

Environment, Planning and Countryside Committee

EPC(2) 12-06(p6)

Date: 28 September 2006
Time: 9.30am
Venue: Committee Room 2, Senedd, Cardiff Bay
Title: EU Biodiversity Policy Document

Purpose

To consider the implications of the European Commission Communication on Biodiversity.

Introduction

1. On Monday 22 May 2006, to correspond with the international day of biodiversity, the European Commission adopted its long-awaited Communication on biodiversity. The Environment and European Council conclusions have pressed the EU to making progress in meeting the commitment to halt the loss of biodiversity by 2010, but there has so far been limited concrete action to integrate biodiversity into other relevant policy streams. The Communication marks a renewed focus on biodiversity as a priority.
2. The Communication presents a new EU action plan, intended to complement the 1998 EU biodiversity strategy and 2001 action plans. It acknowledges that implementation of these measures 'has been insufficient', but stresses that it is still possible to halt EU biodiversity loss by 2010, but efforts must be urgently accelerated.
3. The plan proposes actions and targets in four key policy areas:
 - Biodiversity in the EU
 - Global biodiversity
 - Biodiversity and climate change; and
 - Improving the knowledge base.

Background

2. In 2001, EU Heads of State and Government agreed to halt the decline of biodiversity in the EU by 2010. Beyond halting the loss of biodiversity, and in acknowledgement of the degraded state of biodiversity in the EU, they also set an objective to secure the recovery of habitats and natural systems. In 2002, the CBD adopted its strategic plan that includes the overall target to significantly reduce the rate of biodiversity loss by 2010. This target was

subsequently endorsed by 130 world leaders (including EU Heads of State and Government) at the World Summit on Sustainable Development.

3. In 2003, the Commission initiated a broad stakeholder process for assessment of the implementation, effectiveness and appropriateness of the EC Biodiversity Strategy and Action Plans involving the Commission services concerned, Member States, the [then] Accession Countries and civil society. The review process culminated in May 2004 in a stakeholder conference under the Irish Presidency at Malahide, Ireland. The main output of the conference was the Message from Malahide, which presented an unprecedented degree of consensus on priority objectives and detailed targets designed to meet the EU commitment on biodiversity and to optimise the EU contribution to the global commitment. The Message also presented a first set of headline biodiversity indicators to monitor progress towards the 2010 commitments.
4. The Environment Council agreed, in June 2004, Council Conclusions taking note of the Message from Malahide (annex 1), and calling on the Commission to report to Council and Parliament taking into account the findings of the policy review process and in particular the Message. The Council also highlighted a number of issues identified in the Message and encouraged Member States to act on these. The need for accelerated action to meet the 2010 target was also reiterated by EU Heads of State and Government at the European Council of June 2004 which notably linked this target to the Lisbon Reform Agenda.
5. In response, the Commission considered three possible policy approaches:-
 - i) Business as usual – that is, ongoing implementation of existing instruments, with no attempt to prioritise action to meet the political commitments;
 - ii) EU Action Plan – development of a focused EU Action Plan to 2010 and beyond, addressed to the Community and to Member States, created by deconstructing the 2010 commitments into a clear set of prioritised targets and actions, and apportioning responsibility for delivery between Commission, Member States and other stakeholders;
 - iii) EU Action Plan plus regulation – as for ii), but in addition the rapid introduction of new legislation.
4. The business as usual approach was discarded as it was clear that this was inconsistent with the Council calls for accelerated action, and would not deliver on the political commitments to halt the loss of biodiversity. The regulatory approach was also discarded because the introduction of new legislation would take several years, and so could not have any significant impact on halting the loss of biodiversity by 2010, and because there is as yet

insufficient evidence to suggest that the existing legal framework is inadequate. The Commission prefers the second approach of a focused EU Action Plan to 2010 and beyond. This was also strongly supported throughout wide consultation.

5. The existing EC Biodiversity Strategy and Action Plans form a community strategy while each Member State has pursued its own national strategy and action plans. These all take as their starting point the Convention on Biological Diversity, and so may be expected to address similar concerns, but there has been no concerted effort to ensure coherence and complementarity. The EU Action Plan provides a single action plan for both Community and Member States, and apportions responsibility for these actions at Community and Member State levels. It is a single inter-sectoral and horizontal plan, in contrast to the existing separate sectoral action plans, providing an overview of priority actions in all relevant sectors and horizontal policy areas. It is also oriented towards biodiversity outcomes, and has a clear set of indicators.

Recommendations

10. It proposes ten priority objectives in relation to these:

1. To safeguard the EU's most important habitats and species;
2. To conserve and restore biodiversity and ecosystem services in the wider EU countryside;
3. To conserve and restore biodiversity and ecosystem services in the wider EU marine environment;
4. To reinforce compatibility of regional and territorial development with biodiversity in the EU;
5. To substantially reduce the impact on EU biodiversity of invasive alien species and alien genotypes;
6. To substantially strengthen effectiveness of international governance for biodiversity and ecosystem services;
7. To substantially strengthen support for biodiversity and ecosystem services in EU external assistance;
8. To substantially reduce the impact of international trade on global biodiversity and ecosystem services;
9. To support biodiversity adaptation to climate change;
10. To substantially strengthen the knowledge base for conservation and sustainable use of biodiversity, in the EU and globally.

11. The long-term aim of this Communication is the conservation and sustainable use of biodiversity – and thereby the maintenance of ecosystem services for human well-being. The short to medium term aims are:

- to reinforce EU actions to halt the loss of biodiversity in the EU by 2010;

- to optimise the EU contribution towards significantly reducing the rate of biodiversity loss worldwide by 2010; and
- to accelerate progress towards the recovery of habitats and natural systems in the EU over the period to 2013.

12. It provides the European institutions and public with information on the impacts of biodiversity loss and of proposed measures to halt the loss and secure the long-term recovery of biodiversity.

Wales Response

13. The Welsh Assembly Government is taking forward its responsibilities in this area as a key element of the Environment Strategy. The Strategy was published on 17 May 2006 and provides the framework within which to achieve an environment, which is clean, healthy, biologically diverse and valued by the people of Wales.

14. Five key Biodiversity actions from the Wales Environment Strategy will help to contribute towards the achievement of the 10 EU priorities listed in para 4:

4. The Wales Biodiversity Partnership is being reconfigured to provide an improved leadership role and an expert steer on priorities for action on biodiversity in Wales.
5. We are developing a Biodiversity Framework for Wales explaining the roles, remits and processes essential to biodiversity conservation and enhancement in Wales.
6. We aim to bring designated sites into favourable or recovering condition through a suite of measures aimed at delivering more sympathetic management. One of the measures includes a plan produced by CCW that will refocus existing expenditure in order to bring international sites and SSSIs into favourable management. We will implement the plan immediately it is produced and agreed.
7. We aim to seek broadly defined powers within the proposed Marine Bill so that Wales can develop a distinct approach to marine issues. We are developing proposals for, and will consult widely on, a detailed framework for the management of the seas around Wales based on an ecosystem approach following publication of the Bill.
8. We aim to produce a climate change adaptation action plan, which sets out what actions will be taken to adapt to the impacts of climate change in Wales.

