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Policy Department Economic and Scientific Policy

The Problem of Biodiversity Loss in the EU

Evaluation of EU efforts towards achieving the objectives of the Convention on Biological Diversity, 2010 and beyond

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EXECUTIVE SUMMARY

Global biodiversity is in decline. Many efforts are being undertaken to halt the loss of biodiversity at the international, EU, regional and national level. While at the international level the 2002 Johannesburg Summit agreed on "the achievement by 2010 of a significant reduction in the current loss of biological diversity". At the EU level, the Heads of State have agreed on a stronger commitment i.e. 'to halt the loss of Europe's biodiversity by 2010' (the Gothenburg European Council in 2001). To achieve this commitment, the Commission enrolled in several initiatives. In May 2006, the Commission adopted in its Communication on "Halting the Loss of Biodiversity by 2010 and Beyond" (COM(2006)216). The Communication reviews the progress in achieving the set commitments and it also provides a new 'EU Action Plan to 2010 and Beyond'. This Action Plan includes several objectives and actions that, according to the Commission, will help to achieve the 2010 biodiversity target. This paper discusses the Commission efforts, in particular, the new Action Plan, towards the achievement of the target.

This paper argues that lessons learnt from previous EU efforts aimed at halting the loss of biodiversity indicate that these initiatives were not successful mainly due to weak implementation (e.g. the lack of financial resources) and lack of political will. The Action Plan is very ambitious, as indicated by the 2010 target. The Action Plan is the first biodiversity policy document that jointly addresses both the EU and the global biodiversity aspects. It attempts to streamline EU efforts toward the achievement of the target 2010 and it includes a clear monitoring and review schedule. However, the Action Plan faces, *inter alia*, many challenges (e.g. implementation). Normally, one would expect that any new initiative undertaken after a failure of an initiative, would address the problems and fill the gaps leading to the failure of the prior initiatives. Nonetheless, the new EU Action Plan does not provide any significant change in the policy but faces similar challenges. The Action Plan does not indicate any additional financial resources nor solves the problem of implementation. This paper argues, that the Action Plan does not propose a solution for the biggest weakness in EU biodiversity governance, namely implementation.

The structure of the paper is as follows: the first section introduces the importance and benefits of biodiversity, the loss of biodiversity and the consequences for ecosystem services. The second section discusses the international and EU obligations on biodiversity with focus on the biodiversity target 2010 and beyond. The third section introduces the Communication of the Commission. The fourth section discusses the EU Action Plan and the fifth section includes the assessment of the Communication and the Action Plan.

1 THE PROBLEM OF BIODIVERSITY LOSS

Biodiversity includes 'the variability among living organisms from all sources including, *inter alia*, terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are part. This includes diversity within species, between species and of ecosystems' (Article 1 CBD¹). This Chapter briefly introduces the main aspects related to the importance of biodiversity and the problems arising from the loss of biodiversity:

1.1 Importance of biodiversity

Biodiversity forms an important basis for human wellbeing. It has its own intrinsic value and it is increasingly recognized for the ecosystem services it provides (EEA 2003). These ecosystem services include: **provisioning services** (e.g. food, clean water, timber and genetic resources); **regulating services** (e.g. regulation of climate, floods, disease, water quality, and pollination; **cultural services** (e.g. recreational and spiritual benefits); and **supporting services** (e.g. soil formation, and nutrient cycling) (MEA 2005).

1.2 Biodiversity loss and impacts on ecosystems services

Current biodiversity loss occurs at an unprecedented rate and in an unnatural trend (MEA 2005). In Europe, while some species populations are increasing, other species are rapidly declining. The most vulnerable species are at the top of food chains (EEA 2006). There is scientific consensus that ecosystem productivity declines as species diversity reduces (EEA 2006). Therefore, biodiversity loss causes a serious decline in ecosystem services, consequently bringing about socio-economic losses (MEA 2005, Kettunen & ten Brink 2006). These services play a central role in growth, jobs and human wellbeing. In the context of the EU, the Commission estimates the value of these goods and services to be around €26 trillion per year globally, or "more than twice the value of what humans produce each year" (EC 2006). Thus, if biodiversity loss is not halted, life quality and economic activities are most likely to suffer.

¹ CBD, Convention on Biological Diversity, signed by 150 government leaders at the 1992 Rio Earth Summit.

