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AND THE COMMITTEE OF THE REGIONS**

Our life insurance, our natural capital: an EU biodiversity strategy to 2020

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1. INTRODUCTION

Biodiversity — the extraordinary variety of ecosystems, species and genes that surround us — is our life insurance, giving us food, fresh water and clean air, shelter and medicine, mitigating natural disasters, pests and diseases and contributes to regulating the climate. Biodiversity is also our natural capital, delivering ecosystem services that underpin our economy. Its deterioration and loss jeopardises the provision of these services: we lose species and habitats and the wealth and employment we derive from nature, and endanger our own wellbeing. This makes biodiversity loss the most critical global environmental threat alongside climate change — and the two are inextricably linked. While biodiversity makes a key contribution to climate change mitigation and adaptation, achieving the '2 degrees' target coupled with adequate adaptation measures to reduce the impacts of unavoidable effects of climate change are also essential to avert biodiversity loss.

Current rates of species extinction are unparalleled. Driven mainly by human activities, species are currently being lost 100 to 1,000 times faster than the natural rate: according to the FAO, 60% of the world's ecosystems are degraded or used unsustainably; 75% of fish stocks are over-exploited or significantly depleted and 75% of the genetic diversity of agricultural crops has been lost worldwide since 1990. An estimated 13 million hectares of tropical forests are cleared each year¹ and 20% of the world's tropical coral reefs have already disappeared, while 95% will be at risk of destruction or extreme damage by 2050 if climate change continues unabated².

In the EU, only 17% of habitats and species and 11% of key ecosystems protected under EU legislation are in a favourable state³. This is in spite of action taken to combat biodiversity loss, particularly since the EU 2010 biodiversity target was set in 2001. The benefits of these actions have been outweighed by continued and growing pressures on Europe's biodiversity: land-use change, over-exploitation of biodiversity and its components, the spread of invasive alien species, pollution and climate change have either remained constant or are increasing. Indirect drivers, such as population growth, limited awareness about biodiversity and the fact that biodiversity's economic value is not reflected in decision making are also taking a heavy toll on biodiversity.

This strategy is aimed at reversing biodiversity loss and speeding up the EU's transition towards a resource efficient and green economy. It is an integral part of the Europe 2020 Strategy⁴, and in particular the resource efficient Europe flagship initiative⁵.

¹ FAO, 2010.

² 'Reefs at Risk Revisited', World Resources Institute, 2011.

³ <http://www.eea.europa.eu/publications/eu-2010-biodiversity-baseline/>.

⁴ COM(2010) 2020.

⁵ COM(2011) 21.

2. A NEW FOUNDATION FOR EU BIODIVERSITY POLICY

2.1. A DUAL MANDATE FOR ACTION

The EU mandate

In March 2010, EU leaders recognised that the 2010 biodiversity target would not be met despite some major successes, such as establishing Natura 2000, the world's largest network of protected areas. They therefore endorsed the long-term vision and ambitious headline target proposed by the Commission in its Communication 'Options for an EU vision and target for biodiversity beyond 2010'⁶.

2050 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 wellbeing 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.

The global mandate

The tenth Conference of the Parties (CoP10) to the Convention on Biological Diversity (CBD), held in Nagoya in 2010, led to the adoption of a global Strategic Plan for biodiversity 2011-2020⁷, the Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilisation (ABS Protocol)⁸, and a strategy to mobilise resources for global biodiversity.

The EU 2020 biodiversity strategy responds to both mandates, setting the EU on the right track to meet its own biodiversity objectives and its global commitments.

2.2. VALUING OUR NATURAL ASSETS TO DELIVER MULTIPLE BENEFITS

The EU 2020 biodiversity target is underpinned by the recognition that, in addition to its intrinsic value, biodiversity and the services it provides have significant economic value that is seldom captured in markets. Because it escapes pricing and is not reflected in society's accounts, biodiversity often falls victim to competing claims on nature and its use. The Commission-sponsored international project on The Economics of Ecosystems and Biodiversity (TEEB) recommends that the economic value of biodiversity be factored into

⁶ COM(2010) 4.

⁷ The global Strategic Plan 2011-2020 includes a 2050 vision, 2020 mission and 20 targets.

⁸ On 11 February 2011, the Commission submitted a proposal to the Council for a Council decision on the signing, on behalf of the European Union, of the Nagoya Protocol.

decision making and reflected in accounting and reporting systems.⁹ In Nagoya, this recommendation was incorporated into a global target and forms one of several key actions of the current strategy.

