme on the biological diversity of these ecosystems.

In order to promote and facilitate technical and scientific cooperation within and between countries, a global mechanism was devised for exchanging and integrating information on biodiversity, known as the *Clearing House Mechanism* (CHM), which has helped to develop the necessary human and technological network.

Moreover, the Conference sets up a work group regarding risk management and the transfer of *genetically modified organisms*.

**III COP** During this Conference, the need to foster coordination of the CBD with other conventions was reaffirmed, particularly with Agenda 21, and to this purpose a cooperation treaty was signed between the CBD and the *Ramsar Convention* (Iran, 1971), along with an agreement of cooperation with the *Convention on Migratory Species* (CMS).

This conference decreed that the move from a medi-

um-term programme to a long-term programme must have the following premises:

- the promotion of technical and scientific knowledge,
- the intensification and improvement of cooperation with other institutions,
- the effective working of the institutions of the Convention and the widening of involvement in the Convention by non-governmental organisations (NGOs), the private sector and the institutional sectors.

It establishes a long-term programme on the *conservation and sustainable use of agricultural biodiversity* with the aim of promoting the positive effects of agricultural practices, mitigating the negative ones and fostering the conservation and sustainable use of genetic resources, among which the fair utilisation and equitable sharing of the benefits.

The crucial role played by forests in the conservation of biodiversity is reaffirmed along with the importance of identifying indicators for sustainable forest management. To this end, a work programme is set up in cooperation with the *Intergovernmental Panel on Forests* (IPF).

**IV COP** This Conference promotes the establishment of new programmes in the areas of interest of the Convention, and a review of those already underway.

In order to safeguard *inland water ecosystems*, a programme is adopted which includes an evaluation of the status and trend of biodiversity of these ecosystems through an integrated approach and the identification of strategies for their conservation and sustainable use.

A work programme on the *conservation and sustainable use of marine and coastal biodiversity* is also adopted with reference to the *Jakarta Mandate* - Decision II/10 on marine and coastal biodiversity which has the following objectives: the integrated management of coastal and marine areas, the safeguarding of resources, protected areas, mariculture, alien species and genotypes.

A work programme is set up on *forest biodiversity* to promote research, cooperation and the necessary development of technologies for its conservation and sustainable use.

Lastly, the Conference adopts the guidelines produced in Madrid to set up a work programme on *Article 8* in order to assure the participation of local communities in implementing the Convention.

**V COP** This Conference principally regards *land* biodiversity.

A work programme is defined on the *biodiversity of dryland, Mediterranean, arid, semi-arid, grassland and savannah ecosystems* in order to establish the status of biodiversity, pro-



mote the sustainable use of resources, the equitable sharing of benefits deriving from genetic resources, and to combat biodiversity loss in these areas along with the social-economic consequences that derive from it.

A joint work plan is signed for *inland water ecosystems* with the Ramsar Convention (Iran, 1971) called the “River Basin Initiative”.

The ecosystem approach is defined as “a strategy for the integrated management of the land, water and living organisms to promote the conservation and sustainable use of resources.” The application of this principle helps to reach an equilibrium among the three objectives of the Convention.

A group of experts on *forest biodiversity* is formed to promote the ecosystem approach, and the Contracting Parties are invited to consider the results of the *Intergovernmental Forum on Forests* (IFF).

The Parties are asked to apply guidelines defined for *alien species* and give priority to the development and implementation of strategies and action plans on invasive alien species.

The Conference defines the terms of reference to promote the necessary coordination actions of the *Global Taxonomy Initiative* (GTI) with national initiatives and prepare appropriate structures for the study and collection of species.

A work plan is defined for the *Intergovernmental Commission for the Cartagena Protocol on Biosafety*.

A review of the work programme on *agricultural biodiversity* is carried out and a long-term programme is adopted with the objective to further implement the programme already outlined in COP 3 and promote sustainable agriculture and rural development.

**VI COP** This represents a reference point for the development and progress of the Convention on Biological Diversity. It, in fact, sanctions the move from the development of policies to the implementation. For this reason, a Strategy Plan for the Convention on Biological Diversity was adopted to further advance its implementation at a national, regional and global level.

Numerous decisions are taken during COP 6, and an assessment of all the principal issues of the Convention is carried out.

A work programme on the *Global Taxonomy Initiative* is adopted to outline the objectives and the role of this initiative as well as to define the necessary taxonomic information at a global, regional and national level.

A work programme is adopted for the global initiative on *Communication, Education and Public Awareness* (CEPA)

which has the goal of fostering understanding and awareness of the general public towards biological diversity and the measures required for its conservation.

The *Bonn guidelines* are adopted regarding access to genetic resources and the equitable sharing of the benefits that derive from their use.

A request is made to further develop the guidelines to include correlated arguments on biodiversity within legislation and the Environmental Impact Assessment (EIA).

The Conference adopts the *Global Strategy on Plant Conservation* (GSPC).

Sixteen outcome-oriented global targets, along with divided into five sub-objectives are defined in the Global Strategy: understanding and documenting plant diversity, conserving plant diversity, using plant diversity sustainably, promoting education and awareness about plant diversity, and building capacity for the conservation of plant diversity.

The request is renewed to complement national policies and programmes with regional and multilateral environmental agreements (MEAs). Moreover, the COP establishes a joint liaison group from among the Secretariats of the CBD, the UNCCD (*United Nations Conference to Combat Desertification*) and UNFCCC (*United Nations Framework Convention on Climate Change*).

**VII COP** This Conference focuses its attention on the need to find concrete instruments to carry out the most important objective of the Convention: to reduce the loss of biodiversity by 2010.