2 INTERNATIONAL AND EU OBLIGATIONS ON BIODIVERSITY

The Convention on Biological Diversity (CBD), adopted in 1992, is the major international instrument on biodiversity. It has three objectives: conservation of biodiversity; sustainable use of its components; and the fair and equitable sharing the benefits arising out of the utilization of genetic resources.²

During the past decade the EU has taken a number of initiatives to fulfill its obligations under the CBD, including the implementation of Natura2000 Network, the EU Biodiversity Strategy and the 6th Environment Action Plan. These initiatives are briefly introduced in annex I.

In September 2001, the EU Heads of State adopted at the Gothenburg European Council the decision of "halting and if possible reversing the trend of loss of biodiversity by 2010." This target was thereafter adopted at the World Summit on Sustainable Development in Johannesburg in September 2002. In 2004, the EU Biodiversity Strategy was reviewed in Malahide (Ireland) with the aim to provide an assessment of implementation, effectiveness and appropriateness of the strategy and its action plans (Duke 2005). The review recognized a general low rate of implementation of both the EU Biodiversity Strategy and the actions plans in Member States. The report presented 18 priority objectives for halting the loss of biodiversity (EEA 2006).

3 THE COMMISSION COMMUNICATION ON "HALTING THE LOSS OF BIODIVERSITY BY 2010 AND BEYOND"

In line with the outcome of the Malahide meetings, the Commission adopted on May 22nd 2006 the Communication on 'Halting the Loss of Biodiversity by 2010 and beyond'. The Communication summarizes the situation of biodiversity in the EU and it also includes a summary of the EU efforts toward the halt of biodiversity loss by 2010 and beyond and the Action Plan for 2010 and Beyond. The following Chapter introduces the major elements of the Communication and summarizes the previous efforts of the Commission. The new biodiversity Action Plan is introduced in Chapter 4.

Additional biodiversity-related agreements: The Ramsar Convention on Wetlands (1971); UNESCO World Heritage Convention (1972); Convention on International Trade in Endangered Species of Wild Fauna and Flora (1973); Helsinki Convention on the Baltic Sea (1974); Bonn Convention on Migratory Species (1979); Bern Convention on European Wildlife and Natural Habitats (1979) and the Convention on the Protection of the Alps (1991).

A less ambitious target is adopted at the sixth Conference of the Parties to the CBD, 2002, The Hague, namely "to achieve by 2010 a significant reduction of the current rate of biodiversity loss...".

In the Communication, the Commission distinguishes between the EU internal and external biodiversity policy and supporting measures. The Commission initiatives at the **internal level** are divided in the Communication into six themes: (1) safeguarding most important habitats and species; (2) integration of biodiversity into the Sustainable Development Strategy (SDS), Lisbon partnership for growth and jobs, and environmental policy; (3) integration of biodiversity into agricultural and rural development policy; (4) integration into fisheries policy; (5) integration into regional and territorial development policy; (6) control of alien species.

According to the Communication, existing efforts at the EU level were insufficient to achieve the 2010 target and much of the biodiversity in the EU remains greatly impoverished and continues to decline. The Communication also states that the success of different policies, such as the reformed Common Fisheries Policy (CFP) depends on the implementation. Once the CFP is fully implemented, fishing pressure will be reduced and the status of harvested stocks improved. Concerning the Common Agriculture Policy (CAP), the Communication states that the CAP includes biodiversity needs since 1992 with the aim to increase and promote use of agrienvironment measures, good farming practice, organic farming and the support of less favoured farmland biodiversity.

Bearing in mind, that the agriculture sector causes significant biodiversity loss as stated in the Communication, the Commission expects the reformed CAP to provide only indirect benefits to biodiversity. Furthermore, the Communication also states that there is no comprehensive strategy to address the issue of alien species at the EU level.

Concerning Environmental Impact Assessment (EIA) and Strategic Environmental Assessments (SEA), the Communication states that EIA constitutes a useful instrument that requires the consideration of potential impacts of certain territorial developments. This includes, *inter alia*, consideration of alternatives and the design of measures to prevent and reduce negative impacts. Nevertheless, the Communication states that EIA is often conducted too late or is of a low quality. The Commission expects, however, that the introduction of SEA, which applies to plans and programmes, should be useful to combine conservation and development needs by integrating consideration of impacts at an early stage in the planning process.