Although action to halt biodiversity loss entails costs¹⁰, biodiversity loss itself is costly for society as a whole, particularly for economic actors in sectors that depend directly on ecosystem services. For example, insect pollination in the EU has an estimated economic value of € 15 billion per year¹¹. The continued decline in bees and other pollinators¹² could have serious consequences for Europe's farmers and agri-business sector¹³. The private sector is increasingly aware of these risks. Many businesses in Europe and beyond are assessing their dependency on biodiversity and integrating targets for sustainable natural resource use into their corporate strategies¹⁴.

Fully valuing nature's potential will contribute to a number of the EU's strategic objectives:

- *A more resource efficient economy*: The EU's ecological footprint is currently double its biological capacity.¹⁵ By conserving and enhancing its natural resource base and using its resources sustainably, the EU can improve the resource efficiency of its economy and reduce its dependence on natural resources from outside Europe.
- *A more climate-resilient, low-carbon economy*: Ecosystem-based approaches to climate change mitigation and adaptation can offer cost-effective alternatives to technological solutions, while delivering multiple benefits beyond biodiversity conservation.
- *A leader in research and innovation*: Progress in many applied sciences depends on the long-term availability and diversity of natural assets. Genetic diversity, for example, is a main source of innovation for the medical and cosmetics industries, while the innovation potential of ecosystem restoration and green infrastructure¹⁶ is largely untapped.
- *New skills, jobs and business opportunities*: Nature-based innovation, and action to restore ecosystems and conserve biodiversity, can create new skills, jobs and business opportunities. TEEB estimates that global business opportunities from investing in biodiversity could be worth US\$ 2-6 trillion by 2050.

2.3. BUILDING ON THE BIODIVERSITY KNOWLEDGE BASE

Good progress has been made in improving the biodiversity knowledge base to underpin policy with up-to-date scientific data and information. This now needs to be aligned to the 2020 policy framework.

⁹ <http://www.teebweb.org/>

¹⁰ As set out in the accompanying Staff Working Paper.

¹¹ Gallai et al, 2009.

¹² Grassland butterfly populations have declined by over 70% since 1990.

¹³ Over 80% of the EU's crops are estimated to depend at least in part on insect pollination ('Bee Mortality and Bee Surveillance in Europe', 2009).

¹⁴ 'State of Green Business 2011', GreenBiz Group.

¹⁵ <http://www.eea.europa.eu/data-and-maps/indicators/ecological-footprint-of-european-countries/>.

¹⁶ As described in COM(2009) 147 and COM(2011) 17.

The Commission will work with Member States and the European Environment Agency to develop by 2012 an integrated framework for monitoring, assessing and reporting on progress in implementing the strategy. National, EU and global monitoring, reporting and review obligations will be improved and streamlined as far as possible with requirements under other environmental legislation, such as the Water Framework Directive. The EU 2010 biodiversity baseline and the updated EU biodiversity indicators¹⁷ will be key components of this framework, which will also draw on other data and information, such as that produced by the Shared Environmental Information System and Global Monitoring for Environment and Security, the European Forest Data Centre and the LUCAS Land Use Cover Area Frame Survey. The Biodiversity Information System for Europe (BISE) web portal will be the main platform for data and information sharing.

This strategy includes specific action to improve monitoring and reporting. The integration of biodiversity monitoring and reporting into EU legislation on nature, the Common Agricultural Policy (CAP), the Common Fisheries Policy (CFP) and, to the extent feasible, Cohesion Policy would help assess the impacts of these policies on biodiversity.

The Commission will continue its work to fill key research gaps, including on mapping and assessing ecosystem services in Europe, which will help improve our knowledge of the links between biodiversity and climate change, and the role of soil biodiversity in delivering key ecosystem services, such as carbon sequestration and food supply. Research funding under the new Common Strategic Framework could further contribute to closing identified knowledge gaps and supporting policy.

Finally, the EU will remain closely involved in and contribute actively to the new intergovernmental science-policy platform on Biodiversity and ecosystem services (ipBes), particularly to work on regional assessments, for which an EU-level mechanism may be required to reinforce the science-policy interface.

3. A FRAMEWORK FOR ACTION FOR THE NEXT DECADE

The 2020 Biodiversity strategy includes six mutually supportive and inter-dependent targets that respond to the objectives of the 2020 headline target. They will all help to halt biodiversity loss and the degradation of ecosystem services, with each seeking to address a specific issue: protecting and restoring biodiversity and associated ecosystem services (targets 1 and 2), enhancing the positive contribution of agriculture and forestry and reducing key pressures on EU biodiversity (targets 3, 4 and 5), and stepping up the EU's contribution to global biodiversity (target 6). Each target is broken down into a package of actions designed to respond to the specific challenge addressed by the target. The specific actions are set out in the Annex to this Communication. The actions will be subject to further impact assessments where necessary.¹⁸

¹⁷ <http://biodiversity.europa.eu/topics/sebi-indicators>. Other relevant indicators include the EU's sustainable development and agro-environmental indicators.