Three new work programmes are adopted to adequately face the following important issues: transfer of technologies, protected areas and biological diversity of mountain ecosystems.

On the basis of experience gained throughout the years, the thematic programmes on inland water ecosystems and on marine and coastal biological diversity already adopted are subjected to assessment and review in order to improve their operative instruments and their outcomes. Moreover, the negotiation process for an international regime regarding the use of genetic resources and the equitable sharing of the benefits (*Access and Benefit-Sharing* - ABS) makes great progress towards a positive agreement. Another main achievement of the COP 7 is the adoption of the Addis Ababa Guidelines on Biodiversity and the Sustainable Use, and the Akwe: Kon Voluntary Guidelines represented another important step towards implementing Articles 10 and 8 (j) of the Convention.

## THE ECOSYSTEM APPROACH OF THE CBD

[Goffredo Filibeck, Michela Marignani, Stefano Gomes, Piera Di Marzio, Marco Marchetti]

The ecosystem approach is one of the underlying principles in the political and scientific organisation of the CBD, even though it is not mentioned in the text of the convention.

The concept was introduced at the first meeting of the SBSTTA, while at the second meeting of the COP (Jakarta, November 1995) it was stated that “the conservation and sustainable use of biological diversity and its components should be addressed in a holistic manner, taking into account the three levels of biological diversity and fully considering the socio-economic and cultural factors”, and that the “ecosystem approach should be the primary instrument to undertake action in the context of the Convention” (Decision II/8, 1995). Successively, during a meeting of experts promoted by Holland and Malawi in 1998, the first definitions of the ecosystem approach were drafted, in which twelve principles/characteristics of the ecosystem approach to biodiversity management were identified (*Malawi Principles*). Other meetings followed that allowed this approach to be better examined and defined.

Its definition and description were endorsed with COP 5 Decision V/6, which underlines that such criteria be the *fundamental framework* for any action undertaken in the context of the Convention. Thus, it is recognised that the application of the ecosystem approach will help reach a balance of the three objectives of the Convention: conservation, sustainable use, and the fair and equitable sharing of the benefits arising out of the utilisation of genetic resources (Decision V/6, 2000).

The ecosystem approach is based on the application of appropriate scientific methodologies focused on levels of biological organisation which encompass the essential structure, processes, functions and interactions among organisms and their environment. It recognises that humans, with their cultural diversity, are an integral component of many ecosystems.

In Decision V/6, this focus on structure, processes, functions and interactions is consistent with the definition of *ecosystem* provided in Article 2 of the CBD: “Ecosystem means a dynamic complex of plant, animal and micro-organism communities and their non-living environment interaction as a functional unit.” This definition does not specify any particular spatial unit or level, in contrast to the Convention definition of *habitat*: “Habitat means the

place or type of site where an organism or population naturally occurs.” Thus, the term *ecosystem* can refer to any functioning unit at any level: indeed, the level of analysis and action should be determined by the problem being addressed.

The ecosystem approach, moreover, requires adaptive management to deal with the complex and dynamic nature of ecosystems and the absence of complete knowledge or understanding of their functioning. Ecosystem processes are often non-linear, and the outcome of such processes often shows time-lags. Thus, management must be adaptive in order to be able to respond to such uncertainties and contain elements of “learning-by-doing” or research feedback. The ecosystem approach does not preclude other management and conservation approaches, such as protected areas and single-species conservation programmes, but could, rather integrate all these approaches and other methodologies to deal with complex situations. There is no single way to implement the ecosystem approach, as it depends on local, provincial, national, regional or global conditions.

Decision V/6 lists the 12 principles which are complementary and interlinked. Briefly, they indicate that: the objectives of management of land, water and living resources are a matter of societal choice; management should be decentralised to the lowest appropriate level; ecosystem managers should consider the effects (actual or potential) of their activities on adjacent and other ecosystems; in recognising potential gains from management, there is usually a need to understand and manage the ecosystem in an economic context - any such ecosystem-management programme should reduce those market distortions that adversely affect biological diversity; a priority target of the ecosystem approach should be the conservation of ecosystem structure and functioning, in order to maintain ecosystem services; attention should be given to the environmental conditions that limit natural productivity; the ecosystem approach should be undertaken at the appropriate spatial and temporal scales, based upon the hierarchical nature of biological diversity and connectivity between areas should be promoted where necessary; the objectives for ecosystem management should be set for the long term; management must recognise that change is inevitable; the ecosystem approach should seek the appropriate balance between, and integration of, conservation and use of biological diversity; the ecosystem approach should consider all forms of relevant information, including scientific and indigenous and local knowledge; the ecosystem approach should involve all relevant sectors of society and scientific disciplines.

In applying the 12 principles of the ecosystem approach, the

COP proposes the following points as operational guidance:

- focus on the functional relationships and processes within ecosystems;
- enhance benefit-sharing that flow from the array of functions provided by biological diversity at the ecosystem level, and in particular these functions should benefit the stakeholders responsible for their production and management;
- use adaptive management practices that can be designed to adjust to the unexpected as the diversity of social and cultural factors affects natural-resource use;
- carry out management actions at the scale appropriate for the issue being addressed, with decentralisation to lowest level, as appropriate;
- ensure intersectoral cooperation.

By the end of 2000, in furtherance of Decision V/6, three subregional workshops were held (*Pathfinder Workshops*) in South Africa, South America and in South-east Asia respectively, promoted by IUCN Commission for Ecosystem Management in collaboration with the Secretariats of the CBD, UNESCO-MAB and International WWF. Their principal objective was to analyse the case studies presented on the application of the ecosystem approach.

