

Integrating Biodiversity into Land Planning and raising awareness for sustainable European territories

Recommendations from European regions to improve European policy

European Land Planning and Biodiversity Charter

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Biodiversity in Europe: challenges and actions

Biological diversity, better known for short as biodiversity, is the variety of life on Earth (microorganisms, plants, fungi and animals) and the natural patterns it forms. Three different and interrelated levels of biodiversity are commonly defined: genetic diversity (i.e. the range of genes in all individuals as well as between individuals), species diversity (i.e. the range of species within and between populations) and ecosystems (i.e. the range of habitats, communities, and ecological processes, including intra-ecosystem variations). Although this is not easy to quantify, all levels are important to ensure evolution and the adaptation of individuals to a changing environment.

Definition of biological diversity

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 ecosystems.

Source: Article 2, CBD (1992)

Biodiversity certainly has intrinsic value. It is also essential to human life and wellbeing in the sense that humans have always depended on natural resources. More specifically, biodiversity ensures the quality, quantity and stability of ecosystems' goods and services, i.e. the series of material, cultural and spiritual benefits humans draw from the ecological functions played by ecosystems (MEA, 2005). Biodiversity provides raw materials for food, health and shelter (e.g. agricultural products, fish, wood, medicine, wool, etc.) and in doing so, it becomes the basic resource for many economic activities; it regulates and recycles the air, soil and water conditions necessary for our survival; it forms the basis for cultural and recreational activities (such as ecotourism), scientific and educational programmes, as well as spirituality, religion, ethics and emotions.

Biodiversity is the result of both natural processes and human practices. It has, however, been increasingly negatively affected by the latter. In Europe, like elsewhere in the world, biodiversity is deteriorating. 25 % of marine mammals, 15 % of terrestrial mammals and 12 % of birds are threatened with extinction (EEA, 2010). Moreover, 62 % of European habitats and 52 % of European protected species included in the "Habitat" Directive have an unfavourable conservation status (EEA-ETC/BD, 2009).

Among key pressures, rapid shifts in land use have been acknowledged as a major threat (IUCN, 2007, 2009, 2010). Extensive farming land has declined by 2.6% between 1990 and 2006 across Europe¹. So have natural grassland areas. Over the same period, built-up, industrial and artificial areas have gone up by 7.9%. Subsequent threats of pollution and overexploitation come next. Cropland, forests and pastures cover almost 80% of the total European land area (EU-25 plus Norway and Switzerland (EEA, 2007)). Unsurprisingly, pressure from the twin trends of the intensification of agricultural and

¹ Figures related to land cover (agriculture, natural grassland, industrial areas) come from last available statistics from CORINE, a European Environment Agency programme dedicated to coordinating information on the environment and accessible at <http://www.eea.europa.eu/publications/COR0-landcover>

forestry practices, together with land abandonment, plays a great role. Furthermore, invading exotic species spread out, especially in aquatic ecosystems and in the context of a changing climate: more than 10,000 non-native species have been observed in Europe, more than 10% of them having adverse economic or ecological impacts².

The legal and regulatory framework for biodiversity conservation at European level

Reversing biodiversity loss is a major challenge at global, regional and local levels. The European Union, among other bodies, has actively committed its member states to biodiversity conservation for a number of years. Specific legislation, strategies and plans have been set up to create a framework for policy action aimed at providing long-term protection and conservation of nature. They all emanate from legally binding conventions at global level. A selection of the most relevant official literature is provided in the box below (source documents are listed in the Appendix).

Along with international treaties, many policies including directives, regulations, strategies and action plans, have been adopted at European level. The two central legal instruments are the Directive on the protection of wild birds (known as the **Birds Directive**, 2009/147/EC, a codified version of Directive 79/409/EEC as amended) that was enacted in 1979, and the Directive on the conservation of natural habitats and wild fauna and flora in 1992 (the **Habitats Directive**, 92/43/EC). The Birds Directive was the first major EU law to address the issue of nature conservation at European level. The Habitats Directive provided a more inclusive framework for other endangered habitats and species of interest, and tackled the integration of nature protection requirements into other EU policies such as agriculture, regional development and transport. As at today, over 1000 animals and plant species and over 200 habitat types that are important to Europe are protected under the Directives³.

Created under the Habitats Directive, Natura 2000 is the main EU tool for nature and biodiversity policy, and it is the transposition of EC commitments under the UN Convention on Biological Diversity. It is a European ecological network of natural protection areas for the most valuable and endangered species and habitats. Applying to bird sites, habitat sites and marine areas, it includes Special Areas of Conservation (under the Habitat Directive) and Special Protection Areas (under the Bird Directive). While the network does not systematically ban human activities nor nationalize land, requirements consist of sustainable management. Provided that some conservation measures are fulfilled, the EU, through the LIFE-Nature fund, may assist member states with co-financing the network.

² See the European Invasive Alien Species Gateway from DAISIE (Delivering Alien Invasive Species Inventories for Europe), accessible at <http://www.europe-aliens.org>

³ http://ec.europa.eu/environment/nature/legislation/habitatsdirective/index_en.htm

Reference international conventions framing biodiversity protection in Europe

The United Nations' **Convention of Biological Diversity** (CBD) is a legal instrument dated 1993 that all EU members states have signed along with other European countries. Its objectives are i) the conservation of biodiversity, ii) the sustainable use of its components and iii) the fair and equitable sharing of the benefits arising from the use of genetic resources. Among a number of requirements, contracting Parties have to develop national strategies and integrate the conservation and sustainable use of biodiversity into relevant sector or cross-sector plans, programmes and policies. Held in Nagoya in 2010, the tenth Conference of the Parties (CoP10) of the CBD led to the adoption of the EU 2020 Biodiversity Strategy, a global Strategic Plan for biodiversity over the 2011-2020 period.

The **Convention on Wetlands of International Importance especially as Waterfowl Habitat** (the Ramsar Convention), which was adopted in 1971 and came into force in 1975, provides a framework for international cooperation for the conservation and wise use of wetlands. Parties are to designate suitable wetlands for inclusion in the List of Wetlands of International Importance, to formulate and implement their planning so as to promote the conservation of wetlands included in the List and the wise use of all wetlands in their territory. For a comprehensive approach to the national implementation of the Convention, many countries have developed National Wetland Policies. In its 1994 work programme for the implementation of the 5th Environmental Action Programme, the European Commission included the Communication on the Wise Use and Conservation of Wetlands (1995), providing the strategic basis for a wetland policy, spelling out the issues that negatively affect wetlands and providing an outline of the actions that need to be taken. It was later replaced by the Water Framework Directive.