¹⁸ The potential impact of targets and measures were assessed in the accompanying Staff Working Paper. This paper, on p. 81/82, also lists actions for which further impact assessment work is planned.

3.1. CONSERVING AND RESTORING NATURE

The full implementation of the Birds and Habitats Directives (i.e. reaching favourable conservation status of all habitats and species of European importance and adequate populations of naturally occurring wild bird species) is critical to preventing further loss and restoring biodiversity in the EU. A time-bound, quantified target will accelerate implementation of the Directives and achievement of the objectives set out in them.

Target 1

To halt the deterioration in the status of all species and habitats covered by EU nature legislation and achieve a significant and measurable improvement in their status so that, by 2020, compared to current assessments: (i) 100% more habitat assessments and 50% more species assessments under the Habitats Directive show an improved conservation status; and (ii) 50% more species assessments under the Birds Directive show a secure or improved status.

3.2. MAINTAINING AND ENHANCING ECOSYSTEMS AND THEIR SERVICES

In the EU, many ecosystems and their services have been degraded, largely as a result of land fragmentation. Nearly 30% of the EU territory is moderately to very highly fragmented. Target 2 focuses on maintaining and enhancing ecosystem services and restoring degraded ecosystems by incorporating green infrastructure in spatial planning. This will contribute to the EU's sustainable growth objectives¹⁹ and to mitigating and adapting to climate change, while promoting economic, territorial and social cohesion and safeguarding the EU's cultural heritage. It will also ensure better functional connectivity between ecosystems within and between Natura 2000 areas and in the wider countryside. Target 2 incorporates the global target agreed by EU Member States and the EU in Nagoya to restore 15% of degraded ecosystems by 2020.

Target 2

By 2020, ecosystems and their services are maintained and enhanced by establishing green infrastructure and restoring at least 15% of degraded ecosystems.

3.3. ENSURING THE SUSTAINABILITY OF AGRICULTURE, FORESTRY AND FISHERIES

The EU has already made efforts to integrate biodiversity into the development and implementation of other policies. However, given the benefits that biodiversity and ecosystem services bring to many sectors, these efforts are still not sufficient. This strategy seeks to improve integration in key sectors, specifically through targets and action to enhance the positive contribution of the agriculture, forest and fisheries sectors to biodiversity conservation and sustainable use²⁰.

With respect to agriculture, existing instruments under the CAP will contribute to this target as well as Targets 1 and 2. The forthcoming reform of the CAP and CFP and the new Multiannual Financial Framework present opportunities to enhance synergies and maximise coherence between biodiversity protection objectives and those of these and other policies.

¹⁹ COM(2011) 17.

²⁰ Agriculture and forests cover 72% of EU land. Maintaining and enhancing forest biodiversity is a stated aim of the EU's 2006 Forest Action Plan - COM(2006) 302.

Target 3*

A) Agriculture: By 2020, maximise areas under agriculture across grasslands, arable land and permanent crops that are covered by biodiversity-related measures under the CAP so as to ensure the conservation of biodiversity and to bring about a measurable improvement() in the conservation status of species and habitats that depend on or are affected by agriculture and in the provision of ecosystem services as compared to the EU2010 Baseline, thus contributing to enhance sustainable management.*

*B) Forests: By 2020, Forest Management Plans or equivalent instruments, in line with Sustainable Forest Management (SFM)²¹, are in place for all forests that are publicly owned and for forest holdings above a certain size** (to be defined by the Member States or regions and communicated in their Rural Development Programmes) that receive funding under the EU Rural Development Policy so as to bring about a measurable improvement(*) in the conservation status of species and habitats that depend on or are affected by forestry and in the provision of related ecosystem services as compared to the EU 2010 Baseline.*

(*) For both targets, improvement is to be measured against the quantified enhancement targets for the conservation status of species and habitats of EU interest in Target 1 and the restoration of degraded ecosystems under target 2.

(**) For smaller forest holdings, Member States may provide additional incentives to encourage the adoption of Management Plans or equivalent instruments that are in line with SFM.

Target 4:

Fisheries: Achieve Maximum Sustainable Yield (MSY)²² by 2015. Achieve a population age and size distribution indicative of a healthy stock, through fisheries management with no significant adverse impacts on other stocks, species and ecosystems, in support of achieving Good Environmental Status by 2020, as required under the Marine Strategy Framework Directive.