In October 2002, the German Federal Agency for Nature Conservation organised an additional workshop on the Isle of Vilm entitled "Further Development of the Ecosystem Approach" in order to refine the principles and operational guidelines on the basis of case studies and experience gained in the meantime. One of the outcomes of this meeting was a proposal to regroup and refine the principles (KORN *et al.*, 2003). Moreover, at the workshop held on Vilm Isle, the evident problems in the structure of the Ecosystem Approach were highlighted, such as the need to clarify the structure of the approach itself, the economic incentives, and the lack of guidelines for the ecosystem approach for application in the field.

In the meeting held in July (CBD) and in November 2003 (Ninth Meeting of the SBSTTA, Montreal), priority was given to facilitating the implementation of the ecosystem approach (WILKIE *et al.*, 2003).

KORN H., SCHLIEP R., STADLER J., 2003 – *Report on the international workshop on the Further Development of the Ecosystem Approach*. BfN Skripten 78.

WILKIE M.L., HOLMGREN P., CASTANEDA F., 2003 – *Sustainable Forest Management and the Ecosystem Approach: two concept, one goal*. Forest Resources Development Service, Working Paper FM 25 FAO, Rome, Italy.

## MOUNTAIN ECOSYSTEMS

[Fausto Manes, Michela Marignani]

For the first time, during the IV meeting the Conference of the Parties in 1998, the Convention on Biological Diversity tackled the issue of mountain ecosystems, requesting that the SBSTTA and other scientific bodies deal with this subject (Decision IV/16) to face the question of conservation in detail along with the sustainable use of biological diversity in mountain ecosystems in COP 7.

In 2002, COP 6 (Decision VI/30) invites the Executive Secretary to prepare an analysis of the state on conservation, risks and threats which these habitats are subjected to, including information obtained from the national reports from those who had undersigned the Convention (Decision VI/25).

The importance of the mountain ecosystem for the CBD resides in the great ethical, cultural, ecological and economic valence of mountains. The right of indigenous populations and local communities to live and develop is accompanied with the respect and safeguard of the cultural patrimony of these populations that obtain a livelihood from the natural resources of the mountain.

It is estimated that approximately 22% of the world population live in mountain areas (UNEP-WCMC, 2002); additionally, mountains provide vital natural resources for lowland peoples (water, food, wood, energy, etc.). Hence, the mountains influence, in a direct or indirect manner, almost half of the human population (MESSERLI and IVES, 1997).

The conservation of the ecological integrity of the mountain means to safeguard the relationships of interdependence among organisms (structure), to maintain the functionality of the system and ensure an economic productivity in both quantitative and qualitative terms: these conditions, in respect of a sustainable use of the resources, would guarantee the survival of these populations.

Mountain ecosystems carry out numerous ecological functions such as the management of the following resources: water, land and nutrients. As these mountain systems have a delicate balance, safeguarding their integrity is an absolute priority in the conservation of biological diversity. The harsh climatic conditions of the mountains serve to disaggregate the substrate which the force of gravity continuously transports downhill,

thus slowing the development of the soil. The thin layer of soil and the instability of the slopes correlated to their inclination in turn limit the growth of plants, thus increasing the vulnerability of the mountains to human disturbance which, moreover, require long periods to recover. The only instrument for the conservation of the substrate and the nutrients is the capacity of vegetation to consolidate the slopes. The great biological diversity and functions of plants in mountain ecosystems ensures an effective barrier against soil loss, maintaining the nutrients along with the draining and filtering capacity of the soil. What is more, by improving the drainage capacity of the soil and the stability of the slopes, the risk of landslides and avalanches is reduced for the populations in the areas below.

In this context, protecting biological diversity means protecting the functionality of the entire mountain system.

The mountain holds one of the most valuable biodiversity patrimonies in the world: of the twenty plant species that provide 80% of the world's food reserves (see section *Genetic diversity of plant species of agricultural interest*, Table 2.1), six come from mountain ecosystems, such as the potato (the Andes in Peru), wheat (the Sierra in Mexico) and sorghum (the plateaux in Ethiopia).

The richness of mountain ecosystems depends on several factors such as altitude, latitude and topography which contribute to towards creating a mosaic of habitats suited to the development of a great variety of life forms. Moreover, the geographical isolation of these habitats determines the presence of numerous endemic species which have great biogeographic importance. On the mountains in Central Asia, for example, there are more than 5,500 flower species, with more than 4,200 species only in the area of Tajikistan (JENIK, 1997). On Mount Kinabalu in Sabah (Borneo) there are more than 4,000 plant species (PRICE *et al.*, 1999).

This exceptional diversity of life in mountain ecosystems is also the consequence of the compression of climatic zones along a high altitudinal gradient. At high altitudes, biodiversity gradually diminishes as does the land surface, creating a biodiversity/surface ratio that often surpasses the areas at lower altitudes (KÖRNER and SPEHN, 2002). For example, the Alpine belt - the zone above the natural limit of trees, is a bioclimatic reference point that repeats itself throughout the world at the same temperature, regardless of latitude. This belt covers about 3% of the Earth's land surface and hosts about 4% of the species.

Mountain habitats are well represented in the general computation of protected areas: out of a total of 785 million hectares of protected areas in the world, 264 million hectares are in the mountains, more than any other category (KÖRNER *et al.*, 2002).

The risks and threats to which mountain ecosystems are most subject were identified by the CBD and elaborated during the SBSTTA 8, which was implemented by a group of experts who met in Italy in July 2003.