15. In addition, progress towards the 2010 targets will be further aided by the Natural Environment and Rural Communities Act 2006, which extends the Countryside and Rights of Way Act 2000, Section 74 'biodiversity duty' to all public bodies and statutory undertakers in Wales. The duty requires all bodies to take biodiversity into consideration in all decision making. Every public authority must, in exercising its functions, have regard, so far, as is consistent with the proper exercise of those functions, to the purpose of conserving biodiversity. It is intended to clarify current requirements and allow authorities to strike an appropriate balance in carrying out their functions in the context of conserving biodiversity.
16. We are pleased to see the publication of the Communication, and will take the opportunity it affords to look closely at the actions and targets, comparing these to current plans with the aim of identifying any gaps and to increase coherence of Wales implementation action.

Action for Committee

6. The Committee is asked to note the paper and the latest position, and to note the contribution of the five key Biodiversity actions from the Wales Environment Strategy, and the NERC biodiversity duty, in making progress against biodiversity targets.

Carwyn Jones
Minister for Environment, Planning and Countryside

Contact Point: Michelle Calnan, Nature Conservation & Biodiversity, Tel: 029 2082 5250

Stakeholders' Conference

Biodiversity and the EU - Sustaining Life, Sustaining Livelihoods

Grand Hotel, Malahide, Ireland

25-27 May 2004

MALAHIDE/MP/Message-final-rev2

FINAL

MESSAGE FROM MALAHIDE

**HALTING THE DECLINE OF BIODIVERSITY -
PRIORITY OBJECTIVES AND TARGETS FOR 2010**

27 May 2004

Final version

EXECUTIVE SUMMARY

- *Despite substantial action, **biodiversity loss continues at alarming rates.** This loss **threatens to undermine economic and social progress** in Europe and worldwide.*
- *The European Council has repeatedly recognised that **reinforced action is urgently required** if the EU is to meet the commitments made to halt the loss of biodiversity in the EU by 2010, and to significantly reduce the rate of loss of biodiversity by 2010.*
- *This action needs to be carefully directed so that it has the desired effect and so that resources are used as cost-effectively as possible.*
- *The conference ‘Biodiversity and the EU – Sustaining Life, Sustaining Livelihoods’ was convened by the Irish Presidency 25-27 May 2004 in Malahide, Ireland, to address these concerns.*
- *The 230 participants were drawn from 22 Member States and represented key stakeholders from the environmental, agriculture, fisheries, business and development communities.*
- *The conference built on a broad, in-depth, year-long consultative review of progress in the implementation of the EC Biodiversity Strategy and Action Plans coordinated by the Commission.*
- *This ‘Message from Malahide’ comprises **an unprecedented level of consensus on priority objectives to meet the 2010 commitments.** It provides key targets attached to each objective which clarify where the EU needs to get to by 2010.*
- ***It is now imperative that all key stakeholders respond effectively to this Message.***
- *At the EU level, the **Council** should provide the leadership needed to enable **the Commission** to put the resources and instruments in place and to provide coordination at the EU level.*
- ***Member States** have a responsibility to ensure their actions compliment those taken at the EU level, and to ensure effective implementation on the ground within their own territories.*
- ***Civil society** also has critical roles to play in mobilising the engagement of the private sector and the general public.*

PREAMBLE

1. Content, background, status and organisation of this document

1.1 Content of this document

This *Message from Malahide* is the output of the stakeholder conference entitled '*Biodiversity and the EU – Sustaining Life, Sustaining Livelihoods*' held under the Irish Presidency in Malahide, Ireland from 25th to 27th May 2004.

This document presents priority objectives and detailed targets designed to meet the EU commitment to 'halt the decline of biodiversity by 2010'¹, and to optimise the EU contribution to the global commitment to 'the achievement by 2010 of a significant reduction in the current [2002] rate of loss of biological diversity.'² All targets are to be achieved by 2010 except where otherwise specified. Annex 1 presents a first set of headline biodiversity indicators to monitor progress towards the 2010 commitments. Annex 2 presents a declaration and recommendations on biodiversity research.

1.2 Background

The Malahide conference was organised to finalise a year long consultative process overseen by the European Commission. This process was designed to assess the implementation, effectiveness and appropriateness of the European Community Biodiversity Strategy³ (ECBS) and its four Biodiversity Action Plans⁴ (BAPS) and to identify priorities towards meeting the 2010 commitments.

In the year preceding Malahide, consultation had taken place through five working groups (one for each action plan, and a fifth addressing indicators) under the supervision of the EC's Biodiversity Expert Group and facilitated by the EC Directorate Generals for Environment, Agriculture, Fisheries and Development. Conference deliberations were informed by the substantial products from these working groups.⁵

The research community was engaged through the European Platform for Biodiversity Research Strategy (EPBRS) and in particular through the Irish Presidency meeting of the EPBRS entitled '*Sustaining Livelihoods and Biodiversity – Attaining the 2010 targets in the European Biodiversity Strategy*' held in Killarney from 21st to 24th May 2004⁶. The Killarney

¹ Presidency Conclusions, Goteborg Council, 15 and 16 June 2001. SN/200/1/01 REV1, page 8. <http://ue.eu.int/newsroom/newmain.asp?lang=1>

² Convention on Biological Diversity Decision VI/26 Annex (Strategic Plan) paragraph 11, <http://www.biodiv.org/decisions/default.aspx?m=COP-06&id=7200&lg=0;> and World Summit for Sustainable Development, Plan of Implementation, Paragraph 44. http://www.un.org/esa/sustdev/documents/WSSD_POI_PD/English/POIToc.htm

³ European Community Biodiversity Strategy. COM(1998) 42 final. <http://europa.eu.int/comm/environment/docum/9842sm.htm>

⁴ European Community Biodiversity Action Plans in the Areas of Conservation of Natural Resources, Agriculture, Fisheries, and Development and Economic Cooperation. COM(2001)162final, Vols I-V: http://europa.eu.int/eur-lex/en/com/pdf/2001/com2001_0162en.html

⁵ Conference papers are available at: http://www.ue2004.ie/templates/meeting.asp?sNavlocator=5,418,13&list_id=193

⁶ See meeting website at: <http://www.biodiversityresearch.ie/DesktopDefault.aspx?tabid=112>

meeting adopted a declaration and recommendations on biodiversity research which were subsequently endorsed at Malahide (Annex 2). Malahide was attended by 230 participants representing a wide range of interests including delegates from 22 Member States, 1 non-Member State (Norway), conservation agencies and non-governmental organisations, and representatives of key economic sectors including agriculture, forestry, fisheries and industry. The objectives and targets were evolved in four broadly-based working groups, each drawing membership from these various interest groups.