The **Convention on International Trade in Endangered Species of Wild Fauna and Flora** (CITES), signed in 1973 and implemented in the EU 9 years later, aims to ensure that international trade in species of wild animals and plants does not threaten their survival. It affords varying degrees of protection to more than 30,000 species of animals and plants. CITES works by making international trade in specimens of selected species subject to certain controls. These controls require that the import, export, re-export and introduction from the sea of species covered by the Convention are authorized through a licensing system. The species covered by CITES are divided into three categories, according to the degree of protection they need.

Adopted in 1979 and taking effect in 1982, the **Bern Convention** is the first comprehensive legal instrument for pan-European nature conservation (it also extends to some States of Africa). A keystone treaty for biodiversity within the framework of the Council of Europe, it aims to conserve wild European flora and fauna and their natural habitats (especially endangered habitats and vulnerable species). The elaboration of the Birds Directive and of the Habitats Directives later on is a direct result of the implementation of this Convention.

Since 1979, the **Convention on the Conservation of Migratory Species of Wild Animals**, also known as the Bonn Convention, has aimed to conserve migratory species and their habitats by providing strict protection for endangered migratory species, by concluding multilateral Agreements for the conservation and management of migratory species that require or would benefit from international cooperation, and by undertaking cooperative research activities.

Sources: see Appendix to access the source documents

Several other European directives are indirectly concerned with biodiversity conservation. The Water Framework Directive (2000/60/EC⁴) and the Marine Strategy Framework Directive (2008/56/EC⁵) have established a framework for Community action against the fragmentation of European water policy. They require all inland and coastal waters to reach ‘good ecological status’ by 2015 and by 2020 for marine ecosystems. Other directives relate to pollution prevention, such as the Nitrates Directive (91/676/ EEC), the Groundwater Directive (2006/118/EC), and the Urban waste water (91/271/EEC) Directive.

Contrary to many other environmental media, soil receives no legal protection although it is a major reservoir of biodiversity. To bridge this gap, the Commission of the European Communities drafted a directive proposal in 2006 to establish a common strategy for the protection and sustainable use of soil (by integrating soil concerns into other policies), preserving soil function, preventing threats to soil and mitigation of their effects, as well as restoring degraded soils to a level of functionality at least consistent with their current and approved future use (CEC, 2006).

Alongside existing legislation, the EU has issued a series of successive strategies and plans that outline binding actions for the member states in the coming years (e.g. the 1995 Pan-European Biological and Landscape Diversity Strategy). The latest EU Biodiversity Action Plan, dated 2006 (**2006 Biodiversity Action Plan⁶**), draws from an EC communication named "Halting Biodiversity Loss by 2010 – and Beyond: Sustaining ecosystem services for human well-being". In May 2011, ascertaining the failure of the 2010 target, the EC adopted the new **EU Biodiversity Strategy to 2020**. Several targets have been set to address both the 2020 headline target (see box) and the global commitments agreed by the EU and its member states. They pursue three key orientations: protecting and restoring biodiversity and associated ecosystem services, enhancing the positive contribution of agriculture and forestry, reducing key pressures on EU biodiversity, and stepping up the EU’s contribution to global biodiversity.

EU 2020 biodiversity strategy

The vision: By 2050, European Union biodiversity and the ecosystem services it provides — its natural capital — are protected, valued and appropriately restored for biodiversity's intrinsic value and for their essential contribution to human well-being and economic prosperity, and so that catastrophic changes caused by the loss of biodiversity are avoided.

2020 headline target: Halting the loss of biodiversity and the degradation of ecosystem services in the EU by 2020, and restoring them in so far as feasible, while stepping up the EU contribution to averting global biodiversity loss.

Source: EC, 2011.

⁴ <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2000:327:0001:0072:EN:PDF>

⁵ <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:32008L0056:EN:PDF>

⁶ http://ec.europa.eu/environment/nature/info/pubs/docs/brochures/bio_brochure_en.pdf

The Reverse project

Whereas biodiversity conservation certainly requires a legal framework and policy action, it cannot be effective without relying on sustainable economic activity. In other words, biodiversity conservation and economic development must go hand in hand. Experience shows that this is possible and replicable. Building on successful initiatives from a number of European regions, this is the ambition of Reverse; a European project to protect biodiversity. Across three areas closely linked to biodiversity - agriculture/food production, land planning and tourism - the project identifies local actions that should be easy to transpose and offers policy recommendations to improve biodiversity conservation.

Reverse in figures

Type of project: European interregional cooperation project – INTERREG IVC Programme

Number of partners: 14 partners involved in the development of biodiversity

Number of countries: 7 European countries (Estonia, France, Germany, Greece, Italy, Slovakia and Spain)

Biodiversity-linked economic areas: 3 (agriculture/food production, tourism and land planning)

Duration: 3 years (January 2010 to December 2012)

The present charter is one of the key outputs of the Reverse project. It forms, with two other identically structured charters, a set of sector policy recommendations aimed at policy-makers at European level, to improve the effectiveness of regional policies in conserving biodiversity while promoting economic development. The three charters focus on agriculture, tourism and land planning respectively.

I. Land planning and biodiversity: complex and interrelated topics

A. The crucial role of land planning in biodiversity conservation

Land planning continuously shapes the territory, as natural processes do. The territory is the physical setting of all systems and processes, including ecosystems, landscapes and fundamental ecological processes, and of course the medium of biodiversity. Grey infrastructures split the territory, which threatens biodiversity. But land planning actions and strategies can also have a positive impact on biodiversity through conservation measures, for example by designing natural protected areas and corridors.

On the other hand, policies on wildlife protection and the implementation of conservation plans for endangered wildlife species need to be complemented with other policies and measures conducted in the territory. Many species of fauna and flora, like most endangered habitats, have a significant part of their populations outside protected areas. Furthermore, species establish functional relationships with broader territories. Conservation of their direct habitat alone is not enough to guarantee their mid- to long-term conservation.

In some cases, policies on the protection of wildlife and natural areas can fail if a more comprehensive approach is not implemented. This approach must include the whole territory and its ecological functions (for example, identifying ecological corridors between core areas, establishing buffer zones and protecting them), which are highly influenced by land uses, because land use changes – in particular landscape fragmentation - are one of the biggest threats to biodiversity (EEA, 2011).

B. How biodiversity conservation may facilitate land planning

Biodiversity is the basis for a wide range of socio-economic goods and services⁷, which may be critical assets in land planning if protected and managed effectively. Healthy ecosystems and biodiversity naturally contribute to land organisation and management, by providing goods (such as food, wood and water) that fulfil the basic needs of population pools for consumption, production and labour; by regulating natural cycles (air quality, floods, disease, etc.) that create and maintain the necessary living conditions; and by the supplying aesthetic landscapes, recreational activities and educational tools that are the basis of cultural and social human development.