The richness of mountain ecosystems is acknowledged in the work programme, along with the fragility of the balance that regulates the survival of the species, and the vulnerability these systems have to human and natural disturbance, particularly with regards to land-use change and global climate changes.

Moreover, the CBD programme focuses its attention on the functionality of the mountain ecosystem, stressing the strict correlation that exists between high altitude and low altitude areas, especially in relation to land and water resources, recalling the key role that knowledge and traditional practices of the indigenous and local communities play in the conservation and management of mountain biological diversity.

The programme on mountain biological diversity elaborated by the group of experts and then placed under the review of the SBSTTA 9, constituted the groundwork for the COP 7, which six years after the first decision (IV/16, 1998) defined the work programme to significantly reduce the rate of biological diversity loss by 2010 at a global, continental, and national level through the three objectives of the Convention (conservation of biological diversity, the sustainable use of its components and the fair and equitable sharing of the benefits arising out of the utilisation of genetic resources) (VII/27, 2004).

JENIK J., 1997 – *The diversity of mountain life*. In: MESSERLI B., IVES J.D. (eds.), *Mountain of the World: A Global Priority*. The Parthenon Publishing Group. New York. Pp: 199-235.

KÖRNER C., 1999 – *Alpine plant life*. Springer, Berlin

KÖRNER C., SPEHN E. (eds.), 2002 – *Mountain biodiversity: a global assessment*. The Parthenon Publishing Group. New York.

MESSERLI B., IVES J.D. (eds.), 1997 – *Mountain of the World: A Global Priority*. The Parthenon Publishing Group. New York.

PRICE M., WACHS T., BYERS E., 1999 – *Mountains of the World: Tourism and sustainable mountain development*. Berne, Switzerland: Mountain Agenda.

UNEP-WCMC, 2002 – *Mountain Watch*.

## THE COUNCIL OF EUROPE

The Council of Europe (CoE) is an intergovernmental organisation founded in 1949 set up for the progressive union of European States. It groups together 45 countries and is distinct from the European Union. The mission of the Council of Europe is to: defend human rights, parliamentary democracy and the rule of law; develop continent-wide agreements to standardise member countries' social and legal practices; promote awareness of a European identity based on shared values and cutting across different cultures.

The CoE set up its environmental programme in 1961, paying particular attention to nature and landscape conservation, through the following initiatives:

### The Bern Convention

During the European Ministerial Conference held in Bern in 1979, the Member States adopted the *Convention on the Conservation of European Wildlife and Natural Habitats* (Bern Convention), which became operative in 1982.

The Bern Convention is an important legislative tool of international law for nature protection, which developed along side the EEC Directive 79/409 (*Birds Directive*). It has 45 Contracting Parties of which 39 are Member States of the CoE, along with the European Community, the principality of Monaco, and four African States.

The year 1998 saw the establishment of the *EMERALD* Network (also known as *EMERAUDE*) - a network of areas of special conservation interest (ASCIs) to be established in the territory of the Contracting Parties and observer States to the Bern Convention. For EU Member States, Emerald network sites are those of the *Natura 2000* network.

### The Pan-European Biological and Landscape Diversity Strategy (PEBLDS)

The Pan-European Strategy provides a framework to promote a consistent approach and common objectives to implement the Convention on Biological Diversity in Europe between the CoE and UNEP, with the contribution of the Organisation for Cooperation and Economic Development (OECD) and the World Conservation Union (IUCN). In 1995, during the Ministerial Conference "Environment for Europe" in Sofia, the strategy be-

came operational with the participation of 54 States belonging to the United Nations Economic Commission for Europe (UN/ECE). One of the main objectives of the Strategy was the establishment of a Pan-European ecological network by 2005. The mission of this ecological network is to ensure the conservation of species, habitats, ecosystems and landscape of Pan-European importance (BENNETT, 2002).

### The European Landscape Convention

A key factor in the quality of life both social and individual is the importance given to landscape, an importance, which apart from contributing to human development, is necessary in identifying European culture. It plays an important role in cultural, ecological, environmental and social fields, and is a valuable resource conducive to economic activity, notably tourism.

The debate in recent years has led to the formulation of a reference framework that guarantees landscape protection. The European Landscape Convention was opened for signature to the Council of Europe's Member States during the Ministerial Conference in Florence on October 20 2000.

The Convention is committed to a specific reference text which is devoted entirely to the conservation, management and improvement of European landscapes in international legal instruments on the environment, regional planning and the cultural heritage. In the European Landscape Convention, "Landscape" is defined as "an area, as perceived by people, whose character is the result of the action and interaction of natural and/or human factors". The Convention regards the entire territory: natural spaces, rural, urban and sub-urban landscapes, terrestrial, inland water and marine areas.



## SUMMARY OF INTERNATIONAL CONVENTIONS ON NATURE CONSERVATION

International conventions on nature conservation can be placed into three different historical phases (GOMES, 2002):

**first generation conventions**, such as the agreements for the protection of the seas and coasts from oil spills or the protection of flora and fauna species to be implemented in a regional geographical context;

**second generation conventions**, that is, those following the debate in the early 1970s, such as the 1971 *Ram-*

*sar Convention* which safeguards wetland of international interest, sustained by the World Conservation Union (IUCN), the 1973 *Convention on International Trade in Endangered Species of Wild Flora and Fauna* (CITES), and the 1979 *Convention for the protection of migratory species*. In this context, the 1982 *United Nations Convention on the Law of the Sea* (UNCLOS) differs for its international approach and the role it has carried out in the years following its adoption;