While not all participants have given their individual agreement to each objective and target, a remarkably high degree of consensus was achieved on all 18 objectives and 97 targets. One additional target (on fishing capacity) was discussed, but there was no general agreement on its inclusion.

A full report of the Conference including a list of participants is in preparation⁷.

1.3 Status of this document

While the content of this document does not have the status of inter-governmental agreement, the depth and breadth of the consultative process which underlies it, the level of expertise engaged, and the remarkable degree of consensus obtained in Malahide lends it considerable weight. This has since been further enhanced by the European Environment Council's request that the Commission report on progress towards the 2010 commitments taking into account the Message from Malahide⁸.

1.4 Organisation of the objectives and targets

For ease of cross-reference, the objectives and targets in this document are organised according to the sectors and themes of the Biodiversity Strategy, with the addition of one new sector (international trade) and one new theme (international environmental governance).

2. The 2010 targets and existing biodiversity policy

2.1 EU biodiversity policy

In 2001, EU Heads of State and Government made a commitment at the EU's Spring Summit in Gothenburg to 'halt the decline of biodiversity by 2010'⁹. In 2002, world leaders agreed at the Sixth Meeting of the Conference of the Parties to the Convention on Biological Diversity (CBD) and, subsequently, at the World Summit on Sustainable Development (WSSD) to 'the achievement by 2010 of a significant reduction in the current rate of loss of biological diversity.'¹⁰

The same Gothenburg Council also adopted the EU Sustainable Development Strategy (which contains the headline objective "to protect and restore habitats and natural systems and halt the loss of biodiversity by 2010") and the Sixth Environmental Action Programme (6th EAP) which indicates priorities for the environmental dimension of the Sustainable Development Strategy. Nature and biodiversity are one of the four

⁷ Conference report will be posted when available at:
http://www.ue2004.ie/templates/meeting.asp?sNavlocator=5,418,13&list_id=193

⁸ 'Halting the loss of biodiversity by 2010' - Council Conclusions adopted 28 June 2004, Luxembourg.

⁹ Presidency Conclusions, Goteborg Council, 15 and 16 June 2001. SN/200/1/01 REV1, page 8.
<http://ue.eu.int/newsroom/newmain.asp?lang=1>

¹⁰ See footnote 2

priorities of the 6th EAP, and the 6th EAP specifies the full implementation of the EC Biodiversity Strategy and Action Plans as a key measure towards meeting the 2010 commitment.

The EC Biodiversity Strategy, adopted in 1998, was developed to meet the EC's obligations as a Party to the Convention on Biological Diversity. The Strategy provides a comprehensive response to the many requirements of the CBD. The four Biodiversity Action Plans (for the Conservation of Natural Resources, for Agriculture, for Fisheries, and for Economic and Development Co-operation) lay out in detail what actions should be taken to implement the Strategy in specific areas of Community activity.

2.2 ***Pan-European biodiversity policy***

Pan-European biodiversity policy has been developed under the Environment for Europe process and in particular through the Pan-European Biological and Landscape Diversity Strategy (PEBLDS)¹¹. In 2003, the 5th Environment for Europe Ministerial Conference agreed the Kyiv Resolution on Biodiversity¹², which extended the EU target of halting the loss of biodiversity by 2010 to the pan-European region. Through this Resolution, the Ministers made a commitment to achieve a number of targets in key areas for biodiversity conservation through national efforts and regional co-operation. PEBLDS has adopted action plans for activities to achieve these targets in the pan-European region, with special focus on Eastern Europe, the Balkans, the Caucasus and Central Asia¹³.

3. **The need for reinforced action**

The 2003 Spring Council Conclusions¹⁴ (§ 54) note that “despite some progress, the worrying trends [in natural resources degradation] observed when the [Sustainable Development] Strategy was launched *have not been reversed*, and a new impetus must therefore be given” and “*urges the Council to accelerate work towards a more responsible management of natural resources, including action to meet the 2010 targets for biodiversity.*”

The Malahide Conference information paper on ‘The State of Biological Diversity in the EU’¹⁵ prepared by the EEA indicates that there is continuing loss of biodiversity in the EU. Many reports indicate alarming rates of loss globally. This loss matters; biodiversity has important social, economic, scientific, educational, cultural, recreational, aesthetic and intrinsic values¹⁶.

The ECBS requires the Commission to make an assessment of implementation, effectiveness and appropriateness of the ECBS and BAPs and to report to Council and Parliament every three years. The assessment carried out through a consultative review process in the year leading up to the Malahide Conference has found that, while there have been some successes in implementation, there have also been shortfalls. Further, the review has highlighted the need to address next steps with respect to most actions laid down in the BAPs. But perhaps most importantly, the review found that current EU biodiversity policy is missing a key

¹¹ See PEBLDS website at: <http://www.strategyguide.org/>

¹² Available under the title ‘Kyiv Declaration’ on the following web page: <http://www.strategyguide.org/kyiv.html#form>

¹³ Available at: <http://www.strategyguide.org/stradocs.html>

¹⁴ Presidency Conclusions, Brussels European Council, 20 and 21 March 2003.

¹⁵ MALAHIDE/INF/2 ‘The state of biological diversity in the EU’. European Environment Agency.

¹⁶ MALAHIDE/INF/1 ‘The value of biodiversity: insights from ecology, ethics and economics.’

element if we are to meet the 2010 targets, namely, *a clear sense of priority which has broad-based agreement among key stakeholders*. In a world of competing demands, resources – in terms of political will, public support, human resources and funding – are limited.

4. Some overarching considerations

4.1 Financing

A recurrent theme at the Conference, particularly in the context of the ongoing preparation of the EU's budget for the period 2007-2013, was *the need to allocate sufficient financial resources for the implementation of key measures*, including in particular the Natura 2000 network, and the further integration of biodiversity into the Common Agricultural Policy (CAP), Common Fisheries Policy (CFP), Cohesion Policy, the Seventh Framework Programme for Research and Technological Development, and EU economic and development co-operation.

4.2 Impacts on third countries

The Conference recognized that the Community responsibilities are not restricted to action within Europe. Europe has a profound impact on biodiversity across the globe and these conclusions reflect acceptance of the need to address these issues. For this reason, provision should be made for the involvement of developing countries and other relevant stakeholders in the follow-up process.

4.3 Ecosystem approach and biodiversity stewardship

The Conference placed particular emphasis on the need to adopt an ecosystem approach¹⁷. Moreover, integration of biodiversity concerns into the policies and actions in a wide variety of economic sectors represents a critical element of the conclusions. The theme of the Conference, 'Sustaining Life, Sustaining Livelihoods', itself recognised the integral relationship between biodiversity protection and the well-being of our society. Implementation of future policies and actions should recognise the fact that much of European biodiversity has its origin in traditional land management practices - it will be critical that future policies support the continuation of this stewardship of our biodiversity by farmers, foresters, landowners, agricultural workers and fishermen.