Integrating biodiversity into the strategic development of territories helps save future public costs, boosts local economies, enhances quality of life, and secures livelihoods.

⁷ Ecosystem goods and services are defined in the Millennium Ecosystem Assessment (MA) as the ecological, social and economic benefits provided by ecosystems and biodiversity that contribute to human well-being. Initiated by United Nations Secretary-General Kofi Annan in 2000, the objective of the MA was to assess the consequences of ecosystem change for human well-being and the scientific basis for action needed to enhance the conservation and sustainable use of those systems and their contribution to human well-being. (<http://www.maweb.org/en/Index.aspx>)

Indeed, the loss of biodiversity and associated ecosystem services would require costly alternatives for land planners and policy-makers. For instance, identifying and maintaining wetlands around rivers regulates flooding. This ecological process naturally prevents damage to people, infrastructures, buildings and agricultural soil. If it were to be lost, land planners and policy-makers would have to build expensive replacement infrastructures whereas, at the moment, biodiversity provides this service to society for free.

Moreover, carefully protecting biodiversity contributes to maintaining and creating cultural and social activities that support the competitiveness, spatial coherence and cohesion, sectorial policies and economic development of territories. For example, preserving, restoring and even creating parks and gardens in urban areas increases the well-being of citizens, favours social integration and diversity, and promotes recreational activities as well as educational tools.

On the other hand, the new strategic objectives established by the EU for 2020 in order to stop biodiversity loss should take into account the role of ecosystems and related services. Moreover, climate change is going to unavoidably modify the environment where plants, animals and microorganisms live. There is evidence of the urgency to enhance the conservation and use of genetic diversity of the plant and animals that we grow or raise to consume as food. The change in farming technologies, the introduction of modern varieties, with higher yields but greater water, fertiliser and pesticide needs, to replace varieties that are naturally suited to local conditions, represents a serious case of genetic erosion that should be compensated by supporting and diversifying local farming systems, promoting a new role for farmers as key players in a multifunctional rural environment.

As a result, taking into account biodiversity in land planning is a key condition if land planners and policy-makers are to succeed in developing the territory in a coherent and sustainable manner. However, since they are often unmarketed and intangible, ecosystem goods and services lack visibility and are available for free. It is therefore crucial to identify and promote them, to outline the costs and benefits of different policy options, and to highlight the best strategy for enhancing human well-being and economic sustainability (TEEB, 2012).

II. The European legal framework on land planning and biodiversity

A. European scope in spatial planning

The EU has no authority over spatial planning (organising the distribution of activities across a territory, structuring a territory and the players in it around a vision of the desired development) per se. There is no connection between this definition and that of the economic and social cohesion enshrined in Article 158 of the EC Treaty. The environment is, however, an important field in which European authority may be exercised in matters of spatial planning (see box).

The EU can only operate through incentives, and the limitations are evident. For example, the European Spatial Development Perspective only offers guidelines about how to share responsibility for sustainable development in the European region, but it has no operational content that might commit member states and territorial authorities.

As a result, the process of planning and managing the European region is characterized by the absence of any Community competence in spatial planning (to avoid this situation, the term “territorial cohesion” has been used), and the slow process of creating a common culture to plan land use among the member states (evolving process with successive enlargements).

Basic biodiversity texts dealing with land planning

Articles 6.1 & 10 Habitat Directive

According to Article 6 (1) of the Habitat Directive, for special areas of conservation, member states shall establish the necessary conservation measures involving, if need be, appropriate management plans specifically designed for the sites or integrated into other development plans, and appropriate statutory, administrative or contractual measures which correspond to the ecological requirements of the natural habitat types and the species present on the sites. According to Article 10, member states shall endeavour, where they consider it necessary, in their land-use planning and development policies and, in particular, with a view to improving the ecological coherence of the Natura 2000 network, to encourage the management of features of the landscape that are of major importance for wild fauna and flora. Such features are those which, by virtue of their linear and continuous structure (such as rivers with their banks or the traditional systems for marking field boundaries) or their function as stepping stones (such as ponds or small woods), are essential for the migration, dispersal and genetic exchange of wild species. To get a real coherent system these corridors and stepping stones should get the same legal conservation status as the sites themselves.

European Directives (EIA and SEA)

To devise methods and environmental tools to analyse the impact of proposed developments, the Directive on Environment Impact Assessment (EIA) for projects and the Directive on Strategic Environmental Assessment (SEA) for plans and programmes are the two main tools used in this task. These make sure significant environmental impacts are identified, assessed and taken into account throughout the decision-making process. The SEA Directive has been considered as the Community's first fundamental step towards intervention in the field of land and urban planning with the aim of conserving natural resources and landscapes.

The Sixth Environment Action Programme of the European Community 2002-2012

The 6th EAP is a decision of the European Parliament and the Council adopted on 22 July 2002. It sets out the framework for environmental policy-making in the European Union for the period 2002-2012 and outlines actions that need to be taken to achieve them. The 6th EAP identifies climate change, nature and biodiversity, environment and health, as well as natural resources and waste, as the four priority areas. Regarding nature and biodiversity, it includes, among others, conservation, appropriate restoration and sustainable use of the marine environment, coasts and wetlands; conservation and appropriate restoration of areas of significant landscape value, including cultivated as well as sensitive areas; and the conservation of species and habitats, with special attention paid to preventing habitat fragmentation.

Green Infrastructure for Europe

The European Commission is developing a strategy for an EU-wide Green Infrastructure as part of its post-2010 biodiversity policy. Whilst the term "Green Infrastructure" has been used in the past to describe natural, connected habitats within urban areas, it has recently been launched as a new concept that is now included within the European Commission's EU 2020 European biodiversity headline target and 2050 vision. It designates spatially and functionally connected areas that maintain ecological coherence as an essential condition for healthy ecosystems.

Although core nature areas are now largely protected under the Natura 2000 Network, species still need to be able to move between these areas if they are to survive in the long term. A green infrastructure will help reconnect existing nature areas and improve the overall ecological quality of the broader countryside. This contributes to minimising natural disaster risks, by using ecosystem-based approaches for coastal protection through marshes/flood plain restoration rather than constructing dikes. It promotes integrated spatial planning by identifying multi-functional zones and by incorporating habitat restoration measures and other connectivity elements into various land-use plans and policies, such as linking peri-urban and urban areas or in marine spatial planning policy. It contributes to the development of a greener and more sustainable economy by investing in ecosystem-based approaches delivering multiple benefits in addition to technical solutions, and mitigating the adverse effects of transport and energy infrastructures.