**third generation conventions** which originated from the 1992 Rio de Janeiro Conference which pursued the

1933 - <b>London</b> : Convention relative to the Preservation of Fauna and Flora in their Natural State (Africa)			
1946 - <b>Washington</b> : International Convention for the Regulation of Whaling (IWC)			
1949 - <b>Rome</b> : Agreement for the Establishment of a General Fisheries Council for the Mediterranean			
1950 - <b>Paris</b> : International Convention for the Protection of Birds			
1951 - <b>Paris</b> : Convention for the Establishment of the European and Mediterranean Plant Protection Organization			
1964 - <b>Agreement</b> on the Conservation of Antarctic fauna and flora <b>Madrid</b> : Protocol on Environmental Protection to the Antarctic Treaty (1991)			
1966 - <b>Rio de Janeiro</b> : International Convention for the Conservation of Atlantic Tunas			
1968 - <b>Algiers</b> : African Convention on the Conservation of Nature and Natural Resources <b>Nairobi</b> : Protocol Concerning Protected Areas and Wild Fauna and Flora in the Eastern African Region (1985)			
1969 - <b>Rome</b> : Convention on the Conservation of the Living Resources of the Southeast Atlantic			
1971 - <b>Ramsar</b> : Convention on Wetlands of Especial International Importance as Waterfowl Habitat - <b>IUCN and UNESCO</b>			
1972 - <b>Paris</b> : Convention for the Protection of the World Cultural and Natural Heritage - <b>Council of Europe and UNESCO</b>			
1973 - <b>Washington</b> : Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) - <b>UNEP</b>			
1974 - <b>Helsinki</b> : Convention on the Protection of the Marine Environment of the Baltic Sea Area			
1976 - <b>Barcelona</b> : Convention for the Protection of the Mediterranean Sea Against Pollution - <b>UNEP</b> <b>Barcelona</b> : 6 protocols, included the Protocol concerning specially protected areas and biological diversity in the Mediterranean (SPAMI) 1982-1995			
1979 - <b>Bern</b> : Convention on the Conservation of European Wildlife and Natural Habitats – <b>Council of Europe</b>			
1979 - <b>Bonn</b> : Convention on the Conservation of Migratory Species of Wild Animals (CMS) - <b>UNEP</b>			
1980 - <b>Canberra</b> : Convention on the Conservation of Antarctic Marine Living Resources			
1981 - <b>Abidjan</b> : Convention for Cooperation in the Protection and Development of the Marine and Coastal Environment of the West and Central African Region			
1981 - <b>Lima</b> : Convention for the Protection of the Marine Environment and Coastal Area of the South-East Pacific			
1982 - <b>Montego Bay</b> : United Nations Convention on the Law of the Sea (UNCLOS) - <b>UNEP</b>			
1983 - <b>Cartagena</b> : Convention for the Protection and Development of the Marine Environment of the Wider Caribbean Region <b>Kingston</b> : Protocol Concerning Specially Protected Areas and Wildlife to the Cartagena Convention (1990)			
1985 - <b>Nairobi</b> : Convention for the Protection, Management and Development of the Marine and Coastal Environment of the Eastern African Region			
1986 - <b>Noumea</b> : Convention for the Protection of the Natural Resources and Environment of the South Pacific Region			
1991 - <b>Salzburg</b> : Convention for the Protection of the Alps (Alpine Convention) 9 protocols, included the protocol on the conservation of nature and the countryside			
1992 - <b>New York</b> : United Nations Framework Convention on Climate Change (UNCCC) - <b>UNCED</b> - Kyoto protocol			
1992 - <b>Rio de Janeiro</b> : Convention on Biological Diversity (CBD) – <b>UNCED</b> - Cartagena Protocol on Biosafety (2000)			
1994 - <b>Paris</b> : United Nations Convention to Combat Desertification in Countries Experiencing Serious Drought and/or Desertification, Particularly in Africa (UNCCD) - <b>UNCED</b>			
2000 - <b>Florence</b> : European Landscape Convention - <b>Council of Europe</b>			
<b>Legend:</b>			
	Regional context	European context	International context

Table 1.4 - Conventions and international Protocols.

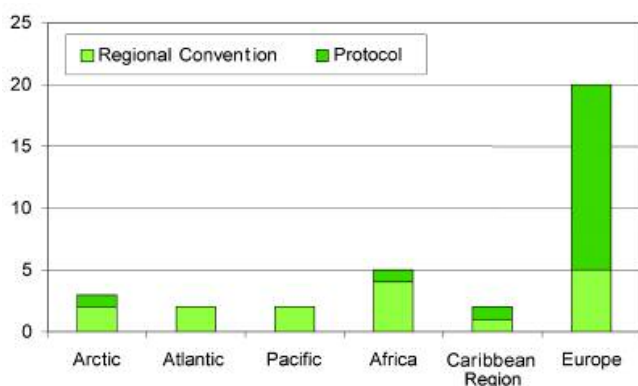


Fig. 1.2 - Conventions and Regional Protocols.

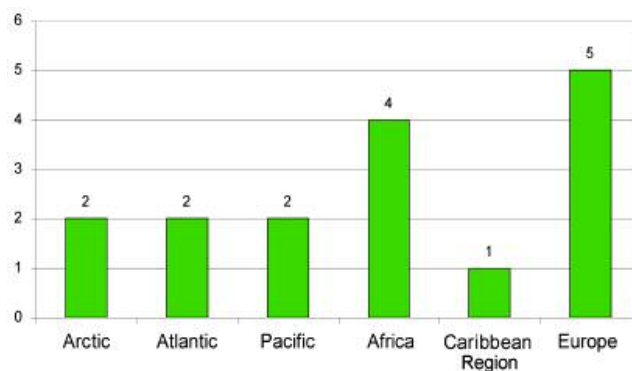


Fig. 1.3 - Regional Conventions.

aim of integrating the protection of environmental resources with development (sustainable development): the *Convention on Biological Diversity*, the *Convention on Climate change*, the *Convention to Combat Desertification*.