3.4. COMBATING INVASIVE ALIEN SPECIES

Invasive alien species (IAS) pose a significant threat to biodiversity in the EU, and this threat is likely to increase in the future unless robust action is taken at all levels to control the introduction and establishment of these species and address those already introduced²³. IAS cause some €12.5 billion worth of damage each year in the EU. Although the challenges posed by IAS are common to many Member States, with the exception of legislation concerning the use of alien and locally absent species in aquaculture there is currently no dedicated, comprehensive EU policy to address them. This strategy proposes filling this gap with a dedicated EU legislative instrument which could tackle outstanding challenges relating inter alia to IAS pathways, early detection and response and containment and management of IAS.

²¹ As defined in SEC(2006) 748.

²² The EU signed up to a target of achieving MSY levels by 2015 at the World Summit on Sustainable Development in 2002 and to the new 2020 fisheries target adopted at CBD COP10.

²³ IEEP, 2010.

Target 5:

By 2020, Invasive Alien Species and their pathways are identified and prioritised, priority species are controlled or eradicated, and pathways are managed to prevent the introduction and establishment of new IAS.

3.5. ADDRESSING THE GLOBAL BIODIVERSITY CRISIS

The EU has pledged to meet the international 2020 biodiversity goals and objectives agreed to under the CBD. This requires taking action within the EU, but also at global level since the EU derives significant benefits from global biodiversity and is at the same time responsible for some of the loss and degradation that occurs beyond its borders, notably due to its unsustainable consumption patterns.

Through this strategy, targeted efforts will strive to alleviate pressure on biodiversity emanating from the EU while contributing to greening the economy in line with EU priorities for the 2012 United Nations Conference on Sustainable Development. The EU will also need to meet specific COP10 commitments relating to resource mobilisation and implement the Nagoya Protocol on ABS if it is to continue to lead international biodiversity policy.

Target 6:

By 2020, the EU has stepped up its contribution to averting global biodiversity loss.

3.6. CONTRIBUTIONS FROM OTHER ENVIRONMENTAL POLICIES AND INITIATIVES

While this strategy serves as the main vehicle for EU action to address biodiversity loss and focus action where the EU has most value-added and leverage, reaching the 2020 target will require the full implementation of existing EU environment legislation, as well as action at national, regional and local level.

Several existing or planned policy initiatives will support biodiversity objectives. For instance, climate change, which is a significant and increasing pressure on biodiversity that will alter habitats and ecosystems, is addressed through a comprehensive EU policy package adopted in 2009. Achieving the 2 degrees target for atmospheric warming will be essential to prevent biodiversity loss. The Commission plans to issue an EU strategy on adaptation to climate change by 2013.

The EU has substantial legislation requiring the achievement of good ecological status for water by 2015²⁴ and marine ecosystems by 2020²⁵, tackling pollution from various sources, and regulating chemicals and their effects on the environment. The Commission is assessing whether additional action to tackle nitrogen and phosphate pollution and certain atmospheric pollutants is warranted, whilst the Member States are considering a Commission proposal for a framework directive to protect soil, which is needed to allow the EU to reach the biodiversity aims. Finally, indirect drivers of biodiversity loss are addressed partly through this strategy, including via action to reduce the EU's ecological footprint, and partly through other initiatives as part of the resource efficient Europe flagship initiative.

²⁴ Directive 2000/60/EC.

²⁵ Directive 2008/56/EC.

4. WE ARE ALL IN THIS TOGETHER

4.1. PARTNERSHIPS FOR BIODIVERSITY

Achieving the EU and global 2020 biodiversity targets requires the full engagement and commitment of a wide variety of stakeholders. To secure this, a number of key partnerships will be expanded and promoted to support this strategy:

- The Commission has set up the **EU Business and Biodiversity Platform**, which currently brings together businesses from six different sectors (agriculture, extractive industries, finance, food supply, forestry and tourism) to share their experiences and best practices. The Commission will further develop the Platform and encourage greater cooperation between businesses in Europe, including SMEs, and links to national and global initiatives.
- The Commission will continue working with other partners to publicise and implement the TEEB recommendations at EU level and support work on valuation of biodiversity and ecosystem services in developing countries.
- The Commission will further encourage collaboration between researchers and other stakeholders involved in **spatial planning and land use management** in implementing biodiversity strategies at all levels, ensuring coherence with relevant recommendations set out in the European Territorial Agenda.
- The active involvement of **civil society** will be encouraged at all levels of implementation. Citizen science initiatives, for instance, are a valuable means of gathering high-quality data while mobilising citizens to get involved in biodiversity conservation activities.
- The Commission and Member States will work with the **outermost regions and overseas countries and territories**, which host more endemic species than the entire European continent, through the BEST (Biodiversity and Ecosystem Services in Territories of European Overseas) initiative to promote biodiversity conservation and sustainable use.
- The EU will also support ongoing efforts to improve collaboration, **synergies** and the establishment of common priorities between the biodiversity-related Conventions (CBD, CITES, Convention on Migratory Species, Ramsar Convention on Wetlands and the World Heritage Convention). The EU will also promote enhanced cooperation between the CBD, Climate Change and Desertification Conventions to yield mutual benefits.
- The EU will reinforce its dialogue and cooperation on biodiversity with **key partners**, in particular candidate countries and potential candidates, to develop or adjust their policies to meet the 2020 biodiversity targets. Candidate countries and potential candidates are invited to contribute to the implementation of the strategy and start developing or adjusting their policies towards the goal of achieving the EU and global 2020 biodiversity targets.

These partnerships help to raise awareness about biodiversity, which in the EU remains low²⁶. The Commission's 2010 campaign 'Biodiversity: We are all in this together' will be followed by a specific campaign focusing on the Natura 2000 network.

²⁶ http://ec.europa.eu/public_opinion/flash/fl_290_en.pdf.

4.2. MOBILISING RESOURCES TO SUPPORT BIODIVERSITY AND ECOSYSTEM SERVICES

Achieving the objectives of this strategy and ensuring the EU meets its global biodiversity commitments will depend on the availability and efficient use of financial resources. Within the current programming period and without pre-empting the outcome of the negotiations on the next Multi-annual Financial Framework, the Commission and Member States will work to:

- *ensure a better uptake and distribution of existing funds for biodiversity.* Under the current programming period, €105 billion under Cohesion Policy is foreseen to be used for environment and climate-related activities, including biodiversity and nature protection²⁷. However, concerted efforts are needed to ensure optimum uptake of funds available²⁸.

- *rationalise available resources and maximise co-benefits of various funding sources,* including funding for agriculture and rural development, fisheries, regional policy and climate change. Indeed, investing in biodiversity can pay off in more ways than one and offers a cost-effective response to the climate change crisis. The inclusion of biodiversity objectives should be explored as part of the Common Strategic Framework under consideration by the Commission to prioritise funding under the five funding instruments under rural, regional, social and fisheries policies.

- *diversify and scale up various sources of funding.* The Commission and Member States will promote the development and use of innovative financing mechanisms, including market-based instruments. Payments for Ecosystem Services schemes should reward public and private goods from agricultural, forest and marine ecosystems. Incentives will be provided to attract private sector investment in green infrastructure and the potential of biodiversity offsets will be looked into as a way of achieving a 'no net loss' approach. The Commission and the European Investment Bank are exploring the scope for using innovative financing instruments to support biodiversity challenges, including through Public Private Partnerships and the possible establishment of a biodiversity financing facility.

Two funding requirements stand out in particular. The first concerns the need for adequate financing to fully implement the Natura 2000 network, where Member State funding must be matched by funding from the EU²⁹ (estimated at approximately €5.8 billion per year in total). This may require the Member States to develop multi-annual planning for Natura 2000, consistent with the prioritised action frameworks required under the Habitats Directive.

The second responds to the CoP10 commitment to increase substantially financial resources from all sources for effective implementation of the Nagoya outcomes. Discussions on funding targets in CoP-11 should recognise the need for increases in public funding, but also the potential of innovative financial mechanisms. Financial flows (own resources and innovative sources) required to meet identified needs should be set out in national biodiversity strategies and action plans.

²⁷ COM(2011) 17.

²⁸ COM(2010) 110. By end September 2009, the uptake of funds allocated to biodiversity was lower than for other spending categories. At that time, the uptake for the two categories directly related to biodiversity ("promotion of biodiversity and nature" and "promotion of natural assets") was 18,1% and 22% respectively, compared to an average of 27,1% for all cohesion policy funding. Member States are required to submit updated figures by the end of June 2011, hence consolidated data should be available in summer.

²⁹ As required under Article 8 of the Habitats Directive.

These commitments could be met directly through dedicated additional funding for biodiversity, and indirectly by ensuring synergies with other relevant funding sources, such as climate finance (e.g. ETS revenues, REDD+) and other innovative financing sources, such as funds generated by the Nagoya Protocol on ABS. The reform of harmful subsidies, in line with the 2020 Strategy and the global CBD target, will also benefit biodiversity.