B. Foundations of the EU land planning policy

1. The Community cohesion policy

The Commission's interest in spatial planning started in the late 70's and during the 80's, with the establishment of the European Regional Development Fund (ERDF), and the launch of the Community cohesion (or regional) policy.

Over the same period, the Council of Europe and the European Parliament played an important role. The Council of Europe, a pan-European organisation created in 1949, was the driving force behind Community concern on spatial planning. It initiated:

- the creation of the Conference of Ministers responsible for Regional Planning of the Council of Europe (CEMAT), to organise ongoing coordination of spatial planning on the European continent, in 1968;
- the adoption of the European Outline Convention, to provide a legal framework for cross-border cooperation between territorial authorities, in Madrid in 1980;
- the adoption by ministers of the European Spatial Planning Charter in Torremolinos in 1983. This represented a decisive step forward, because it provided both for the creation of a European structure for spatial planning and for the specific needs of the territories (urban, rural and frontier areas, mountains, islands, etc.) and the need to organise sectorial policies on a territorial basis. It may be regarded as the precursor of territorial cohesion.

2. The European Spatial Development Perspective

Partly based on the work done by the CEMAT, the European Parliament recognised that intergovernmental efforts had exhausted the possibilities for action, and that it was essential to incorporate spatial planning into the Community framework. Thus, the member states and the European Commission adopted the European Spatial Development Perspective (ESPD) initiative in Potsdam, in 1999. The ESPD was the first European policy document on spatial planning, and was intended to promote a coordinated definition of the spatial development strategies and sector policies of the member states at European level. It established three major priorities (or guiding principles for sustainable development):

- Developing a polycentric and balanced urban system and strengthening the partnership between urban and rural areas;
- Promoting integrated transport and communication concepts;
- Developing and conserving the natural and cultural heritage through intelligent management.

Despite its status and lack of operational focus, the ESPD has had a substantial influence in strengthening the European dimension of several national and regional spatial planning strategies and projects.

3. The European Spatial Planning Observation Network

In 2002, the Commission and the member states established the European Spatial Planning Observatory Network (ESPON), which was designed to improve understanding of the dynamics of the territories and the territorial impact of sectorial policies. This network has evolved considerably; it has developed a forward-looking approach, added a European dimension to national research into spatial planning and promoted the creation of a common scientific culture in this area; it has also fostered closer links between scientists, administrations and political decision-makers.

C. Current framework for territorial cohesion and economic development in the EU

1. The Territorial Agenda of the European Union

The “Territorial Agenda of the European Union: towards a more competitive and sustainable Europe of diverse regions” was agreed at the Informal Ministerial Meeting on Urban Development and Territorial Cohesion (TA, 2007). This document, which defined an intergovernmental programme of work up to 2011, relaunched the ESDP by picking up its objectives (balanced, sustainable development) and principles (territorial cooperation, coherence between policies), and added two new priorities:

- to promote regional clusters of competition and innovation in Europe;
- to promote trans-European risk management including the impact of climate change, in order to face natural hazards, reduce and mitigate greenhouse gas emissions and adapt to climate change.

The Territorial Agenda also puts forward the idea of basing territorial development policies around the realisation of their individual potential (territorial capital).

2. Leipzig Charter and the Action Programme

The Territorial Agenda was supplemented by the “Leipzig Charter on Sustainable European Cities”, adopted at the same time by the Ministers responsible for urban development. A link between spatial planning and urban development policies was thus established at European level.

In November 2007 in the Azores, the same Ministers took a further step by adopting an Action Programme to implement the Territorial Agenda, from which two main strands of action can be highlighted: i) to influence the “big European projects” and Community sectorial policies in order to give them a territorial and urban dimension; and ii) to reinforce territorial governance in the EU and the member states. This represents a continuation of the ESDP, as well as starting point to translate it into concrete actions.

3. The Green Paper on Territorial Cohesion

At request of the European Parliament, and in response to the request articulated in the Territorial Agenda for a report from the Commission on territorial cohesion, the Commission adopted a Green Paper on the subject in October 2008. This “Green Paper on Territorial Cohesion: Turning Territorial Diversity into Strength”, was the result of a five-month expert debate on territorial cohesion and the options for implementing it. As well as summarising the main territorial trends, the Green Paper identified three methods of action:

- Overcoming differences in density by a "reasonable" concentration;
- Overcoming distances by connecting territories;
- Overcoming divisions by way of cooperation.

It identifies 22 questions, grouped into 6 sets to structure the debate:

- Defining territorial cohesion: balanced and sustainable development of the European territory, but also the need to help all territories to realise their specific potential, to reverse unsustainable trends (urban sprawl, urbanisation of coastlines, etc.), and to anticipate the effects of climate change;
- Defining the scale and scope of European action;
- Improving European territorial cooperation (across borders);
- Reinforcing coordination between territorial policies and sectorial policies that have a territorial impact (“horizontal” coordination);
- Identifying new partnerships (e.g. the role of local players);
- Improving understanding of territorial cohesion (e.g. by measuring it).

4. The Territorial Agenda of the European Union 2020: Towards an Inclusive, Smart and Sustainable Europe of Diverse Regions

The Ministers responsible for spatial planning and territorial development, in cooperation with the European Commission and with the endorsement of the Committee of the Regions, have reviewed the Territorial Agenda launched in 2007 and agreed upon the new Territorial Agenda of the European Union 2020 (TA2020) at the Informal Ministerial Meeting of Ministers responsible for spatial planning and territorial development (TA2020, 2011).

The TA2020 is the EU action-oriented policy framework to support territorial cohesion in Europe as a new goal of the European Union introduced by the Treaty of Lisbon (Art 3. TEU). Its objective is to provide strategic orientations for territorial development, fostering territorial integration within different policies at all levels of governance, and to ensure the implementation of the Europe 2020 Strategy according to the principles of territorial cohesion.

The TA2020 identifies the challenges and potential for territorial development, including the driving forces and their territorial aspects. The driving forces related to

biodiversity are climate change and environmental risks; together with the loss of biodiversity, vulnerable natural, landscape and cultural heritage.

The Territorial Agenda defines six territorial priorities for the EU that can contribute to the successful implementation of the Europe 2020 Strategy. With regard to biodiversity, the priority is “Managing and connecting the ecological, landscape and cultural values of regions”. The TA2020 underlines that healthy ecological systems and the protection and enhancement of cultural and natural heritage are important conditions for long-term sustainable development. Joint risk management is particularly important, taking into consideration different geographical specificities. It supports the integration of ecological systems and areas protected for their natural value into green infrastructure networks at all levels.