As regards the **EU external polices**, The Commission recognises the important role it has in biodiversity governance overseas. However, the Commission states that financial resources assigned by the Member States to the Global Environment Facility were disappointing, 'largely, due to the low priority often given to biodiversity in the face of other compelling needs (EC 2006).' Furthermore, concerning the impacts of trade on biodiversity, the Communication states that only some success has been achieved within the framework of the Convention on International Trade in Endangered Species; however only little has been done to tackle other trade-related causes of deforestation.

In relation to **supportive measures**, the Commission recognizes the need for more research in order to fill critical knowledge gaps. Furthermore, it attributes an important role to awareness raising and public engagement (e.g. through the Århus Convention and the Multi-stakeholder Countdown 2010 initiative).

Based on own headline set of biodiversity indicators adopted by the CBD, the Commission is developing own headline set that would streamline the different indicators and enable a better monitoring and reporting.

4 EU ACTION PLAN TO 2010 AND BEYOND

The EU Action Plan to 2010 and Beyond is the major element of the Communication. The main objective of the Plan is to clearly divide responsibilities between the Commission and the Member States concerning the implementation of existing biodiversity initiatives. The adoption of this Action Plan was a result of an analysis and consultation with public and scientists carried out by the Commission. Within the analysis and the consultation three policy approaches have been considered:

- (1) **Business as usual**: this means ongoing implementation of existing instruments, with no attempt to prioritise action to meet the target.
- (2) **EU Action Plan**: adoption of an Action Plan focused on 2010 and Beyond, addressed to the EU and to Member States and based on translating the 2010 target into a clear set of prioritised targets and actions, and dividing the responsibilities between the Commission and Member States and other stakeholders.
- (3) **EU Action Plan plus regulations**: In addition to the EU Action Plan as outlined in (2), the fast introduction of new legislation.

According to the Commission, since business as usual would not lead to the achievement of the target, and new regulation is time consuming, and in light of the need for urgent and rapid actions for meeting the 2010 commitment, it has been decided to adopt an Action Plan. The Action Pan includes four key policy areas for actions and ten related priority areas for the EU and Member States to focus on. In addition, the Commission lists four key supporting measures. This Action Plan includes a wide range of aspects. The following Chapter summarises the main contents of the Action Plan.

4.1 Key areas of action

The Action Plan identifies four key areas of action and ten related objectives. The areas of action are: biodiversity in the EU; the EU and global biodiversity; biodiversity and climate change; and knowledge base. The following introduces each of those areas and the related objectives.

The Commission adopted five concrete objectives at **the EU level**:

- 1. To safeguard the EU's most important habitats and species
- 2. To conserve and restore biodiversity and ecosystems 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 genotypes⁴.

For the achievement of these objectives, the plan demands greater commitment from Member States to, *inter alia*, propose, designate, protect, and effectively manage sites assigned for protection under Natura2000. In particular, the Action Plan also requires Member States to strengthen coherence, connectivity and resilience of the network, including through support to national, regional and local protected areas.

In order to strengthen Natura2000 and the conservation of threatened species, marine, terrestrial, and freshwater environments must be supportive for biodiversity. Key actions suggested include, *inter alia*, optimizing the use of existing measures under the reformed CAP and its future developments⁵ and improving planning at the national, regional and local levels. This also includes the prevention of intensification or abandonment of high-nature-value farmland, woodland and forest and supporting their restoration and implementing the forthcoming Forest Action Plan. The Commission also calls to maximise the use of the CFP to, *inter alia*, restore fish stocks and reduce impacts on non-target species and reduce damages to marine habitats.

An important part of the instruments the Commission includes in the Action Plan are related to the improvement and better integration of biodiversity in the decision-making process. The Action Plan requires Member States to improve planning at the regional and local levels to prevent, minimise and offset negative impacts of regional and territorial development on biodiversity. Key actions include: effective treatment of biodiversity in SEA and EIA; ensuring that community funds for regional development benefit, and do not damage biodiversity; and building partnerships between planners, developers and biodiversity interests. Concerning alien species, the Action Plans recognises the existence of policy gaps in the EU and stresses the need for a comprehensive EU strategy.