4.3. A COMMON IMPLEMENTATION STRATEGY FOR THE EU

The shared EU and CBD targets need to be pursued through a mix of sub-national, national and EU-level action. Close coordination will therefore be needed to track progress in reaching the targets, including those addressed through policy measures outside the scope of this strategy, and to ensure consistency between EU and Member State action. For this purpose, the Commission will work with Member States to develop a common framework for implementation involving also other key actors, sectors and institutions based on best practice, and setting out the roles and responsibilities of each in ensuring success.

The Commission will support and complement Member States' efforts by enforcing environmental legislation, filling policy gaps by proposing new initiatives, providing guidelines, funding, and fostering research and the exchange of best practice.

5. FOLLOW-UP

This strategy provides a framework for action to enable the EU to reach its 2020 biodiversity target and set it on the right path to attain the 2050 vision. It will be subject to a mid-term review in early 2014, so that results can feed into the preparation of the EU's fifth National Report as required under the CBD. The targets and measures will be reconsidered as new information becomes available and progress is made on the objectives set in the strategy.

Because many of the actions taken today to safeguard biodiversity and enhance our natural assets will take a long time to bring about real improvements, implementation of this strategy needs to begin now for the EU to meet its 2020 headline target.

The Commission invites the European Parliament and the Council to endorse the targets and actions set out in the Annex.

ANNEX

TARGET 1: FULLY IMPLEMENT THE BIRDS AND HABITATS DIRECTIVES

To halt the deterioration in the status of all species and habitats covered by EU nature legislation and achieve a significant and measurable improvement in their status so that, by 2020, compared to current assessments: (i) 100% more habitat assessments and 50% more species assessments under the Habitats Directive show an improved conservation status; and (ii) 50% more species assessments under the Birds Directive show a secure or improved status.

Action 1: Complete the establishment of the Natura 2000 network and ensure good management

- 1a) Member States and the Commission will ensure that the phase to establish Natura 2000, including in the marine environment, is largely complete by 2012.
- 1b) Member States and the Commission will further integrate species and habitats protection and management requirements into key land and water use policies, both within and beyond Natura 2000 areas.
- 1c) Member States will ensure that management plans or equivalent instruments which set out conservation and restoration measures are developed and implemented in a timely manner for all Natura 2000 sites.
- 1d) The Commission, together with Member States, will establish by 2012 a process to promote the sharing of experience, good practice and cross-border collaboration on the management of Natura 2000, within the biogeographical frameworks set out in the Habitats Directive.

Action 2: Ensure adequate financing of Natura 2000 sites

- 2) The Commission and Member States will provide the necessary funds and incentives for Natura 2000, including through EU funding instruments, under the next multiannual financial framework. The Commission will set out its views in 2011 on how Natura 2000 will be financed under the next multi-annual financial framework.

Action 3: Increase stakeholder awareness and involvement and improve enforcement

- 3a) The Commission, together with Member States, will develop and launch a major communication campaign on Natura 2000 by 2013.
- 3b) The Commission and Member states will improve cooperation with key sectors and continue to develop guidance documents to improve their understanding of the requirements of EU nature legislation and its value in promoting economic development.
- 3c) The Commission and Member States will facilitate enforcement of the nature directives by providing specific training programmes on Natura 2000 for judges and public prosecutors, and by developing better compliance promotion capacities.

Action 4: Improve and streamline monitoring and reporting

- 4a) The Commission, together with Member States, will develop by 2012 a new EU bird reporting system, further develop the reporting system under Article 17 of the

Habitats Directive and improve the flow, accessibility and relevance of Natura 2000 data.

- 4b) The Commission will create a dedicated ICT tool as part of the Biodiversity Information System for Europe to improve the availability and use of data by 2012.

TARGET 2: MAINTAIN AND RESTORE ECOSYSTEMS AND THEIR SERVICES

By 2020, ecosystems and their services are maintained and enhanced by establishing green infrastructure and restoring at least 15 % of degraded ecosystems.

Action 5: Improve knowledge of ecosystems and their services in the EU

- 5) Member States, with the assistance of the Commission, will map and assess the state of ecosystems and their services in their national territory by 2014, assess the economic value of such services, and promote the integration of these values into accounting and reporting systems at EU and national level by 2020.

Action 6: Set priorities to restore and promote the use of green infrastructure

- 6a) By 2014, Member States, with the assistance of the Commission, will develop a strategic framework to set priorities for ecosystem restoration at sub-national, national and EU level.
- 6b) The Commission will develop a Green Infrastructure Strategy by 2012 to promote the deployment of green infrastructure in the EU in urban and rural areas, including through incentives to encourage up-front investments in green infrastructure projects and the maintenance of ecosystem services, for example through better targeted use of EU funding streams and Public Private Partnerships.