The Commission has adopted on 26 January 2011 the communication on 'Regional Policy supporting sustainable growth in Europe 2020 (COM-2011/17/Final, 2011). The communication is about what and how regions can invest in sustainability through ERDF/Cohesion Fund and builds on a number of good practices.

This Communication proposes a two-pillar approach to increase the contribution of Regional Policy to sustainable growth during the current programming period. In the pillar one: “Investing more in sustainable growth”, one of the priorities identified is “Ecosystem services: focus on preserving and maximising the potential of the natural environment”. In this priority, the communication recommends to the managing authorities to:

- Invest in natural capital as a source of economic development
- Use Regional Policy funding for natural risk prevention as an element of preservation of natural resources and adaptation to climate change
- Prioritize the “Green Infrastructure”

D. Specific land planning initiatives relevant to biodiversity conservation

1. Landscape

Pan-European Biological Diversity and Landscape Strategy (PEBLDS) 1995

This Strategy represents Europe’s answer to the 1992 Rio Convention on Biodiversity. It proposes to combine ecological and socio-economic aspects, enhancing local communities’ participation. Natural and cultural landscapes of pan-European interest are defined therein according to the following aspects:

- The main geomorphologic features characterising the geological or climatic areas based on four criteria, namely: rarity, uniqueness, representativeness, and natural character.
- Geological features including, but not limited to: river systems, pingos, eskers, dune systems of coastal barrier, dolines, and fossil organisms.
- The combined application of ecologically safe processes and the sustainable utilisation of natural resources.

- The un-intensive management of semi-natural habitats for wildlife and plants.
- Distinct soil use and nature of habitats of specific regions or cultures and in particular those linked to field architecture, terraces, historic mansions and estates. The cultural character may include the rural architecture, historic parks, ancient trails and grazing routes, channels, ditches and waterways, aquaculture systems, artificial channels, lodging systems and rural areas.
- The picturesque and exceptional character represented by the visual features of the continent's natural and cultural landscapes.

The European Landscape Convention

The European Landscape Convention - also known as the Florence Convention - aims to promote landscape protection, management and planning, and to organise European co-operation on landscape issues. It was adopted on 20 October 2000 in Florence (Italy) and came into force on 1 March 2004 (Council of Europe Treaty Series no. 176). It is the first international treaty to be exclusively concerned with all dimensions of European landscape. It is in line with the existing legal texts at international level in the field of the protection and management of natural and cultural heritage, regional and spatial planning, local self-government, and trans-border co-operation.

For the purposes of the Convention, landscape designates an area “as perceived by people, whose character is the result of the action and interaction of natural and/or human factors”. The Convention, therefore, recognizes the quality and diversity of European landscapes as having a heritage value derived from their natural configuration and/or from human activity. As a key element of individual and social well-being, landscapes must be protected (i.e. conserved and maintained), managed (i.e. sustainable development to guide and harmonise changes that are brought about by social, economic and environmental processes) and planned (i.e. forward-looking action to enhance, restore or create landscapes).

One of the major innovations of the European Landscape Convention is the definition of “landscape quality objectives”, meaning, for a specific landscape, the formulation of the public's aspirations with regard to the landscape features of their surroundings by the competent authorities. As such, landscapes become a policy area in their own right.

As of February 2012, the convention has been signed by 39 member States of the Council of Europe, and ratified by 36, of which 23 belong to the EU.

2. Coastal and marine areas

The Integrated Coastal Zone Management (ICZM)

The ICZM is a continuously improved suite of measures that was first developed in 1996. The objective of the strategy is to promote an integrated and cooperation-based approach to the planning and management of European coastal areas. It also aims to test the feasibility of an integrated approach to managing the problems encountered by coastal areas, particularly conflicts between competing groups of uses – tourism, fishing and aquaculture, urban development, offshore energy, environmental protection, etc. In general, the strategy relies upon existing instruments and programmes that are modified,

if necessary, for coastal zone management. In 2000, this programme resulted in a European strategy (Communication from the Commission “On integrated coastal zone management: a strategy for Europe”), offering member states an integrated territorial “model” for managing coastal areas, heavily influenced by the framework and the principles behind the ESDP. The main instrument to promote this approach is the 2002 EU Recommendation that urges member states to implement national strategies for ICZM. ICZM promotes an integrated territorial approach that would also be beneficial for other areas such as mountains, wetlands and other sensitive areas. All EU member states were given the task of developing their national ICZM strategy by 2006.

Marine Spatial Planning (MSP)

MSP is a general framework for balancing the impact of human activity that integrates policies and objectives from different sectors. The concept of marine spatial planning enables the management of adversarial coastal zone uses in line with environmental protection principles. Today, marine spatial planning is considered to be a continuous interactive process which is adjusted in response to new knowledge and experience gained. The concept of marine spatial planning together with ICZM strategy provides an effective network and a basis for extensive ecosystem-based marine management and development of management. The strategy of marine spatial planning is already applied in many European countries, and it has a central position in several European Union and regional regulations and recommendations. The main strength of the strategy is its transparent and participatory decision-making process. The future of marine spatial planning will be built upon a common marine space vision where the focus is on socio-economic considerations, the integrated management of marine areas and spatial planning.

The European Code of Conduct for the Coastal Zone

It was prepared on the initiative of the European Coastal and Marine Union (EUCC). Originally (in 1993), the Code was adopted with the aim of protecting nature and maintaining biological diversity, offering practical guidelines for sustainable use of the coastal zone by citizens' associations, local authorities and other users of the coast. Today, the Code focuses on the integration of biological and landscape diversity and socio-economic aspects. The Code for the Coastal Zone provides a common partnership framework on eleven themes, including coastal and marine ecosystems (Action Theme 5), and forms part of the implementation plan for this sector. The initiative unites researchers, environmental protectors, planners and politicians and has grown into a large network of land planning professionals and experts in Europe.

Recommendations and Action Plans on Land Planning and Biodiversity

The relevance of land planning for the achievement of the EU target of stopping biodiversity loss by 2020 is being increasingly highlighted⁸. Integration of biodiversity issues into land planning has to be both into policies and legislation at European, member state and regional level, as much as at land planners' and promoters' level. The EU may take action and suggest guidance at all levels. Here are a number of non-exhaustive recommendations that seem critical to success.