4.4 Public awareness

The Conference identified the promotion of broader public awareness, understanding and support for the conservation and sustainable use of biodiversity as a critical overarching issue. There is an urgent need to mobilise public opinion in support of biodiversity. Until the person in the street understands that biodiversity provides for his/her wellbeing and that decisions he/she makes and actions he/she takes impact on biodiversity's ability to do so, the 2010 targets will simply not be achieved. There is a need for greater public understanding of the economic importance of biodiversity (for example in providing raw materials for manufacturing, medicines, etc and supporting agriculture, forestry and fisheries) as well as its many other values. We also need to change a frequently held perception of the public, businesses and other key stakeholders that halting the loss of biodiversity threatens economic development. We need to get the message across that biodiversity:

¹⁷

As defined by the Convention on Biological Diversity Decision V/6 available at: <http://www.biodiv.org/decisions/default.aspx?m=COP-05&id=7148&lg=0>

- is essential for sustaining human life and well-being;
- is critical in sustaining livelihoods; and
- has a vital role as a provider of natural capital, goods and services underpinning the Lisbon Agenda across all sectors.

In this regard, the Malahide conference welcomed the **Countdown 2010** initiative which was inspired by IUCN – The World Conservation Union and launched by a partnership of civil society organisations at the conference.

5. Next steps

The Conference, building on the outputs of the consultative review, considers that the EU needs to re-commit itself to full implementation of the EC Biodiversity Strategy if the Gothenburg and WSSD commitments are to be met. The Conference however recommends that resources should be focused on the priority objectives identified in this document, where action is felt most likely to result in substantial movement towards the 2010 targets. Specific targets are attached to each objective to ensure clarity of what has to be achieved by 2010 (or before that date as appropriate). Additionally, a set of headline biodiversity indicators, consistent with the framework adopted under the CBD¹⁸ (Annex 1) are proposed as a basis for monitoring and reporting on progress.

The weakness of implementation to date argues the case for re-enforcement of implementation arrangements. Member States are seen to have a particular responsibility in this respect. Not only do they have to implement their own direct competencies but they are also responsible for the detailed implementation of most Community policies. A concern was expressed at the lack of coherence between the Community's Strategy and those adopted or under preparation by the Member States.

The Conference addresses its conclusions to the Community institutions, Member States and society at large. It recommends that the new Commission, which takes up its duties in November 2004, should give priority to consideration of how the priorities and targets can be incorporated across the Commission into its future priorities and work programmes.

6. Concluding remarks

The CBD COP6 and the WSSD established a new momentum by giving global political support at the highest level to biodiversity and recognised that it is essential for sustainable development. They set an ambitious target: to *significantly reduce* the current [2002] rate of biodiversity loss by 2010. The EU has made a commitment to *halt* the loss of biodiversity within the EU by 2010. We are at the dawn of a new, enlarged EU, bringing new biodiversity riches to the EU but presenting a yet greater challenge if we are to meet the 2010 target. We have little more than 5 years left to meet this challenge. Setting and delivering priorities is a chance for the EU to take leadership, to signal to the rest of the world that our words have substance, and are not merely pious hopes. As pointed out by Margot Wallstrom, Environment Commissioner, in her speech to

¹⁸ Convention on Biological Diversity, Decision VII/30 (Strategic Plan: future evaluation of progress) <http://www.biodiv.org/decisions/default.aspx?m=COP-07&id=7767&lg=0>

Malahide, the stakes are high - the challenge ahead of us is to conserve and use in a sustainable manner the variety of life on earth; our very livelihoods as well as those of our children and our children's children depend on it.

**SECTOR 1: CONSERVATION AND SUSTAINABLE USE OF
NATURAL RESOURCES**

OBJECTIVE 1: To ensure conservation of Europe's most important wildlife habitats and species within a thriving wider environment.***2010 and earlier targets***

- 14.1 Natura 2000 network completed on land by 2005, marine sites by 2008 and management objectives for all sites agreed and instigated by 2010.
- 14.2 Natura 2000 contributes to the establishment of effectively managed, comprehensive and ecologically representative networks of protected areas at land and at sea, integrated into a global network.
- 14.3 Arrangements established which ensure adequate and guaranteed community co-financing for the Natura 2000 network. This should include *inter alia* the enhancement of Life-Nature funding in the new Financial Instrument for the Environment alongside enhanced funding from the structural and rural development funds. These funds should be accessible to all those who manage Natura 2000 sites. Funds should also promote awareness raising and networking initiatives.
- 14.4 Appropriate protection status, management and adequate financial support identified and provided to areas of biodiversity importance in parts of the EU not covered by the Habitats and Birds Directives.
- 14.5 Action plans prepared and implemented to enhance the status of those species under particular threat, with a view to establishing their favourable conservation status.
- 14.6 Scientific review of the annexes of the Birds and Habitats Directives initiated in 2008 following the next periodic reports of these Directives.
- 14.7 Article 6 (avoidance of damages to Natura 2000 sites) of the Habitats Directive fully transposed into national legislation and planning policies, and routinely implemented; where development proposals cannot avoid damage to sites, special effort given to the adequate design and implementation of compensation measures.
- 14.8 Protected areas integrated into broader landscapes and seascapes by applying the ecosystem approach, and where appropriate, developing tools for ecological connectivity, such as ecological corridors.
- 14.9 Support strengthened for *ex situ* conservation programmes which are operated in line with best practice.

OBJECTIVE 2: To ensure that biodiversity concerns are fully recognised in the conception and implementation of community legislation and instruments in both environment and other sectors.

2010 targets

- 18.1 Integration of biodiversity concerns in the further development and implementation of horizontal environmental legislation and instruments ensured, in particular regarding water, soils, marine, liability, eco-labelling, Environmental Monitoring and Audit Schemes (EMAS), IPP, Precautionary Principle, Environmental Impact Assessment, Strategic Environmental Assessment, Århus, chemicals and GMOs.
- 18.2 In the conception and development of broader EU policies, assessment of the likely impacts on biodiversity carried out so as to ensure that these policies do not prejudice achievement of the Gothenburg target.

OBJECTIVE 3: To develop and implement measures for the prevention and control of invasive alien species and alien genotypes.