Action 7: Ensure no net loss of biodiversity and ecosystem services

- 7a) In collaboration with the Member States, the Commission will develop a methodology for assessing the impact of EU funded projects, plans and programmes on biodiversity by 2014.
- 7b) The Commission will carry out further work with a view to proposing by 2015 an initiative to ensure there is no net loss of ecosystems and their services (e.g. through compensation or offsetting schemes).

Target 3: INCREASE THE CONTRIBUTION OF AGRICULTURE AND FORESTRY TO MAINTAINING AND ENHANCING BIODIVERSITY

3A) Agriculture: By 2020, maximise areas under agriculture across grasslands, arable land and permanent crops that are covered by biodiversity-related measures under the CAP so as to ensure the conservation of biodiversity and to bring about a measurable improvement() in the conservation status of species and habitats that depend on or are affected by agriculture and in the provision of ecosystem services as compared to the EU2010 Baseline, thus contributing to enhance sustainable management.*

*B) Forests: By 2020, Forest Management Plans or equivalent instruments, in line with Sustainable Forest Management (SFM)³⁰, are in place for all forests that are publicly owned and for forest holdings above a certain size** (to be defined by the Member States or regions*

³⁰ As defined in SEC(2006) 748.

and communicated in their Rural Development Programmes) that receive funding under the EU Rural Development Policy so as to bring about a measurable improvement() in the conservation status of species and habitats that depend on or are affected by forestry and in the provision of related ecosystem services as compared to the EU 2010 Baseline.*

(*) For both targets, improvement is to be measured against the quantified enhancement targets for the conservation status of species and habitats of EU interest in Target 1 and the restoration of degraded ecosystems under target 2.

(**) For smaller forest holdings, Member States may provide additional incentives to encourage the adoption of Management Plans or equivalent instruments that are in line with SFM.

Action 8: Enhance direct payments for environmental public goods in the EU Common Agricultural Policy

- 8a) The Commission will propose that CAP direct payments will reward the delivery of environmental public goods that go beyond cross-compliance (e.g. permanent pasture, green cover, crop rotation, ecological set-aside, Natura 2000).
- 8b) The Commission will propose to improve and simplify the GAEC (Good Agricultural and Environmental Conditions) cross-compliance standards and consider including the Water Framework Directive within the scope of cross-compliance once the Directive has been implemented and the operational obligations for farmers have been identified in order to improve the state of aquatic ecosystems in rural areas.

Action 9: Better target Rural Development to biodiversity conservation

- 9a) The Commission and Member States will integrate quantified biodiversity targets into Rural Development strategies and programmes, tailoring action to regional and local needs.
- 9b) The Commission and Member States will establish mechanisms to facilitate collaboration among farmers and foresters to achieve continuity of landscape features, protection of genetic resources and other cooperation mechanisms to protect biodiversity.

Action 10: Conserve Europe's agricultural genetic diversity

- 10) The Commission and Member States will encourage the uptake of agri-environmental measures to support genetic diversity in agriculture and explore the scope for developing a strategy for the conservation of genetic diversity.

Action 11: Encourage forest holders to protect and enhance forest biodiversity

- 11a) Member States and the Commission will encourage the adoption of Management Plans,³¹ inter alia through use of rural development measures³² and the LIFE+ programme.

³¹ SFM requires wider use of management plans or equivalent instruments. 23 Member States already have more than 60% of their forested areas under such plans.

³² As set out in Council Regulation 1698 (2005).

- 11b) Member States and the Commission will foster innovative mechanisms (e.g. Payments for Ecosystem Services) to finance the maintenance and restoration of ecosystem services provided by multifunctional forests.

Action 12: Integrate biodiversity measures in forest management plans

- 12) Member States will ensure that forest management plans or equivalent instruments include as many of the following measures as possible:
- maintain optimal levels of deadwood, taking into account regional variations such as fire risk or potential insect outbreaks;
 - preserve wilderness areas;
 - ecosystem-based measures to increase the resilience of forests against fires as part of forest fire prevention schemes, in line with activities carried out in the European Forest Fire Information System (EFFIS);
 - specific measures developed for Natura 2000 forest sites;
 - ensuring that afforestation is carried out in accordance with the Pan-European Operational Level Guidelines for SFM³³, in particular as regards the diversity of species, and climate change adaptation needs.

TARGET 4: ENSURE THE SUSTAINABLE USE OF FISHERIES RESOURCES

Achieve Maximum Sustainable Yield (MSY) by 2015. Achieve a population age and size distribution indicative of a healthy stock, through fisheries management with no significant adverse impacts on other stocks, species and ecosystems, in support of achieving Good Environmental Status by 2020, as required under the Marine Strategy Framework Directive.