The recommendations regarding Land Planning and Biodiversity are structured around three challenges or goals. The first one deals with recommendations for protected areas where the conservation of biodiversity plays a leading role. The second challenge is related to the rest of the European landscape, where biodiversity should be taken into account along with many other factors. Both goals need to be fulfilled in order to maintain healthy ecosystems that will deliver valuable services to European societies. And finally, the third challenge addresses a crucial aspect, awareness, which needs to be improved so that the first two goals can be successfully reached.

Challenge 1 - Improve the coherence and full functionality of the networks of protected areas, especially the Natura 2000 network.

The EU is aware that Europe's landscape has faced more habitat loss and fragmentation than any other continent. Therefore, great effort has been and continues to be devoted to the creation of networks of protected areas.

The Habitat Directive was approved two decades ago, and yet some important gaps remain in relation to its implementation and full development. More specifically, additional effort is needed for the identification of important areas in terms of biodiversity, and management plans still have to be carried out.

Networks are, of course, much more than collections of individual units, and that is where the concept of coherence comes into place. Ecological coherence means that there are sufficient habitats and species, which are needed to guarantee a favourable conservation status along the entire species natural range. Article 10 of the Habitats Directive prompts member states to strengthen the coherence of the Natura 2000 Network. Furthermore, for many years, scientists have stressed that ecological coherence, together with habitat quality, plays a key role in the long-term survival of numerous species and habitats.

Despite the successful establishment of Natura 2000 sites on land, much of Europe's landscape is highly fragmented and under intensive land use or heavily urbanised. Already, it is clear that there are many connectivity problems related to Natura 2000 sites.

⁸ See, for example, the contents and outcomes of the Polish presidency "Planning for biodiversity" conference held in Warsaw in November 2011.
<http://prezydencja.gdos.gov.pl/Articles/view/97/Materials>

Moreover, this integration of Natura 2000 sites in the wider landscape could provide valuable environmental goods and services, including the reduction of the amount of greenhouse gases in the atmosphere, while at the same time mitigating the effects of extreme weather events, such as floods and droughts.

1st RECOMMENDATION

Urge member states to complete, improve and ensure good management of European networks of protected areas, especially the Natura 2000 network.

Even though there has been a wide development of the networks of protected areas, namely the Natura 2000 network, increasing knowledge on biodiversity proves that not all areas with outstanding biodiversity value have been identified yet. This is especially true for those ecosystems, habitats and species that are less well known. Therefore, Europe needs to maintain the conservation efforts of the last decades.

On the other hand, effective conservation cannot rely merely on legal protection; appropriate management measures and subsequent monitoring are needed to ensure that the values set out to protect are indeed maintained. Currently, considerable effort is made in this direction, which needs to continue and strengthen.

Action plan

- Urge member states and regions to identify all relevant areas of biodiversity value and to promote their protection, paying special attention to marine-coastal areas.
- Exhort member states to finalize the identification and designation of Natura 2000 sites, and to apply their legal status.
- Continue and expand co-funding for the management and monitoring of protected areas.
- Press member states and regions to develop management plans, or equivalent tools, which will set out conservation and restoration measures, and to implement them on time for all protected areas in the EU; especially the Natura 2000 network.
- Require member states and regions to allocate adequate financial, human and technical resources to the development of management plans or equivalent tools.

2nd RECOMMENDATION

Encourage member states to identify corridors, and buffer zones between core areas, especially Natura 2000 sites, and protect them at the same level as the sites themselves.

The Habitats and Birds Directives include various connectivity conservation measures for safeguarding Europe's biodiversity, both within protected areas and in the wider environment. Article 10 of the Habitats Directive suggests that conservation of landscape features is particularly important as a means of supporting the coherence of the Natura 2000 network. Similarly, Article 3 of the Birds Directive indicates that habitat conservation and restoration measures should be taken inside and outside protected areas.

The EU 2020 Biodiversity Strategy, which follows on from the 2006 Biodiversity Action Plan, places a high priority on enhancing the coherence and connectivity of protected areas, incorporating both Natura 2000 and non-Natura 2000 sites. In particular, it recognises that as well as 'structural tools' (such as flyways, stepping stones and ecological corridors), enhancing the connectivity and resilience of the Natura 2000 network requires actions that support biodiversity in the wider environment.

Action Plan:

- Assess connectivity needs through the application of existing guidance on the maintenance of landscape connectivity.
- Research, develop and establish at European level common standards and methodologies for both the assessment of the needs and the identification of corridors and buffer zones, taking into account the particularities of different biodiversity elements in the member states.
- Encourage member states and regions to identify corridors and buffer zones between core areas, especially Natura 2000 sites, and protect them at the same level as the sites themselves.
- Continue and expand co-funding for the management of corridors.
- Promote research on the effects of climate change on the Natura 2000 network and the ecological function of corridors.

Challenge 2 - Integrate biodiversity in the early stages of land planning practices, policies and legislation beyond Natura 2000 and other protected areas.

The conservation of functional and healthy ecosystems that will guarantee that current and future generations of Europeans are able to enjoy their valuable services cannot rely only on the existence of conservation havens, no matter how large or numerous they may be. The common landscape where those core areas are located must have certain qualities, and land planning can make a decisive contribution to this goal, integrating biodiversity into all administrative and spatial levels, as well as reaching all players involved. The "no net loss" initiative set by the Commission by 2015, as part of the

actions in the context of the EU Biodiversity Strategy to 2020 (COM(2011) 244 final, 2011) summarises well the overall aim that planning for biodiversity should seek.

There are useful tools, such as Strategic Environmental Assessment, but their application often implies that biodiversity is brought into the planning process way too late. This results in a loss of efficiency, and increased costs. Therefore, the need to take biodiversity early into account in all planning aspects has to be stressed.

General measures, such as the creation of a Green Infrastructure⁹ are needed together with more specific ones, such as the integration of biodiversity as one of the factors that drive decision-making processes and in the everyday work of planners and developers, or the consideration of biodiversity as a requisite for public funding of plans and projects.

The concept of Green Infrastructure emphasises the value of functionally and spatially connected, healthy ecosystems and the importance of ensuring that they continue to provide their goods and services. Green Infrastructure has a vital role to play in the conservation of the EU's biodiversity and in tackling fragmentation, as it can encompass protected areas such as Natura 2000 as well as non protected green areas, High Nature Value Farmland (HNVF), natural ecotones, and other areas (for instance "Common lands"¹⁰) that have less intensive land use. The concept highlights the importance of adopting a joined-up approach to integrated spatial planning and a flexible approach to climate change adaptation.