2010 and earlier targets

- 15.1 Strategy on IAS adopted by 2005, taking into account the CBD's guiding principles on IAS, considering potential legal instruments, and identifying priorities for eradication programmes and measures capable of the prevention of further intentional or non-intentional introductions of potential IAS.
- 15.2 MS encouraged to develop national strategies by 2007 and implement them fully by 2010.
- 15.3 Adequate funding provided in the 7th Framework Programme and from national sources for research on the extent and scale of IAS and possible solutions to the problems they cause.
- 15.4 Ratification by MS of the International Convention for the Control and Management of Ship's Ballast Water and Sediments under the IMO encouraged.
- 15.5 Early warning system established for the prompt exchange of information between neighbouring countries on the emergence of IAS and cooperation on control measures across national boundaries.

OBJECTIVE 4: To prevent or minimise the negative impacts on biodiversity and optimise opportunities to benefit biodiversity, in relation to climate change adaptation and mitigation.

2010 and earlier targets:

- 16.1 Commitments made under the Kyoto Protocol respected, and further ambitious measures agreed in line with the long-term Intergovernmental Panel on Climate Change (IPCC) assessments.
- 16.2 All climate change adaptation and mitigation measures assessed to ensure they have no negative impacts and, wherever possible, provide positive benefits to biodiversity.
- 16.3 The ecological connectivity of Natura 2000 network supported in order to achieve or maintain favourable conservation status of species and habitats in the face of climate change, including the promotion of cross-border ecological corridors between the EU and neighbouring states.
- 16.4 Habitats and species most at risk from climate change assessed by 2007, and appropriate management plans subsequently prepared.

SECTOR 2: AGRICULTURE

OBJECTIVE 5: To further integrate biodiversity issues into the Common Agricultural Policy in order that the agricultural sector can fulfil its contribution to the 2010 biodiversity target

2010 and earlier targets

Within the Rural Development context

- 1.1 The Rural Development Regulation strengthened within the Financial Perspectives 2007-2013 including its funding and in particular those measures including Less Favoured Areas and areas with environmental restrictions and agri-environment that contribute to the delivery of biodiversity.
- 1.2 High Nature Value areas (including the Natura 2000 network) threatened with loss of biodiversity and abandonment identified, and measures to address those threats provided.
- 1.3 Habitats and species in other agricultural areas also at risk of biodiversity loss identified and support for their protection provided.
- 1.4 High-Nature Value areas and traditional farming systems included in Less Favoured Areas and their continued support provided for.
- 1.5 Rural Development support underpinned by identified Good Farming Practices that provide a basic level of protection for biodiversity.
- 1.6 Agri-environmental schemes – in addition to their other tasks – specifically targeted to provide positive incentives for biodiversity conservation in the longer-term;
- 1.7 Extension services and farm advisory system broadened, and biodiversity training for farmers, land owners and farm workers strengthened.

Within the market pillar

- 1.8 Provisions of the 2003 CAP reform (eg. decoupling, national envelope, Single Farm Payment) implemented in such a way as to benefit biodiversity.
- 1.9 Cross-compliance effectively implemented in ways that benefit biodiversity, including possible extension of scope following its evaluation in 2007.

Genetic resources

- 1.10 Measures in place to ensure the conservation and availability for use of genetic resources, and in-situ conservation (varieties, breeds and races)¹⁹ promoted.

¹⁹ This includes the Community commitment to the International Treaty on Plant Genetic Resources for Food and Agriculture.

Monitoring and evaluation

- 1.11 Effectiveness of rural development and key market policy reform measures (single farm payment, cross-compliance, national envelopes etc) for biodiversity monitored and evaluated.

SECTOR 3: FORESTRY

OBJECTIVE 6: To conserve and enhance biodiversity through sustainable forest management at national, regional and global levels.

2010 and earlier targets

National and EU level

- 1.1 Biodiversity considerations fully integrated with economic and social considerations in implementation of sustainable forest management.
- 1.2 Forest species and habitats listed under the Birds and Habitats Directives in favourable conservation status.
- 1.3 Adequate financial support secured for the conservation of forest biodiversity both inside and outside Natura 2000 sites by 2007.
- 1.4 Biodiversity of all ancient and semi-natural woodland of significant importance secured.
- 1.5 No overall long-term negative impact of afforestation and deforestation on biodiversity in EU from 2004.

Global level

- 1.6 Wood imported by the EU derived only through sustainable forest management.
- 1.7 EU imports driving deforestation identified and reduced.
- 1.8 Bilateral agreements made between the EU and the major timber exporting countries with the aim of supporting forest law enforcement, governance and trade (FLEGT).

SECTOR 4: FISHERIES

OBJECTIVE 7: To further promote conservation and sustainable use of commercial stocks and to continue reduction of adverse impacts of fishing and aquaculture on species and habitats making full use in particular of the CFP instruments.

2010 and earlier targets:

- 1.1 New Regulation on Structural Funds in the field of fisheries, with an increased allocation of funds for investments aiming at environmentally-friendly management adopted by 2006.
- 1.2 Recovery plans prepared and implemented as soon as needed for any stocks outside safe biological limits.
- 1.3 Technical measures, including marine protected areas, effectively implemented to help ensure favourable conservation status of marine habitats and species not commercially exploited, in line with the process initiated at the Dundalk Conference²⁰ including measures aimed at the reduction of unwanted by-catch and of damage to the benthos.
- 1.4 Community Plans of Action on sharks and seabirds adopted by 2006 with progressive implementation thereafter.
- 1.5 Fishery protection measures required for Natura 2000 implementation adopted following CFP procedures.
- 1.6 Restoration programmes for diadromous species (eg. eel, trout, salmon, sturgeon) designed and adopted in collaboration with the appropriate authorities and in close consultation with relevant stakeholders.
- 1.7 Appropriate environmental impact assessment techniques applied to new aquaculture and new fisheries to identify impacts on biodiversity and these assessments acted on from 2004.
- 1.8 Funds made available regularly to undertake assessments of the short- and long-term effects on marine ecosystems of principal fishing and aquaculture techniques and practices.
- 1.9 A strategic plan for making operational the ecosystem-based approach to fisheries management developed and adequately funded as soon as possible.
- 1.10 Reports on progress of environmental integration in the CFP made available by 2005, 2007 and 2009.
- 1.11 Regional Advisory Councils (which will be instrumental for the delivery of biodiversity objectives) established, adequately funded and fully operational by 2005 in order to strengthen stakeholder participation in fisheries management and promote biodiversity awareness.

²⁰ 'Fast-tracking the development of environmentally-friendly fishing methods', Dundalk, Ireland, 2004.

Footnote to targets:

There was discussion of a potential further target to be worded: 'Reduction of fishing capacity facilitated where the exploitation rate exceeds the sustainability of the resource.' There was, however, no agreement on inclusion of such a target.

SECTOR 5: REGIONAL POLICY & SPATIAL PLANNING

OBJECTIVE 8: To ensure that Cohesion policy and spatial planning support conservation and sustainable use of biodiversity.