For **global biodiversity**, the Commission adopted three inter-related objectives:

- 1. To substantially strengthen effectiveness of international governance for biodiversity and ecosystem services
- 2. To substantially strengthen support for biodiversity and ecosystem services in EU External assistance
- 3. To substantially reduce the impact of international trade on global biodiversity and ecosystem services.

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Invasive alien species are species introduced deliberately or unintentionally outside their natural habitats where they have the ability to establish themselves, invade, out compete natives and take over the new environments. Thus, they species constitute a serious impediment to biodiversity, with significant undesirable impacts on the goods and services provided by ecosystems. (www.biodiv.org; see also MEA 2005).

⁵ The next reform of the CAP is scheduled for 2008-2009

The achievement of these objectives involves strengthening coherence and synergies between trade and development cooperation; promoting more effective implementation of the CBD and related agreements, including measures to address tropical deforestation. Regarding external assistance, the EU should enhance 'earmarked' funds for biodiversity and strengthen mainstreaming of biodiversity into sector and geographical programmes.

As regards **biodiversity and climate change**, the Action Plan recognises that climate change will impact biodiversity and ecosystems in the EU and it is likely to be the most powerful factor in altering Europe's biodiversity map. In this context, the action of the Commission involves honouring Kyoto commitments and to achieve more ambitious global emissions targets post-2012, in order to limit the global annual mean temperature increase to no more than 2°C above pre-industrial levels; minimising potential damage from new wind farms or biomass energy crops that are being promoted to help mitigate global warming. In relation to **knowledge base**, the action plan aims to strengthen the European Research Area, its international dimension, research infrastructures and improving the connection between science and policy and comparability of biodiversity data.

4.2 Supporting measures

As regards **financial support**, the Commission will use existing funding programs such as the rural development funding, cohesion and structural funds, the European Fisheries Fund, LIFE+ and the Seventh Framework Programme for Research (EP7). It states, however that the limited budget of the EU for the period between 2007-2013 limits the amount of EU co-financing available under Natura2000. Therefore, the Commission regards financing from Member States' own resources as extremely crucial. In relation to **EU decision-making**, coordination and synergy between the Commission and Member States must be improved. This includes, *inter alia*, ensuring that existing and new policies and budgets consider biodiversity needs; taking account of environmental costs in decision making; improving coherence at national level between the different plans and programmes that have effects on biodiversity and more importantly, ensuring that decision making at regional and local level is consistent with high-level commitments for biodiversity.

The Action Plan also supports **building partnerships** between relevant stakeholders. This includes partnerships between government, academia, conservation practitioners, landowners and users, private sector, educational sector and the media to frame solutions for biodiversity. As regards to **monitoring**, **evaluation and review**, the Commission plans to submit its annual report to the Council and the Parliament on progress of implementation of the Action Plan, starting end 2007. In 2008, the Commission will include a concise mid-term evaluation of progress towards the 2010 targets. The fourth annual report will be due end 2010 and it will evaluate the extent to which the EU has met its 2010 commitments. The evaluations and actions should create the conditions to look beyond 2010 towards a long-term vision as a framework for policy.

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In 2007 the Commission will develop an index as a sustainable development and structural indictor. The seventh report will be due end 2013 and it will evaluate all post-2010 targets in the Action Plan. Based on the results of the evaluation, the 6th EAP will be evaluated, including sectoral policies and budgets.

5 ASSESSMENT OF COMMUNICATION AND THE ACTION PLAN

Biodiversity loss is a serious problem and the 2010 target is very ambitious. Progress toward the 2010 target is not visible and the target is unlikely to be reached without additional integrated policy efforts. So far the previous initiatives of the Commission have been insufficient to halt the loss of biodiversity. The identification of the four areas is clearly an advantage as it provides Member States with clear objectives to be achieved, mostly at the national and local level. The areas specified in the Action Plan cover most important issues in biodiversity. Nevertheless, the Action Plan remains relatively broad and it often lacks depth within the specific areas (e.g. agriculture and fishery). This Chapter discusses what is new in the Action Plan, what are its key strengths, its key weaknesses and what has been not considered:

5.1 What is new?

5.1.1 Ecosystem services approach

As mentioned earlier in this paper, biodiversity as such provides many ecosystem services and our economies depend strongly on biodiversity. Clearly, the Commission's focus on ecosystem services constituted a shift towards a more anthropocentric and market-driven biodiversity policy. The Communication, however, also recognises the intrinsic value of biodiversity. This combined approach reflects the relationship between humans and natural resources. It can also be argued, that focusing on biodiversity, as a 'merely' nature conservation issue did not seem to provide incentive for its conservation, since all conservation efforts of the EU have failed to activate the Member States.