Action 13: Improve the management of fished stocks

- 13a) The Commission and Member States will maintain and restore fish stocks to levels that can produce MSY in all areas in which EU fish fleets operate, including areas regulated by Regional Fisheries Management Organisations, and the waters of third countries with which the EU has concluded Fisheries Partnership Agreements.
- 13b) The Commission and Member States will develop and implement under the CFP long-term management plans with harvest control rules based on the MSY approach. These plans should be designed to respond to specific time-related targets and be based on scientific advice and sustainability principles.
- 13c) The Commission and Member States will significantly step up their work to collect data to support implementation of MSY. Once this objective is attained, scientific advice will be sought to incorporate ecological considerations in the definition of MSY by 2020.

Action 14: Eliminate adverse impacts on fish stocks, species, habitats and ecosystems

- 14a) The EU will design measures to gradually eliminate discards, to avoid the by-catch of unwanted species and to preserve vulnerable marine ecosystems in accordance with EU legislation and international obligations.
- 14b) The Commission and Member States will support the implementation of the Marine Strategy Framework Directive, including through providing financial incentives through the future financial instruments for fisheries and maritime policy for marine

³³ <http://www.foresteurope.org/>.

protected areas (including Natura 2000 areas and those established by international or regional agreements). This could include restoring marine ecosystems, adapting fishing activities and promoting the involvement of the sector in alternative activities, such as eco-tourism, monitoring and managing marine biodiversity, and combating marine litter.

TARGET 5: COMBAT INVASIVE ALIEN SPECIES

By 2020, Invasive Alien Species (IAS) and their pathways are identified and prioritised, priority species are controlled or eradicated, and pathways are managed to prevent the introduction and establishment of new IAS.

Action 15: Strengthen the EU Plant and Animal Health Regimes

- 15) The Commission will integrate additional biodiversity concerns into the Plant and Animal Health regimes by 2012.

Action 16: Establish a dedicated instrument on Invasive Alien Species

- 16) The Commission will fill policy gaps in combating IAS by developing a dedicated legislative instrument by 2012.

TARGET 6: HELP AVERT GLOBAL BIODIVERSITY LOSS

By 2020, the EU has stepped up its contribution to averting global biodiversity loss.

Action 17: Reduce indirect drivers of biodiversity loss

- 17a) Under the EU flagship initiative on resource efficiency, the EU will take measures (which may include demand and/or supply side measures) to reduce the biodiversity impacts of EU consumption patterns, particularly for resources that have significant negative effects on biodiversity.
- 17b) The Commission will enhance the contribution of trade policy to conserving biodiversity and address potential negative impacts by systematically including it as part of trade negotiations and dialogues with third countries, by identifying and evaluating potential impacts on biodiversity resulting from the liberalisation of trade and investment through ex-ante Trade Sustainability Impact Assessments and ex-post evaluations, and seek to include in all new trade agreements a chapter on sustainable development providing for substantial environmental provisions of importance in the trade context including on biodiversity goals.
- 17c) The Commission will work with Member States and key stakeholders to provide the right market signals for biodiversity conservation, including work to reform, phase out and eliminate harmful subsidies at both EU and Member State level, and to provide positive incentives for biodiversity conservation and sustainable use.

Action 18: Mobilise additional resources for global biodiversity conservation

- 18a) The Commission and Member States will contribute their fair share to international efforts to significantly increase resources for global biodiversity as part of the international process aimed at estimating biodiversity funding needs and adopting resource mobilisation targets for biodiversity at CBD CoP11 in 2012³⁴.

³⁴ As set out in CoP10 Decision X/3.

- 18b) The Commission will improve the effectiveness of EU funding for global biodiversity inter alia by supporting natural capital assessments in recipient countries and the development and/or updating of National Biodiversity Strategies and Action Plans, and by improving coordination within the EU and with key non-EU donors in implementing biodiversity assistance/projects.

Action 19: ‘Biodiversity proof’ EU development cooperation

- 19) The Commission will continue to systematically screen its development cooperation action to minimise any negative impact on biodiversity, and undertake Strategic Environmental Assessments and/or Environmental Impact Assessments for actions likely to have significant effects on biodiversity.

Action 20: Regulate access to genetic resources and the fair and equitable sharing of benefits arising from their use

- 20) The Commission will propose legislation to implement the Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilisation in the European Union so that the EU can ratify the Protocol as soon as possible and by 2015 at the latest, as required by the global target.