Table 1.4 lists the international conventions regarding the conservation of biodiversity subdivided into territorial sectors. It is possible to follow the changes in the approach to nature conservation over time.

A fundamental process in implementing a convention is the creation of sectoral protocols (Figures 1.2 and 1.3).

The *Convention for the Protection of the Mediterranean*

*Sea against Pollution*, adopted in Barcelona in 1976 elaborated six Protocols among which one regards *pecially protected areas and biological diversity in the Mediterranean*.<sup>6</sup>

The *Convention on the Protection of the Alps*, adopted in Salzburg in 1991 (the Alpine Convention) elaborated several monothematic protocols of which nine were adopted between 1994 and 2000, while four are in the process of being adopted. Among the Protocols that were adopted there was also the *Nature Conservation and Landscape Protection Protocol* (1994) and the *Mountain Forests Protocol* (1996).

<sup>6</sup> The original title: *Protocol concerning Mediterranean Specially Protected Areas*, adopted in Geneva on April 3rd 1982, which entered into force on March 23rd 1986, emended in Barcelona on June 10th 1995 with the new title.



## ADOPTION OF CONVENTIONS IN THE EUROPEAN UNION

In 1972, the same year as the Stockholm Conference, the Conference of the Heads of State and Governments of the European Community held in Paris identified the need to give life to a common environmental policy, thus giving rise to European Community law on environmental protection.

Since then, every four years an Environment Action Programme of the European Community is elaborated which has now reached its sixth edition (see following section).

Following the 1992 Maastricht Treaty, the European Union recognised the need to promote the adoption of international agreements which involved more than one European Community Member State. The following Conventions were thus undersigned:

- the *Washington Convention on International Trade of Endangered Flora and Fauna Species* (CITES, UNEP, 1973);
- the *Barcelona Convention for the Protection of the Mediterranean Sea* (UNEP, 1976);
- the *Bern Convention for the Protection of Wild Flora and Fauna in Europe* (Council of Europe, 1979);
- the *Bonn Convention on Migratory Species* (CMS, UNEP, 1979);
- the *Alpine Convention* (1991);
- the Conventions undersigned during the Rio de Janeiro Conference, such as the *Convention on Biological Diversity* (CBD, UNEP, 1992).

## The European Union's Environmental Programme<sup>7</sup>

In reply to the environmental instances that began to advance in the early 1970s, the European Union set up a series of "environmental action programmes" To date, the EU's environmental action programmes have effectively had two main purposes: they suggest specific proposals for legislation that the Commission intends to put forward over the next few years; and they provide an occasion to discuss some broad ideas in environmental policy and suggest new directions for the future.

The *First Environmental Action Programme* (1973-1976) underlined the importance of environmental issues connected principally with urbanisation and the geographical distribution of man and his activities on the one hand,

while on the other it stressed the need to find common solutions at a European Community level. The programme insisted, above all, on the need to adopt measures with regards to urbanisation, urban concentration and circulation.

The *Second Action Programme* (1977-1981) focused its attention on the reduction of pollution, protection and enhancement of the environment and on strengthening the European Community's presence at an international level. Moreover, it set up a research programme regarding town planning, aimed at analysing the environmental impact of large urban concentrations in the European Community, as well as a computerised environmental monitoring programme.

The *Third Action Programme* (1982-1986) did not propose, as the previous two had, measures to undertake, rather it gave environmental policy more structure, by supplying it with "framework objectives." Among the most important framework objectives to reach there is the integration of the environmental dimension in other European Community policies and the elaboration of procedures to assess environmental impact.

The *Fourth Action Programme* (1987-1992) recognised the preventive nature of environmental policy, sustaining how environmental protection should constitute an essential component of all policies placed into being, at both economic and social level. The attention of the European Community therefore also focuses on the quality of environmental conditions.

The Fifth Action Programme (1992-2000) for sustainable development was elaborated in parallel to Agenda 21.

Two important initiatives can be placed in this context:

1. Council Directive 92/43/EEC of May 21 1992 regarding the conservation of natural habitats and of wild flora and fauna, known as the *Habitats Directive*. Previously, with Council Directive 79/409/EEC April 2 1979 (*Birds Directive*), regarding the conservation of wild birds, a series of protected areas throughout Europe had been created to safeguard bird populations. This concept of integrated territorial management was further developed by the Habitats Directive through the creation of the *Natura 2000 Network*, a network of supranational nature to which all Member States of the European Union make their contribution.
2. The *European Community Strategy for Biological Diversity* approved in 1998.

This Strategy provides four principal thematic areas in the context of which specific objectives have been identified to be met through action plans and other measures.

The objectives are divided in eight areas of policy in-

<sup>7</sup> This section was edited by Miriam Marta relative to the first four Action Programmes.

tervention, to be reached in the context of national policies and Community instruments (Figure 1.4).

This Strategy also takes into consideration the objectives contained in the PEBLDS (see section *The Council of Europe*).

Following the experience gained at the end of last century, the *Sixth Action Programme for the Environment* (2001-2010) entitled “Environment 2010: Our future, Our choice” underlines how future actions of environmental protection must be strengthened through an increase in knowledge. In particular, further data on biodiversity, elements that threaten it and the current trend that will allow specific and effective policy measure to be defined, are considered of fundamental importance.