Furthermore, the ecosystem services approach also assists in integrating Natura2000 into broader regional context, as it considers how Natura2000 areas contribute to, for example, water purification/retention, cultural services etc. This approach might also assist in managing these areas and increasing the financial support.

Another advantage of ecosystem services approach is that it would enable a greater involvement of the private sector and other stakeholders in the EU effort toward the halt of biodiversity loss. However, in order for this policy approach to be successful, there is a need to increase public and decisions makers' awareness of ecosystem services. Conversely, current knowledge on biodiversity related ecosystem services remain limited. In order to support this policy approach more supporting research at all levels is required. In response, FP7 will already focus on these issues.

Another key question to raise here is how to integrate ecosystem services into local and regional decision-making. It is suggested, that comprehensive and integrated assessments (e.g. EIAs and SEAs) constitute potential tools as a basis for regional land use planning and management (e.g. project evaluation). However, additional tools (e.g. SWOT analysis and analysis of critical threshold concepts)⁷ should also be considered and developed (Kettunen, ten Brink 2006).

⁷ SWOT analysis is based on the assessment of Strengths, Weaknesses, Opportunities and Threats.

5.1.2 Biodiversity indicators

Biodiversity indicators are also considered among the best tools to assess and inform about the progress towards the 2010 target. Currently, different related international initiatives with collaboration of the Commission are carried out, including, *inter alia*, the CBD, EEA, and the Pan European Biological and Landscape Strategy (so-called SEBI2010). The indicators presented in Annex 2 of the Action Plan constitute a good start, that can be tested and further developed. However, the questions that arise here are whether these indicators are useful to achieve the 2010 target due to the time limitation and why the development of these indictors has not been prioritized at earlier stages.

5.1.3 Impact Assessment

Another important issue addressed in the Action Plan is the need to improve impact assessment to integrate biodiversity needs early in planning processes. Although EIA processes are in place and applied in the EU, biodiversity considerations are often inadequately addressed (EC 2006). The main obstacles to the integration of biodiversity in impact assessment include low priority for biodiversity and limitations in one or more of the following areas: capacity to conduct the assessments; awareness of biodiversity values; adequate data; and post-project monitoring. Generally, SEA has a strong potential for integrating biodiversity in planning and decision-making, but faces similar challenges to its application (www.biodiv.org).

A potentially useful assessment concept is the Sustainability Impact Assessment (SIA). SIA involves an assessment of social, environmental, and economic impacts. The EU undertakes *ex ante* SIAs of all trade agreements and as such is likely to constitute an efficient tool in trade negotiations with countries rich in biodiversity as a means of preventing the loss of biodiversity overseas.

Despite the challenges EIA, SIA and SEA face in implementation, these assessments concepts, once adequately applied, are likely to improve governance of biodiversity. These tools are also especially useful to include the concepts of ecosystem services. Accordingly, these tools shall clearly be included in any relevant EU legislations. For these concepts to be successful, however, any legislation must introduce a comprehensive strategy on how to achieve the conditions for EIA and SEA and how the existing limitations in their application could be solved.

5.1.4 Monitoring, evaluation and review

One of the advantages of the new Action Plan is the inclusion of a deadline for the assessment of progress. This timetable will 'force' the Commission and the Member States to report on the progress reached in the implementation of the Action Plan. These reports would constitute milestones for the measurement of the effectiveness of the EU and Member States initiatives undertaken within the framework of implementation of the Action Plan.

5.2 Key weaknesses

5.2.1 Financial aspects

Among the main reasons for the limited success of all former EU initiatives, in particular the Directives on Birds and Habitats to halt biodiversity loss was the lack of financial resources. Also in this context, the Commission does not seem able to allocate additional funding required for the achievement of the targets, due to the financial cut planned for the years 2007-2013. Therefore, the Commission requests Member States to allocate funds at the national level. So far, there is no clear commitment to increase the budget for biodiversity conservation and recovery.