2010 and earlier targets

- 1.1 Substantial proportion (10%) of structural funds guaranteed under Financial Perspectives 2007-2013 for positive measures for the conservation and sustainable use of biodiversity, in particular to enhance ecological connectivity.
- 1.2 Projects co-financed by structural funds not causing significant negative impact on biodiversity and complying with Community nature and environmental legislation.
- 1.3 All territorial plans subject to Strategic Environmental Assessment Directive take full account of impacts on biodiversity from July 2004.
- 1.4 Spatial plans have ensured the maintenance and enhancement of the ecological functioning of landscapes and of the coherence of the Natura 2000 network.
- 1.5 An Environment Objective established within the Structural Funds to address nature conservation issues in regions of high biodiversity value implemented through the new Regulation for 2007-2013.

**SECTOR 6: ENERGY & TRANSPORT, CONSTRUCTION
& EXTRACTIVE INDUSTRIES**

OBJECTIVE 9: To prevent, minimise and mitigate negative impacts on biodiversity of construction, infrastructure and extractive industries, or related to the use of infrastructure.

2010 and earlier targets

- 17.1 All environmental assessments of transport, energy, urban, industrial and extractive projects under the EIA Directive and/or Art. 6 of the Habitats Directive, take full account of impacts on biodiversity in the authorisation procedure, whether or not the project receives EU financing.
- 17.2 All environmental assessments of transport, energy, urban and industrial and extractive programmes and plans under the SEA Directive take full account of impacts on biodiversity from July 2004.
- 17.3 All new Trans-European Networks (TENs) provide for environmental assessment, taking full account of biodiversity impacts.
- 17.4 All EU pollution and accident prevention legislation and post-Prestige measures fully implemented to schedule.

SECTOR 7: TOURISM

OBJECTIVE 10: To make all tourism sustainable.

2010 targets

- 1.1 All Natura 2000 management arrangements ensure that recreation and educational use of the site is sustainable.
- 1.2 CBD guidelines on sustainable tourism promoted, adopted and implemented as appropriate by key stakeholders.

SECTOR 8: ECONOMIC AND DEVELOPMENT COOPERATION

OBJECTIVE 11: To ensure an improved and measurable contribution of EU economic and development cooperation to achieving the global target ‘to significantly reduce the current [2002] rate of biodiversity loss by 2010’ in support of the Millennium Development Goals.

2010 and earlier targets

- 1.1 EU Regional and Country Strategy Papers and Sectoral Strategy Papers have integrated implementation of the CBD by 2007.
- 1.2 Partner countries²¹ have integrated implementation of the CBD in national development strategies, including Poverty Reduction Strategies by 2007.
- 1.3 EC and Member States funding for supporting implementation in partner countries of the CBD, its work programmes and its Biosafety Protocol, significantly increased by 2007.
- 1.4 Adequate dedicated EU funding secured to support international implementation of the CBD where these actions fall outside development cooperation.
- 1.5 All programmes and projects funded by the EU in partner countries have *ex ante* strategic environmental assessments and environmental impact assessment, and actions are taken to prevent and mitigate negative impacts on biodiversity in a timely manner.
- 1.6 Adequate long term capacity has been established in EU delegations and development cooperation agencies to sustainably achieve the above targets by 2006.
- 1.7 EC and Member States cooperate and coordinate their efforts to support the above targets, with corresponding reporting mechanisms by 2006.
- 1.8 Effective mechanisms are in place to enable NGOs and local communities to access EU funding and to increase synergies between governments, NGOs and the private sector.

²¹ The term “Partner countries” includes Overseas Territories

SECTOR 9: INTERNATIONAL TRADE

OBJECTIVE 12: To contribute to the global 2010 target by promoting ecologically sustainable international trade.

2010 targets

- 1.1 Major negative impacts of trade on third countries' and EU's biodiversity identified, and mechanisms proposed and adopted and action taken to significantly reduce them.
- 1.2 All trade agreements between the EU and third countries avoid or at least mitigate negative effects on biodiversity.
- 1.3 All trade in CITES species effectively controlled to ensure that it is not detrimental to their conservation and sustainable use.
- 1.4 Biodiversity conservation and sustainable use fully integrated into EC trade-related technical assistance and capacity-building activities.
- 1.5 Mutual supportiveness between biodiversity-related agreements and the WTO and other trade-related agreements ensured, consistent with the precautionary principle.

THEME 1: CONSERVATION OF NATURAL RESOURCES

No objective – see Policy Area 1

**THEME 2: SHARING OF BENEFITS, TRADITIONAL
KNOWLEDGE**

OBJECTIVE 13: To ensure the fair and equitable sharing of benefits arising out of the use of genetic resources while promoting their conservation and sustainable use.

2010 and earlier targets

- 1.1 Bonn Guidelines on Access to Genetic Resources and Fair and Equitable Sharing of Benefits Arising out of their Utilisation fully applied in the EU by 2006.
- 1.2 Capacity built in developing countries for the implementation of the ABS provisions of the CBD.
- 1.3 International regime on ABS concluded according to the mandate adopted at COP7.
- 1.4 International Treaty on Plant Genetic Resources for Food and Agriculture effectively implemented by 2007.

OBJECTIVE 14: To ensure the implementation of CBD decisions on knowledge, innovations and practices of indigenous and local communities embodying their traditional lifestyles.

2010 targets

- 1.1 Ensure application of the principle of prior informed consent when commercially using traditional knowledge
- 1.2 Apply the CBD Akwe-Kon Guidelines for projects affecting terrestrial lands of indigenous and local communities both within the EU Member States and in third countries.

THEME 3: RESEARCH, MONITORING AND INDICATORS

OBJECTIVE 15: To implement an agreed set of biodiversity indicators to monitor and evaluate progress towards the 2010 targets, with the potential to communicate biodiversity problems effectively to the general public and to decision-makers and provoke appropriate policy responses.

2010 and earlier targets

- 1.1 *Indicators*: biodiversity headline indicators adopted in 2004, tested, optimised, finalised by 2006; biodiversity indicator adopted in list of Sustainable Development Indicators for reporting on Sustainable Development Strategy by 2004; interim biodiversity structural indicator developed by 2005 and finalised by 2006.
- 1.2 *Monitoring*: use, and if necessary develop, monitoring frameworks (building on existing monitoring approaches and methods including those of civil society) in order to establish adequate harmonised data flows for the biodiversity headline and structural indicators to reveal and communicate key trends from 2006.
- 1.3 *Reporting*: adopt best approaches to streamline national reporting to European Community, pan-European and international agreements from 2006 onwards; headline indicators applied for reporting on progress in implementation of the ECBS and BAPs 2007 and 2010.
- 1.4 *Funding*: adequate financial resources allocated to biodiversity indicators, monitoring, reporting and their coordination.

Note: The Malahide Conference endorsed the first set of biodiversity headline indicators for testing, optimising and finalising in line with target 15.1 (Annex 1)

OBJECTIVE 16: To improve and apply the knowledge base for the conservation and sustainable use of biodiversity.