**Section I Introduction**

**Section II Thematic Areas**

- Theme 1** Conservation and sustainable use of biological diversity in situ and ex situ
- Theme 2** Sharing of benefits arising out of the utilisation of genetic resources;
- Theme 3** Research, identification, monitoring and exchange of information;
- Theme 4** Education, training and awareness.

**Section III Policy Areas**

- 1. Conservation of Natural Resources
- 2. Agriculture
- 3. Fisheries
- 4. Regional policies and spatial planning
- 5. Forest
- 6. Energy and Transport
- 7. Tourism
- 8. Development and economic co-operation

**Section IV Process of**

- Development
- Implementation
- Monitoring

Fig. 1.4 - 1998 European Community Strategy for Biological Diversity.

## ADOPTION OF THE CONVENTION ON BIODIVERSITY IN ITALY<sup>8</sup>

Article 6 of the Rio de Janeiro Convention establishes that “each Contracting Party shall, in accordance with its particular conditions and capacity: 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.”

Italy's commitment to this Convention can be found in Law No. 124 of February 14 1994, with which Italy ratifies the Convention on Biological Diversity. The CBD requests all Contracting Parties to elaborate plans and programmes for the conservation of biodiversity and for the sustainable use of resources, where sustainable use is intended as the “use of components of biological diversity in a way and at a rate that does not lead to the long-term decline of biological diversity, thereby maintaining its potential to meet the needs and aspirations of present and future generations.”

Once the Convention was ratified, it was possible to prepare the document entitled “Strategic guidelines to implement the Rio de Janeiro Convention and to draw up the national biodiversity plan”, approved with the Interministerial Committee for Economic Planning (CIPE) Resolution 16 March 1994 and published in the Official Gazette - No. 107 of 10/05/1994.

On April 27 2004, the Italian Department for European Community Policies decreed the establishment of a *National Committee for Biodiversity* with the aim of coordinating and defining a common Italian position on issues regarding biodiversity. The Committee is jointly presided over by the Department for European Community Policies and the Nature Protection Directorate of the Ministry for the Environment Land and Sea Protection.

The Committee is made up of representatives designated by the:

- Ministry of Agriculture and Forestry
- Ministry of Health
- Ministry of Productivity
- Ministry of Education
- Ministry of Foreign Affairs
- Ministry of Economics and Finance

The Committee is also made up of the region representative designated to coordinate the other regions for the environmental sector, which at the moment is the Piemonte region.

European Associations and national representatives of those involved in the sector and the interested social parts can also be invited to the Committee's reunions.

The Committee's first year of activity focused on organising its area of competence and its contribution in the compilation of the III *National Report* of the CBD.

The Nature Protection Directorate - the *national focal point* for the Convention on Biodiversity had dealt with the previous national reports and several thematic reports.

All the reports are available on the following web site <[www.biodiv.org](http://www.biodiv.org)>.

<sup>8</sup> This section was edited by Nicoletta Tartaglini.

**THE DOCUMENT ENTITLED “STRATEGIES FOR THE IMPLEMENTATION OF THE RIO DE JANEIRO CONVENTION AND THE DRAFTING OF THE NATIONAL BIODIVERSITY PLAN”**

[Giovanni Cannata, Davide Marino]

The guidelines drawn up by the Ministry for the Environment is the first attempt to give a concrete start to the Convention, utilising resources and instruments already available thanks to other environmental policy instruments, such as the Three-Year Programme For Environmental Protection (ex law 305/89) and the Three-Year Programme for Protected Areas provided for in Law No. 394 of 1991. This document contains the necessary flexibility because given its specificity, the objectives have to be continually redefined on the basis of new knowledge and assessments of the results obtained.

The Action Programme is subdivided into 9 work areas, each containing specific objectives within the general objective of the area, along with a series of actions to reach the specific objectives: knowledge regarding the Italian patrimony of biological diversity; monitoring of the state of biodiversity; education and awareness-raising; *in situ* conservation (protected areas, non protected territory, environmental recovery); promotion of sustainable use activities; containment of risk factors; *ex situ* conservation, biotechnologies and safety; international cooperation and ecodiplomacy.

The Document affirms the need to create a Convention on Biological Diversity Unit, called upon to deal with the concrete implementation of the Convention in Italy and to coordinate the various Ministries summoned to collaborate. Moreover, the Document accounts for the available financial resources. These resources are subdivided into allocated *ad hoc* funds and standing services of the Administration directly involved in the implementation of the Convention. Reference is also made to the possibility of reutilising resources of other Administrations, after the necessary concerted action between the interested Administrations for the specific aims of the Convention. Added to this, there is also the possibility of utilising European Community funds available for programmes and specific projects.

**THE 2010 BIODIVERSITY TARGET:  
“TO HALT THE BIODIVERSITY LOSS BY 2010”<sup>9</sup>**

On the threshold of the third millennium in the context of the Council of Europe, the Heads of State who participated in the Gothenburg Summit (June 15-16 2001) agreed it was necessary to undertake concrete actions to halt the loss of biodiversity by 2010. This decision was then shared and strengthened in other international seats such as the World Summit on Sustainable Development (Johannesburg, September 2002) in which a Plan containing specific actions to significantly reduce the loss of biodiversity by 2010 was adopted.

The last two COP of the Convention on Biological Diversity (The Hague, 2002; Kuala Lumpur, 2004) were characterised by numerous decisions regarding increasing the number of activities of the Contracting Parties to facilitate progress towards the target, and setting up a process of review on the work programme of the Convention itself.

At continental level, through the Kiev Resolution and the Pan-European Strategy, Europe has identified the actions to undertake in order to reach the 2010 target.