There is no doubt that strengthening Natura2000 is a crucial step towards arresting biodiversity loss. The limited success Natura2000 has delivered is attributed mainly to its limited financial resources (EC 2006). Therefore, any expectation for Natura2000 to effectively contribute to the 2010 target must be accompanied by an increase in its budget. The decision of the Commission to co-finance Natura2000 via existing Community funds is a promising step. However, it is unclear how funding can be ensured for Natura2000 through this integrated model. Since funding decisions are taken at the national level, it must be ensured that biodiversity is among national funding priorities. In this context, the concept of ecosystem services is likely to be useful, as it connects biodiversity to regional and local development, which might deliver additional funding for initiatives related to biodiversity conservation and sustainable use.

5.2.2 The problem of implementation

Th issue of implementation is among the main obstacles to progress in biodiversity conservation and sustainable use (McGraw 2002; Brink ten, *el.al*, 2003). In this regard, there has been much confusion between the division of responsibilities between the Commission and the Member States. The Action Plan therefore made a clear division in responsibilities between the Member States and the Commission (Annex 1 of the Action Plan). Clearly, the major responsibility to halt biodiversity loss lies currently with the Member States, as its full implementation at the national and local level is key to its success.

Furthermore, the integration of biodiversity into other policy sectors through the SDS and the 6th Environmental Action Programme has so far not delivered much success (e.g. Pallemaerts *et. al.* 2006). The Commission believes that the more recent directives and thematic strategies (e.g. in the areas of water, air, marine, soil, natural resources and pesticides), once implemented, are likely to achieve more progress. But since two major directives (Birds and Habitats) are still not fully implemented, the question that arises here is why would new instruments be more successful? And more importantly why new instruments would be more victorious, if they do not offer solutions for the problems the predecessors face, namely implementation and funding? The lack of implementation in Member States might be an indicator for the lack of political will to engage in these policies. Weak implementation in the Member States is likely to be among the key challenges for the Action Plan.

5.2.3 Weakness in policy sectors

Among the major weakness of the Action Plan are the references to agriculture and fishery. Since the agriculture and fishery sectors cause major biodiversity loss in the EU, and the 2010 target would not be achieved without additional integrated policy, there is a need for stricter measures for these sectors (EEA 2006). In this context, the recent EU fishery restrictions, if properly implemented, seem promising. However, the impacts of agriculture are still alarming. In the new EU Member States, where the share of extensive farming in areas associated with valuable biodiversity is still fairly large compared with the EU-15, we are likely to witness a process of, *inter alia*, a rapid shift towards intensification of land-use with dramatic impacts on biodiversity (EEA 2006).

Currently, the EU agriculture sector and policy are in a transition towards a broader rural development approach. This implies that future benefits provided by agricultural systems in the EU will be considered more in terms of broader rural development than pure agriculture production. This approach includes the ecosystem services provided and supported by agricultural ecosystems. Support to the agriculture sector in the EU could be further improved to integrate biodiversity needs. Therefore current developments in the EU seem to be promising. There is a need, however, to further define and analyse the actual benefits of agri-environment measures for biodiversity.

In addition to the challenges within CAP and CFP, another problematic sector is related to the EU and national regional development policies. As mentioned earlier in this paper, if these policies would fully integrate ecosystem services in their plans, this would enable the achievement of sustainable development (win-win situations) and also highlight the costs arising from the loss of biodiversity.

5.3 Measures to support developing countries

5.3.1 Benefit sharing

Fair and equitable sharing of the benefits arising from the utilization of genetic resources is considered as a precondition for conservation and sustainable use of biodiversity. Thus, benefits are, *inter alia*, to raise financial resources; thus making the CBD financially functional. The EU Headline Indicators include the plan to identify the percentage of European patent applications for inventions based on genetic resources. Nevertheless, the Commission does not indicate what supportive actions/measures should be taken in this context.

5.3.2 Financial assistance

As biodiversity-rich countries generally lack financial resources, Parties to the CBD agreed to provide the required funding to help prevent the loss of biodiversity in these countries. In this context, the Commission states that overseas funding has been disappointing as only limited resources have been provided by the Member States. Despite clear commitment, the Action Plan does not indicate how this commitment will be fulfilled.