2010 and earlier targets

Knowledge outcomes

- 1.1 Status²², trends and distribution of all habitats and species of Community Interest and of additional habitats and species of policy relevance known.
- 1.2 Impacts of the most significant pressures²³ on biodiversity for each key sector of the European Community Biodiversity Strategy discriminated,

²² Here 'status' is used to refer to the abundance of species, extent of habitats and the favourable conservation status of habitats and species of Community Interest. Composition and function to be included here.

²³ Pressures include sea- and land-use change, habitat fragmentation, connectivity and destruction, climate change, pollution, including eutrophication and nitrogen deposition, harvesting and hunting pressure, natural and anthropogenic catastrophes, non-indigenous and invasive organisms and emergent diseases, globalisation, trade, consumption patterns, business practices and social conflicts, institutional structures and property rights, loss of genetic diversity and key functional groups (e.g. pollinators and bio-turbators), policy conflicts, and new technologies including GMOs and renewable energy.

ranked and quantified where possible, and prevention and mitigation options developed and tested.

- 1.3 Tools for measuring, anticipating and improving the effectiveness of the most important policy instruments for conservation and sustainable use of biodiversity in each of the sectors of the European Community Biodiversity Strategy developed and applied.

Enabling outcomes

- 1.4 Adequate financial resources (to achieve knowledge and enabling outcomes) allocated by 2006 to European and national biodiversity research and to the dissemination of its results, including sufficient funding under the Community's FP7.
- 1.5 Effective and inclusive European Research Area for biodiversity established, research capacity in key disciplines (e.g. taxonomy) with interdisciplinary and participatory science strengthened by 2008.
- 1.6 Institutional arrangements in place to ensure essential policy-relevant research is done and research outcomes are assimilated by policy-makers.
- 1.7 Common data standards and quality assurance procedures established and promoted to enable interoperability of key European and national biodiversity databases and inventories by 2008.

Note: The Malahide Conference endorsed the Killarney Declaration and EPBRS recommendations on research priorities (Annex 2).

**THEME 4: EDUCATION, TRAINING & AWARENESS,
PARTICIPATION**

OBJECTIVE 17: To reinforce measures for public communication, awareness and participation.

2010 and earlier targets

- 1.1 “El Teide Declaration” implemented through the development of partnerships, involving the broad range of stakeholders in the conservation and management of Natura 2000 sites, the sharing of experience and good practice in managing the Network, the sustainable use and management of Natura 2000 areas for educational and recreational purposes.
- 1.2 Positive dialogue with Member States and stakeholders continued through charters, guidance documents, to improve efficiency of communication channels on the implementation of the Natura 2000 Network and Birds and Habitats Directives.
- 1.3 Ten thematic conferences under the “Countdown 2010” initiative (launched at Malahide in 2004) to halt the loss of biodiversity supported from 2004 to 2010, and parallel processes in other regions, or by other partners encouraged.
- 1.4 Public participation and related access to justice requirements of the Århus Convention applied to projects, and plans and programmes, relating to or having an impact on biodiversity conservation.

THEME 5: INTERNATIONAL ENVIRONMENTAL GOVERNANCE

OBJECTIVE 18: EU contributes to improved international environmental governance to increase implementation of the CBD and other biodiversity related agreements

2010 targets

- 1.1 Coordinated and effective compliance and dispute settlement mechanisms established for all biodiversity related international agreements.
- 1.2 Effectiveness and synergy of implementation of biodiversity-related agreements strengthened through the global partnership for biodiversity.

[Note: while there was preliminary agreement on the need for this objective, the Conference felt there was a need for more thorough examination of the issues and legal context]

ANNEX 1
A FIRST SET OF EU HEADLINE BIODIVERSITY INDICATORS

First set of EU headline biodiversity indicators based on CBD decision and focal areas²⁴

<i>Status and trends of the components of biological diversity</i>
• Trends in extent of selected biomes, ecosystems and habitats
• Trends in abundance and distribution of selected species
• Change in status of threatened and/or protected species
• Trends in genetic diversity of domesticated animals, cultivated plants, and fish species of major socioeconomic importance
• Coverage of protected areas
<i>Sustainable use</i>
• Area of forest, agricultural, fishery and aquaculture ecosystems under sustainable management
<i>Threats to biodiversity</i>
• Nitrogen deposition
• Numbers and costs of invasive alien species
• Impact of climate change on biodiversity
<i>Ecosystem integrity and ecosystem goods and services</i>
• Marine trophic index
• Connectivity/Fragmentation of ecosystems
• Water quality in aquatic ecosystems
<i>Status of access and benefit sharing</i>
• Patents (to be developed)
<i>Status of resource transfers and use</i>
• Funding to biodiversity
<i>Public opinion</i>
• Public awareness and participation

²⁴ UNEP/CBD/COP/7/L.27

**ANNEX 2
KILLARNEY DECLARATION
AND RECOMMENDATIONS ON BIODIVERSITY RESEARCH**



The mission of the European Platform for Biodiversity Research Strategy (EPBRS) is to ensure that research contributes to halting the loss of biodiversity by 2010.

KILLARNEY DECLARATION AND RECOMMENDATIONS ON BIODIVERSITY RESEARCH



EPBRS
KILLARNEY · MAY 2004

Adopted by the EPBRS Meeting

***Sustaining livelihoods and biodiversity –
Attaining the 2010 targets in the European Biodiversity Strategy***
under the
Irish Presidency of the EU
in Killarney, Co Kerry 21-24 May 2004



Éire 2004 Uachtaránacht an Aontais Eorpaigh
Ireland 2004 Presidency of the European Union

www.eu2004.ie

KILLARNEY DECLARATION

Emphasises:

- that biodiversity is essential for sustaining human life and well-being
- that biodiversity is critical in sustaining livelihoods
- the vital role of biodiversity as a provider of natural capital, goods and services underpinning the Lisbon agenda across all sectors

Recognises:

- the alarming rate of biodiversity loss in the EU and globally
- that urgent and effective action is needed to meet the 2010 target

Stresses:

- that knowledge is essential for conservation and sustainable use of biodiversity and that investment in an improved understanding of biodiversity will deliver new and exciting opportunities for development
- the crucial role the European Research Area/7th Framework Programme must play in supporting the achievement of the biodiversity targets
- the critical importance of research in delivering the EC Biodiversity Strategy and thereby meeting the EU and Member States' international obligations as Parties to the Convention on Biological Diversity
- the need for immediate research actions to fill gaps in current knowledge, brought about by targeted biodiversity research funding from EU sources and Member States

***KILLARNEY RECOMMENDATIONS FOR BIODIVERSITY
RESEARCH PRIORITIES FOR THE 2010 TARGET***

To achieve the objectives of the European Community biodiversity strategy and the target of halting biodiversity loss by 2010, the participants of this meeting place high priority on research to:

Status and trends

1. Further develop an accessible Europe-wide geo-referenced inventory of species and habitat distribution, status and trends, underpinned by significant new taxonomic effort, and support similar research in developing countries. This should include quantification of genetic diversity for species of economic or conservation importance, and improved understanding of traditional knowledge and uses of species and habitats.
2. Develop, test and evaluate indicators, and harmonise habitat and landscape classifications, to deliver policy-relevant information on the status and trends of biodiversity, the drivers of biodiversity change and the success of policies designed to halt the loss of biodiversity by 2010, and progress towards targets of the EC Biodiversity Strategy. Develop indicators of sustainable management of renewable resources, ecosystem integrity and ecosystem goods and services, vulnerability of livelihoods, public awareness and participation, and funding to biodiversity.