On the other hand, soil is a finite resource and the way it is used is one of the principal reasons behind environmental change, with significant impact on quality of life and ecosystems as well as on infrastructure management. In Europe, the change in land cover and consumption of natural soil by inadequate land planning that doesn't give priority to the reuse of soils is one of the major causes of biodiversity loss.

Finally, the fulfilment of this challenge requires a profound change of approach to the planning process, involving cross-disciplinarity, collaboration among authorities, public participation and better governance.

3rd RECOMMENDATION

Establish a functional European Green Infrastructure

Europe's Green Infrastructure should serve the following purposes: combating biodiversity loss by increasing connectivity between existing natural areas and increasing their ecological coherence; strengthening the functions of ecosystems for

⁹ Information about the aim to develop a European Green Infrastructure Strategy and related documents are available at http://ec.europa.eu/environment/nature/ecosystems/index_en.htm. A technical report on Green Infrastructure and territorial cohesion by the EEA is available at <http://www.eea.europa.eu/publications/green-infrastructure-and-territorial-cohesion/>

¹⁰ The commons lands, thanks to the absence of fragmentation and to the direct participation by local communities, are able to guarantee biodiversity conservation and to maintain healthy ecosystems that will deliver valuable services to European societies. They are present in several region of Europe like France, Italy, Spain, Romania, Sweden, Great Britain, etc. See <http://www.common-interreg.eu>.

delivering goods and services, as well as mitigating and adapting to climate change effects; increasing the resilience of ecosystems by improving their functional and spatial connectivity; as well as promoting integrated spatial planning by identifying multi-functional zones or by incorporating habitat restoration measures and other connectivity elements into various land-use plans and policies.

One of the most effective ways to build up Green Infrastructure is through spatial planning. Policies that adopt a spatial planning approach can improve spatial interactions over a large geographical area. Integrated spatial planning can, for instance, guide future infrastructure developments away from sensitive sites, and help minimise the risk of further habitat loss and fragmentation.

Action Plan:

- Complete the EU strategy for a Green Infrastructure and define the necessary measures to enhance landscape connectivity and functionality, including the development of proper tools in order to implement the strategy at the regional level.
- Urge member states and regions to implement the EU strategy, once it has been completed, evaluate threats and opportunities regarding Green Infrastructure, including the evaluation of its economic value, and create co-funding for the establishment of the Green Infrastructure.
- Encourage member states and regions to identify the potential components of a Green Infrastructure, following the criteria set by the EU strategy for a Green Infrastructure and with special emphasis on the immediate protection of large un-fragmented areas, ecologically significant areas, wildlife corridors and HNMF.
- Exhort member states and regions to integrate the Green Infrastructure in their spatial planning tools and documents.

4th RECOMMENDATION

Ensure the consideration of biodiversity in land planning policy-making.

Territory is the substrate for social development, while land planning should stand guarantor for its functionality. Policy-makers need to be aware of the multiplicity of aspects that the territory embodies. In other words, successful land planning necessarily implies taking into account very different views in the planning process. This can be achieved through the improvement of collaboration and cooperation among different authorities, encouragement of public participation, effective communication among all parties involved, and a cross-disciplinary approach during the whole process.

Although land planning authority is held by member states and regions, some common guidance is needed regarding how to integrate various aspects in land planning policy-making. Traditionally, nature conservation policies and land planning policies have been developed separately, even clashing at times, which means that there is still much to be improved in the integration of both. The landscape approach, as defined in the European Landscape Convention, could help a great deal in the achievement of this goal.

It should be noted that taking into account biodiversity in land planning not only benefits biodiversity itself, but it is also beneficial to society, directly and indirectly.

Action Plan:

- Prepare a European white/green paper about the integration of biodiversity into land planning.
- Take into account the relationships between biodiversity and the cultural heritage of landscapes, analysing historical transformations, the character of landscapes, the dynamics and the pressures modifying them, as well as trends and future perspectives.
- Evaluate and manage landscapes according to the various values held by general public.
- Promote cross-sectoral cooperation within authorities, in order to take advantage of synergies created by the various skills and visions that each of them brings into land planning policy-making.
- Improve governance by promoting the participation of the public, especially the local communities, in the planning process.

5th RECOMMENDATION

Facilitate the consideration of biodiversity by land planners and promoters.

Besides adopting an adequate approach, a general conceptual and methodological frame, land planners and promoters need specific tools that will allow them to integrate biodiversity in their everyday work. That is, provided there is a real will to take biodiversity into account in the land planning process, answers need to be offered regarding how to actually do so.

The general aim of producing no net loss of biodiversity will be most effectively accomplished by the combination of a wide variety of tools, which will enable the land planner and/or promoter to adjust to the heterogeneity of real situations, building proposals and solutions that will promote sustainability at the social, economic and environmental level.

Land planners and promoters also need feedback about the effectiveness of the instruments they apply; they need to know whether the tools they use in fact result in the outcomes they planned and expected, regarding biodiversity in this case.

Action Plan:

- Adopt an EU Soil Framework Directive that will establish criteria and promote methodological guidelines with common EU standards, contributing to the sustainability of land planning in terms of reducing soil sealing and consumption of natural soil.

- Urge member states and regions to set up criteria for the implementation of compensatory measures, prioritizing the restoration of damaged ecosystems or ecological corridors that have disappeared.
- Implement monitoring systems at European level in order to improve knowledge on the relevant values of biodiversity and its evolution.
- Implement a monitoring system for landscape fragmentation in Europe and apply the results as a tool in transport and infrastructure planning, as well as regional land planning.
- Encourage member states, as well as regional and local land planners to apply or adapt the available biodiversity indicators (such as the SEBI– Streamlining European Biodiversity Indicators¹¹) in order to have an overview of local biodiversity trends and identify the areas where compensation measures are needed.
- Encourage member states to ratify the European Landscape Convention, and develop the tools it provides.

6th RECOMMENDATION

Establish conditional public funding for planning projects, depending on their positive effect on biodiversity.

A key principle for sustainable land planning is not only to avoid, mitigate or compensate damage, but to seek ways to actively enhance and restore biodiversity. Consequently, public funds should pay at least as much attention to the latter as they do to the former.

In principle, all planning projects should seek to improve natural values, in one way or another. Encouraging planning projects that receive public funding to explain and justify the positive effects they have on biodiversity is a way to actually stimulate them to incorporate measures that will improve biodiversity. Public authorities should also engage in exemplary projects that will help draw private sectors to respect biodiversity, and use public funds to guide private activities towards a more ecologically coherent and connected territory.