5.4 Conclusions

The Action Plan provides a comprehensive policy framework for the EU and global biodiversity. However, many of the actions listed in the Action Plan lack concrete details. Although the Action Plan attempted to clarify the division of responsibilities between the Commission and the Member States, it does not solve the problem of implementation. In this context, the Action Plan does not provide anything new for the central problems of EU biodiversity governance, namely lack of financial resources and implementation.

The major responsibility for implementing the Action Plan lies with Member States, which lack the necessary political will and perhaps the incentives to act. In this context, the adoption of the concept of ecosystem services might yield some changes since it frames biodiversity conservation and sustainable use in a more comprehensive way. Halting the loss of biodiversity, regardless of the 2010 target requires both political changes and also changes in consumption habits. A key condition is a strong political commitment combined with political and public awareness.

Without addressing the key issues in EU biodiversity governance, biodiversity loss will not be stopped, not in 2010 and not beyond. This paper suggests four areas to be addressed at the EU level: (1) improving implementation; (2) securing adequate financial resources; (3) significantly improving the integration of biodiversity into sectoral policies, in particularly CAP, CFP; and (4) regional development policy. Furthermore, concerning global biodiversity, the Commission and the Member States should consider the recommendations of the Conference on Biodiversity in European Development Cooperation Paris, 19-21 September 2006, which suggested a better integration of biodiversity in European development policy.⁸

The Commission and the Member States need to do more. What is needed is better monitoring of the loss of biodiversity. For this purpose, the EU must first a) ensure the implementation of its biodiversity policy and b) review and revise other sectoral polices that jeopardise its efforts to halt the loss of biodiversity. Preventing the loss of biodiversity needs clear actions and not words.

See information provided online at: www.countdown2010.org (visited on 20-01-07).

5.5 Suggestions

Based on the analysis of this paper, the following suggestions on particular focal areas for the future can be made:

- 1) Support the use of EIAs, SIAs and SEAs and other instruments to fully integrate consideration of biodiversity and related ecosystem services in regional and local decision-making.
- 2) Support the further reform and use of CAP, CFP, and regional and local development policies to deliver biodiversity benefits.
- 3) Support measures and policies that raise additional financial resources and enhance the effective implementation at all levels.
- 4) Support the development of additional and comprehensive biodiversity indicators to include ecosystem services.
- 5) Support the further review/reform of EU internal and external policies so that they do not have negative effects on biodiversity in third countries but rather support the conservation and sustainable use of biodiversity.
- 6) Support a greater involvement of the EU towards the achievement of the fair and equitable benefit sharing arising from the use of genetic resources as a means of raising funding for biodiversity conservation and sustainable use overseas.

Annex I: EU implementation of the CBD

The Birds Directive 1971

This Directive is the EU's oldest legislation on nature conservation. It aims to ensure the long-term protection and management of all wild bird species and their habitats. The Directives also gives particular priority to the conservation of wetlands. The Directive designates Special Protection Areas (SPAs) for migratory and other vulnerable wild bird species. It also bans activities that directly threaten birds, *inter alia*, the deliberate destruction of nests and other associated activities such as trading in live or dead birds. The Directives also limit the number, periods and methods of hunting of species.

The Habitats Directive (1992)

This Directive aims to ensure the comprehensive protection of a range of animal and plant species, as well as a number of habitats. It establishes Special Areas of Conservation (SACs) that include habitats with a small range or those that are suffering from rapid loss (e.g. peat bogs, dunes and heathlands). The SACs also aim to protect species that are endangered, in decline or endemic. The Directive also establishes some rules of impact assessment that aim to ensure that safeguards are in place to protect areas designated as SACs, including: the prior assessment of potentially damaging plans and projects; the requirement that these plans and projects be approved only if they represent an overriding interest and only if no alternative solution exists; and measures for providing compensatory habitats in the event of damage. The Directive also aims to protect the breeding and resting places of certain animal species.

The Natura 2000 Network

The Network aims to maintain the most important European habitats and species in favorable conservation status to ensure their continued survival. It represents about a fifth of total land area of the EU together with the SPAs and SACs, which are designated under the Birds and Habitats Directives. In other words, the Network aims to ensure that human activities in these areas do not damage the wildlife and habitats. The Network also sets, that only appropriate land management activities are allowed and when necessary, detailed management plans should be prepared for sites. As of 2006, the Network included 200 sites and covers some 18% of the territory of the EU-15. New sites from the EU-10 are to join soon (EC 2006).