Pressures and drivers of change

3. Improve understanding of the major anthropogenic and natural drivers of biodiversity change, and their individual and combined impacts. Important drivers and pressures include:
 - i. Sea- and land-use change
 - ii. Habitat fragmentation, connectivity and destruction
 - iii. Harvesting and hunting pressure
 - iv. Climate change
 - v. Natural and anthropogenic catastrophes
 - vi. Pollution, including eutrophication and nitrogen deposition
 - vii. Non-indigenous and invasive organisms and emergent diseases
 - viii. Loss of genetic diversity and key functional groups (e.g. pollinators and bio-turbators)
 - ix. Globalisation, trade, consumption patterns, business practices and social conflicts
 - x. Institutional structures and property rights
 - xi. Policy conflicts
 - xii. New technologies including GMOs and renewable energy
4. Further develop models at relevant scales, within and across disciplines, to understand and predict the effects of these drivers on biodiversity. Produce and implement decision support tools incorporating these models.
5. Improve understanding of public beliefs, perceptions, attitudes and preferences regarding biodiversity, and how these relate to behaviour and public policy; increase knowledge of the various values of biodiversity (not limited to economic) and improve methods for their evaluation.
6. Improve understanding of the ways humans use biodiversity, and the ways those uses affect biodiversity, ecosystem goods and services and ecological-economic system resilience. Quantify the contribution of biodiversity to livelihoods and further understand how changes in biodiversity and ecosystem functions influence livelihoods, and improve and assess strategies for sustainable livelihoods and lifestyles.

Response and policy evaluation

7. Further develop participatory and conflict management methods and effective and cost-effective policy instruments, implementing sustainable use, conservation and restoration of species and habitats, and improve methods to implement the ecosystem approach and to monitor and evaluate policy.
8. Investigate forms of governance and management of biodiversity use, conservation and restoration in different sectors, taking into account uncertainty, irreversibility, and the complex nature of ecosystems, including research into implementation of the precautionary principle, addressing legal issues including cross-border and multi-level governance and jurisdiction.

Specific priorities for Biodiversity Action Plan on Conservation of Natural Resources

9. Assess and evaluate legislation, policy and sectoral activities, at all scales, that impact the conservation of natural resources, and identify solutions to conflicts.
10. Develop and assess methods of conserving natural resources that achieve sustainable lifestyles and that reduce impact on biodiversity.
11. Develop concepts, tools and methods to achieve favourable conservation status of habitats and species and establish baselines and targets.
12. Understand how species interact and contribute to ecosystem function, structure and services, and discriminate anthropogenic and natural dynamics in ecosystems.
13. Develop concepts, tools and methods to enable species recovery and to restore and manage the various functions of degraded ecosystems with reference to their resilience.

Specific priorities for Biodiversity Action Plan on Agriculture

14. Assess the performance of the reformed CAP in achieving the target of halting biodiversity loss by developing a harmonized framework for evaluation, and urgently support the development of monitoring systems using agreed indicators.
15. Define harmonized farming and landscape classification systems for the identification of priority biodiversity objectives, establish reference condition and targets and develop appropriate policy instruments for specific farm contexts and habitats.
16. Improve the design, implementation, monitoring and evaluation of agri-environmental instruments at the scales at which they most effectively deliver on the 2010 biodiversity targets.
17. Develop ecologically-based agricultural and food supply systems that enhance biodiversity and utilize its benefits, starting with research for conservation programmes for the most vulnerable and potentially useful species.
18. Analyse land managers' attitudes, motives and behaviour in order to promote and enhance their role as conservers of biodiversity in different farming contexts.

Specific priorities for Biodiversity Action Plan on Fisheries

19. Develop the ecosystem-based approach to the management of fisheries and aquaculture supported by appropriate sociological and socio-economic research.
20. Improve the understanding of the population structure of commercial species, using genetic and traditional approaches, to optimise stock management.
21. Improve understanding of the ecosystem effects of fishing activities and how they may be reduced in particular through fishing gear developments including selectivity.
22. Pursue further research into the ecological impacts of aquaculture to facilitate informed and sustainable development and management.
23. Investigate new and alternative approaches to ensure the future economic and environmental sustainability of the aquaculture sector.

Specific priorities for Biodiversity Action Plan on Economic and Development

Cooperation

24. Identify and quantify the causes of biodiversity change in developing countries and the impact of this change on livelihoods.
25. Develop and evaluate economic, social, institutional, political, policy and environmental instruments in developing countries to alleviate the impacts of biodiversity change on livelihoods and to develop sustainable use and management of renewable resources.
26. Develop and evaluate long-term biodiversity monitoring programmes and indicators that contribute to the assessment of the 2010 WSSD target in developing countries.

While uncertainty or gaps in knowledge are not excuses for inaction, targeted biodiversity research stimulates and guides action towards meeting the 2010 target.

To develop the necessary high quality and policy relevant research on the above priority areas, and to ensure that the necessary information is available to decision-makers, particular attention should be paid to:

- focusing research priorities on the political agenda, addressing societal concerns and values;
- developing and testing methods which successfully engage public participation in research and monitoring;
- further developing participatory interfaces between science and policy, including scientists, policy makers and stakeholders;
- building capacity in biodiversity research both within the European Union and in developing countries, in interdisciplinary research bringing together natural and social science and traditional and local knowledge;
- enhancing communication and dissemination of biodiversity research results and increasing awareness of scientists on policy and governance issues;
- expanding focus from single species research and management approaches to more holistic approaches; focussing on life-support systems, conservation and restoration; and bridging the gap between different scales;
- encouraging better integration of research and management, recognising the ability to learn through systematic experimentation in resource management;
- studying historical interactions between societies and nature, how they evolved to reach the present time, and what can be learned from this for the future;
- maximizing the value and accessibility of existing data including archives and the interoperability of existing data bases;
- encouraging the development of national and regional networks that can then be linked to form European networks, paying particular attention to newer and less well established research groups, and link these networks to international ones.