Action Plan:

- Encourage promoters and environmental authorities to explain the positive effects on biodiversity among the contents of plans and projects receiving public funding, at the European, member state and regional levels.
- Prevent infrastructure and urban development projects receiving public funding from degrading biodiversity and areas of high landscape value through systematic environmental impact studies, carried out from the initial stages, at the European, member state and regional levels.

¹¹ See the Pan-European SEBI initiative in: <http://biodiversity.europa.eu/topics/sebi-indicators>

- Minimize the impact of infrastructures receiving public funding on biodiversity, at the European, member state and regional levels.
- Apply effective compensation measures, where applicable, for practices receiving public funding that contribute to the conservation of biodiversity and use the financial means dedicated to compensation measures to re-create natural sites or damaged corridors (goal : no net loss on biodiversity)
- Identify and reform public subsidies and incentives that are harmful to biodiversity, at the European, member state and regional levels.

Challenge 3. Increase knowledge and awareness of biodiversity among all land planning stakeholders as well as the general public.

Too often biodiversity is seen as an obstacle for development, even though experts confront us with proof about the opposite, as chances for development decrease when biodiversity is lost. The evidence on biodiversity, together with many other environmental, social and economic facts, challenges the conventional development model, thus becoming an uncomfortable companion. It shows the less attractive face of economic growth in the industrial era, but can also be seen as an opportunity for sustainable development in the current informational society. More effort is needed for the latter message to come across, so biodiversity will be seen as an ally in land planning processes.

A shared view on why biodiversity is necessary and how it affects all our lives will lead European societies to demand its protection and will effectively engage the stakeholders involved in its conservation. Therefore, it is important to increase understanding and awareness of biodiversity, as this will increase public support for conservation measures and the costs involved in their development, and it will also result in the commitment of all land planning stakeholders to the maintenance of healthy ecosystems in Europe.

Awareness and knowledge about biodiversity also need to be improved among public authorities, as they are a prerequisite to achieve collaboration and coordination among all sectoral authorities involved in planning processes.

Awareness should be based on knowledge, and it should lead to action at all levels, starting from simple and small individual actions, down to strategic decisions that affect member states or the EU itself. On the other hand, knowledge has to be based on scientific data and up-to-date information, and needs to be shared among all stakeholders. Common standards and methodologies for the use of such scientific data about the environment are needed, such as those put forward by the EEA – member countries partnership called EIONET through its several tools and services (Reportnet, SEIS, and others), or by the INSPIRE Directive regarding spatial information on environmental issues.

7th RECOMMENDATION

Increase, improve and share knowledge of biodiversity and on its role on the territory.

Knowledge on biodiversity is very accurate and up-to-date for some aspects and elements, but patchy in other fields. On the whole, we know more about the most conspicuous aspects of biodiversity and the most accessible ecosystems. Hence, efforts to promote knowledge about biodiversity, its values and its wide functions, must be sustained.

Improving knowledge is not just about increasing the amount and scope of data on biodiversity, as the quality of currently available data should be upgraded first. Accordingly, evaluating the quality of existing information will lead to the improvement of knowledge. Better knowledge will also come from the establishment of new relationships on existing data, from new views on old facts, and chances for these to happen arise more easily with the exchange of information. For this reason, the capitalization of existing knowledge should be accompanied by making it widely accessible through common platforms, through initiatives like the INSPIRE Directive for the specific case of spatial data. Knowledge and information should be shared not only at European level, but within member states also, where authority on planning matters lies.

Action Plan:

- Facilitate and encourage the sharing of information related to biodiversity and land planning, at the European, member state and regional levels.
- Support and encourage the use of common standards and methodologies, and facilitate the integration of ecological data into platforms suitable for combining them with geographical, social and economic data on the territory, at the European, member state and regional levels.
- Encourage member states and regions to set up networks of local observatories on biodiversity, active at local (regional) level and with a central (national) coordination, with the aim of monitoring the state of biological diversity in the territory concerned, together with the diversity of both landscape and cultures.

8th RECOMMENDATION

Raise public awareness of biodiversity and encourage active involvement in its conservation.

Promoting governance and a more participatory approach to land planning implies better informed public, so individuals can take part in the decision making process in a meaningful way. But it must be stressed that in order to actively seek information, there needs to be a prior awareness about the issue, as public participation is a voluntary process. So, only those who are aware about the challenges Europe faces regarding biodiversity will look for information about it. The general public is not fully aware about how biodiversity influences our everyday lives, about the numerous goods and services healthy ecosystems deliver, and about the tremendous costs that can arise if biodiversity is not part of the land planning process.

Besides raising awareness and promoting public participation in the planning process, individuals can do a great deal to favour biodiversity through everyday decisions in their roles as citizens, consumers, employees, and so on. That is why it is important to offer guidance on how people can help biodiversity conservation, so awareness and knowledge can lead to action.

Action Plan:

- Urge member states and regions to raise awareness of biodiversity among all land planning stakeholders as well as the general public, especially on natural protected areas and the Natura 2000 Network.
- Evaluate and communicate on the economic value of biodiversity to society.
- Develop and issue specific guidelines on how the general public can put into practice actions that will help biodiversity conservation.
- Integrate biodiversity into education programmes.
- Improve public access to biodiversity-related data and information, at the European, member state and regional levels.
- Evaluate the impact and effectiveness of actions carried out in the field of biodiversity communication and education in terms of public awareness and involvement.

9th RECOMMENDATION

Promote stakeholder awareness regarding biodiversity and encourage their commitment to the conservation of biodiversity.

Raising awareness among the general public is very important and positive. Still, there are certain actors whose decisions have a larger influence on the territory than those belonging to the average citizen, for instance those who directly shape our rural landscapes, promote urban development plans, or are responsible for planning decisions at European, member state or regional level. Their awareness has to be addressed with special attention, matching their ability to modify landscapes and influence biodiversity.

Promoting the awareness of the several stakeholders involved in planning processes should result in their commitment to the conservation of biodiversity. When it comes to stakeholders, benchmarking stands out as an effective strategy to raise awareness, presenting the benefits of taking into account biodiversity in a convincing way.

Action Plan:

- Transfer applicable knowledge on biodiversity to stakeholders, as well as examples of best practices, at the European, member state and regional levels.
- Communicate to decision makers and to land developers the foreseeable effects and impacts of both taking and not taking biodiversity into account in land planning decisions.
- Communicate to policy, planning and project managers, land owners, and so on, the benefits of biodiversity and tools for integrating biodiversity into their daily work and decisions.
- Disseminate information about ways of “working with nature” and not against it.
- Evaluate the impact and effectiveness of actions taken in the fields of communication and education on biodiversity, in terms of stakeholder awareness and commitment.

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