The EU biodiversity Strategy (1998)

The EU Biodiversity Strategy constitutes the framework for Community to develop policies and instruments in order to comply with the CBD. The strategy is developed around four main themes: (i) Conservation and sustainable use of biodiversity, (ii) Sharing of benefits arising out of the utilization of genetic resources; (iii) Research, identification, monitoring and exchange of information, and (iv) Education, training and awareness. Furthermore, the strategy also considers the impact of Community policies on biodiversity for the following sectoral areas: nature conservation, agriculture, fisheries, regional policies and spatial planning, forestry, and development and economic co-operation.

The 6th Environmental Action Programme (2001)

Biodiversity is addressed in this document as a priority area with the overall aim of 'protecting, conserving, restoring and developing the functioning of natural systems, natural habitats, wild flora and fauna with the aim of halting desertification and the loss of biodiversity (by 2010), including diversity of genetic resources, both in the European Union and a global scale'.

References

- Brink, ten B.J.E. (et.al.) (2000). Technical Report on Biodiversity in Europe: an integrated economic and environmental assessment, RIVM report 481505019, available online at www.rivm.nl (visited 20.01.2007).
- Duke, G. (ed.) (2005). *Biodiversity and the EU –Sustaining Life, Sustaining Livelihoods*. *Conference Report*. Stakeholder Conference held under the Irish Presidency of the European Union in partnership with the European Commission, $25^{th} - 27^{th}$ May, Grand Hotel, Malahide, Ireland.
- Ehrlich, P.R. & Wilson, E.O. (1991). Biodiversity studies: science and policy. *Science, New Series*, 253(5021), 758-762.
- Emerton, L. (2000). *Economics and the convention on biological diversity. IUCN Economies and biodiversity programme*. Available online at: http://www.undp.org/bpsp/ thematic_links /IUCN2.pdf (*visited on* 15-01-07).
- European Commission (2006). *Halting the loss of biodiversity By 2010- and beyond: sustaining ecosystems for human well-being*, Brussels, 22.5.2006, COM(2006) 216 final.
- European Environment Agency (EEA) (2003). Europe's environment: the third assessment published 2003-05-11.
- European Environment Agency (EEA) (2006). *Progress toward halting the loss of biodiversity by 2010*, EEA Report, No. 5/2006.
- Kettunen, M. & ten Brink, P. 2006. Value of biodiversity- Documenting EU examples where biodiversity loss has led to the loss of ecosystem services. Final report for the European Commission. Institute for European Environmental Policy (IEEP), Brussels, Belgium. 131 pp.
- McGraw, D. M. (2002). The CBD Key Characteristics and Implications for Implementation, *Review of European Community and International Environmental Law* 11(1), pp. 17-28.
- Novacek, M. & Cleland, E. (2001), The current biodiversity extinction event: scenarios for mitigation and recovery. *Proceedings of the National Academy of Sciences of the United States of America*, 98(10), 5466-5470.
- Pallemaerts, M, Wilkinson, D, Bowyer, C, Brown, J, Farmer, A, Farmer, M, Herodes, M, Hjerp, P, Miller, C, Monkhouse, C, Skinner, I, ten Brink, P and Adelle, C (2006) Drowning in Process? The Implementation of the EU's 6th Environmental Action Programme Report for the European Environmental Bureau. IEEP, London.
- Sala, O.E. et.al. (2000). Global biodiversity scenarios for the year 2100. Science, 287, 1770.
- Vitousek, P.M et al. (1997). Human domination of earth's ecosystem. Science, 277, p. 494.
- World Conservation Union (IUCN) (2004). *EU Enlargement and Biodiversity*, Media Brief, available online at www.iucn.org/en/news/archive/2001_200g/press/mediakiteu.pdf (visited on 22-01-07).
- World Resources Institute (1992). Global biodiversity strategy, guidelines for action to save, study and use Earth's biotic wealth sustainably and equitably. Washington.
- Millenium Ecosystem Assessment (MEA) (2005). *Ecosystem and human well-being, Biodiversity Synthesis*, World Resources Institute (WRI), Washington D.C.