At European Community level, the European Commission adopted the VI Environmental Action Programme of the European Community in July 2002, entitled “Environment 2010: Our Future, Our Choice”, thus adhering to the global 2010 target which has guided the choice of priorities in planning which actions to undertake.

What clearly emerged from the various institutional activities of States and Governments in carrying out the strategies, plans and programmes at both national and international level, was the need to involve all actors and sectors of civil society in reaching the common objective of halting biodiversity loss in a significant manner by 2010.

Man’s presence on the European continent over the many centuries is partly responsible for the high level of biodiversity that characterises it. The variety of ecosystems, habitats and numerous species that live in our territory and seas is a patrimony which must be safeguarded and monitored, in that it is part of biodiversity at planetary level. With this awareness, the strategies for Western and Eastern Europe have been adjusted.

A Stakeholder Conference on the implementation of the EU Biodiversity Strategy and Action Plans was held in Ireland (Malahide) in May 2004, organised by Ireland’s Presidency and co-financed by the European Com-

<sup>9</sup> This section was edited by Nicoletta Tartaglini.

mission, with the objective of raising awareness among all stakeholders and providing the Commission and the Parliament with a common work programme which produced a document approved by the Council of the European Union on June 28 2004. It contains 18 priority objectives and about 100 detailed targets designed to meet the EU commitment to halt the decline of biodiversity by 2010, and to optimise the EU contribution to the global commitment to the 2010 target. This conference was organised to finalise a year-long technical-scientific consultative process overseen by the European Commission to assess the implementation, effectiveness and appropriateness of the *European Community Biodiversity Strategy* (ECBS) and its four *Biodiversity Action Plans* (BAPs) and to identify priorities towards meeting the 2010 commitments.

The document is preceded by a preamble of the Commission in collaboration with Ireland's Presidency which follows the structure of the 1998 European Strategy on Biodiversity (sectoral policies and themes).

The sectors contained in this document "Message from Malahide" are the following:

1. Conservation and Sustainable Use of Natural Resources (objectives 1-4)
2. Agriculture (objective 5)
3. Forestry (objective 6)
4. Fisheries (objective 7)
5. Regional Policy & Spatial Planning (objective 8)
6. Energy & transport, Construction & Extractive Industries (objective 9)
7. Tourism (objective 10)
8. Economic and Development Cooperation (objective 11)

#### THE REFORM OF THE COMMON AGRICULTURAL POLICY FROM AGENDA 2000 TO THE FISCHLER DECREE

[Giulia Bonella]

The reform process of the CAP (Common Agricultural Policy), starting with the implementation of the Agenda 2000 principles was characterised by a change of emphasis on the integration of environmental objectives and biodiversity conservation in the framework of market policies and rural development. The CAP reform (EEC Regulation 1782/03) is, in fact, based on new guiding principles – such as “decoupling”, environmental considerations and the strengthening of rural development intervention, whose correct implementation by Member States will contribute in a significant manner to maintaining agricultural and forest landscape. Key elements of the reformed CAP include a single farm payment for EU farmers, independent from production, limited coupled elements may be maintained to avoid abandonment of production; this payment will be linked to the respect of environmental, food safety, animal and plant health and animal welfare standards, as well as the requirement to keep all farmland in good agricultural and environmental condition, known as “cross-compliance”.

Italy adopted EEC Regulation 1782/03 with Ministerial Decree August 5<sup>th</sup> 2004 regarding provisions to implement the Common Agricultural Reform. In implementing Art 5 of this Decree, Ministerial Decree No. 5406

was emanated on December 13<sup>th</sup> 2004 which expressly addresses the criteria of cross-compliance.

Annexes 1 and 2 of Ministerial Decree No. 5406 define the so-called Obligatory Management Criteria (*Criteri di Gestione Obbligatori*) and the Good Agricultural and Environmental Conditions (*Buone Condizioni Agromiche e ambientali*) which regulate the commitments that farmers are called upon to respect with regards to the environment and biodiversity, with particular attention to Natura 2000 sites.

Even the proposal of the Council of Europe Regulation on Rural Development by the European Fund for Rural Development for 2007-2013 aims at supporting actions of integrated agricultural and forestry management to safeguard the environment and biodiversity conservation.

Section 2, Priority Axis II, “Management of the Territory” of this Regulation provides for support measures to foster the sustainable use of agricultural lands and forests, and specific incentives for farmers and silviculturists within Natura 2000 sites. Moreover, support measures are also provided for non-productive investment by enterprises that enhance the Natura 2000 network in terms of public utility.

## 9. International Trade (new) (objective 12)

The themes are the following:

1. Conservation of Natural Resources (no objective – see Policy Area 1)
2. Sharing of Benefits, Traditional Knowledge (objectives 13 and 14)
3. Research, Monitoring and Indicators (objectives 15 and 16)
4. Education, Training & Awareness, Participation (objective 17)
5. International Environmental Governance (objective 18)

Moreover, two annexes are an integral part of this document:

- a first set of EU Headline Biodiversity Indicators (based on the last CBD decision and focal areas)
- the “Killarnet Declaration and Recommendations on Biodiversity Research” adopted by the European Platform for Biodiversity Research Strategy (EPBRS) in May 2004.

During the Malahide Conference, the IUCN initiative entitled “COUNTDOWN 2010” was launched with the primary objective of raising awareness among the various sectors of society to reach the 2010 target.

Recently, during the first meeting of the work group on protected areas of the CBD (Montecatini June 13-17 2005) Italy formally adopted the “COUNTDOWN 2010” initiative as a nation and launched the web site <[www.iucn.it](http://www.iucn.it)>.

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