BIODIVERSITY & THE EU BUDGET

Making the case for conserving biodiversity in the context of the EU Budget Review

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1 INTRODUCTION

The EU budget is mainly spent on supporting Member States put into practice the Community's common policy objectives including environmental policy. Conservation of biological diversity is an integral part of EU environmental policy and a number of activities supporting the protection of habitats and species and sustainable use of ecosystems are eligible for funding from the EU budget. Over the past 20 years the conservation of biodiversity has gained a higher profile on the EU political agenda and financing from the Community budget now forms a very important part of the overall funding devoted to conservation within the Union.

However, it is commonly considered that the financial contribution to biodiversity from the EU budget remains low, in particular when the threats facing biodiversity at the global and European level are escalating and increasing levels of biodiversity and related ecosystem services, i.e. ecosystem processes underpinning human wellbeing, continue to be lost. Furthermore, the loss of ecosystems and their services is resulting in significant costs to society (TEEB 2008).

In 2006 the European Parliament, the Council and the Commission agreed to undertake an extensive review of the EU budget. The budget review reflects the recognition that the recent EU financial frameworks fall short in reflecting the objectives and priorities of the present policy agenda. For example, the budgetary spending allocated to address several new challenges, such as climate change and the energy crisis, is very low (Adelle et al. 2008). Also, the rationale for continued support for the EU agricultural sector at the current level through the Common Agricultural Policy (CAP) has been widely questioned.

After a lengthy consultation process in 2007/8, the review process is still ongoing and the Commission is expected to present its proposal on the future priorities for the EU budget before the end of 2009. These priorities will form the basis of discussions in the European Parliament and Council. It is not yet clear, however, how these discussions will feed into the actual negotiations of the next Community budget which will take place from 2010/2011 onwards.

The budget review and the upcoming negotiations on the financial framework provide a valuable opportunity to make the case for adequate levels of funding for biodiversity in the future. In addition, they allow stakeholders to take stock of progress in providing sufficient financial support for biodiversity conservation within the Union, including an assessment of the successes and shortcomings of current EU funding.

However, the bulk of the debate on the future of the EU budget so far has concentrated on a few high profile items including the likely reduction in funding for the CAP, the future of regional and cohesion funding, and the need to increase spending on climate change. While the focus on certain environmental priorities such as climate change is to be welcomed, it should not overshadow consideration of other important issues. Biodiversity conservation needs to be much closer to the heart of the negotiations than it is now.

The objective of this IEEP / WWF briefing is to give an overview of the EU budget and the Union's funding for biodiversity and to highlight the case for greater Community spending in this area in future. It is hoped that the paper will help different stakeholders at the EU and Member State level to participate actively in this debate.

The focus here is primarily on biodiversity within the European Union but the EU also plays an important role in supporting the protection and sustainable use of biodiversity outside its borders (e.g. in the context of EU external assistance and development cooperation). Whilst this dimension is also of increasing importance, it falls outside the scope of this paper and separately needs to be addressed separately.

2 BRIEF INTRODUCTION TO THE EU BUDGET

The EU budget is negotiated between the European Parliament and the Council of Ministers on the basis of a proposal drafted by the Commission. The budget covers spending plans for consecutive seven-year periods and it is funded from three main sources including customs duties, a share of the harmonised value added tax (VAT), and a contribution from the Member States based on the size of their gross national income. The annual budget corresponds to around 1 per cent of the Union's national wealth (i.e. the EU's gross national income, GNI). This is currently equivalent to about 130 billion EUR per year[1], amounting to around 250 – 300 EUR per year per EU citizen.

The EU budget provides support to those policy areas that have been agreed by the Member States to be addressed, either completely or partly, at the Community level. These include, for example, agriculture and rural development (i.e. the Common Agricultural Policy (CAP)), fisheries, (i.e. the Common Fisheries Policy (CFP)), regional development and cohesion (i.e. including the Regional Policy), environment, aspects of employment and research. Part of the Community budget is also spent on funding sustainable development and humanitarian aid in countries outside the EU.

In principle, the distribution of EU funds between different Community policy domains is decided in accordance with the Union's existing political priorities. However, in practise political manoeuvring and compromises between Member States also play an important role in deciding the final outcome[2] (Gros and Micossi 2005, Adelle et al. 2008 and 2009). Generally, action at the Community level (e.g. decisions on possible financial support) should be taken only in cases where the common policy goals cannot be sufficiently achieved by Member States alone (i.e. the **subsidiarity principle**). In other words, EU financed activities should provide clear added value compared to action taken by individual Member States. In addition, it should be

[1] http://ec.europa.eu/budget/prior_future/fin_framework_en.htm

[2] E.g. decision making on the EU budget is known to be often dominated by the logic of '*juste retour'* where Member States have fought to increase the net balance of their country's contributions to the EU budget compared to their receipts (Adelle et al. 2009)

demonstrated that financial support is the most appropriate means to achieve the agreed goals (i.e. the **best policy instrument principle**). Furthermore, the content and form of EU funded actions should not exceed what is necessary to achieve the given policy objectives (i.e. the **proportionality principle**).

The current EU budgetary framework covers the seven-year period from 2007 to 2013. The total EU revenue for this 7 year period amounts to some 864 billion EUR with the foreseen annual budgets ranging from 117 billion to 127 billion EUR for 2007 and 2013, respectively (as constant 2004 prices)[3]. These funds are distributed between four main priorities among which growth and jobs and the "sustainable use and production of natural resources" receive the main proportion of the total budget. The latter also contains financial support for EU environmental policy, including biodiversity. The formal descriptions of these priorities and the relevant financial allocations are shown in Table 1. However, these descriptions are rather misleading and need to be interpreted with care. The lion's share of the "natural resources" budget line is, however, dedicated to support the implementation of CAP, of which over 73 per cent is allocated as direct aid to farmers (Adelle et al. 2009).

In practice, EU funding is made available to the Member States and other possible beneficiary countries through different means, including **co-financing** actions at the national level (i.e. financing a certain proportion of the cost of initiatives and projects implemented in Member States). This Community co-financing procedure provides monetary resources to support actions within Member States via Commission-managed project funding (such as LIFE+) or through expenditure managed by national authorities within a European framework (e.g. via the Operational Programmes for the Structural and Cohesion funds). All and all, around 76 per cent of the total EU funds is decentralised and managed by Member States (e.g. funding to support agriculture and regional development) whereas 24 per cent of the budget is administrated centrally by the Commission or allocated to international organisations and third countries.

Specific EU funds have been established to support the co-financing of different Community policies. During the 2007-2013 financing period these funds include, for example, the European Agricultural Fund for Rural Development (EAFRD), European Fisheries Fund (EFF), Structural and Cohesion funds with the European Regional Development Fund, (ERDF), the Cohesion Fund (CF) as well as the European Social Fund (ESF), and Financial Instrument for the Environment (LIFE+). The majority of these funds are managed at national level, i.e. the allocation of funds between different national and regional priorities is primarily decided by individual Member States.

[3] http://ec.europa.eu/budget/prior_future/fin_framework_en.htm (Accessed 10 July 2009)

Table 1. Main goals supported by the EU budget 2007-2013

EU budget line	Main goals	Monetary allocation (EUR)	Proportion of the total budget
Sustainable growth: competitiveness	• Increasing EU competitiveness • Support to economic growth and jobs in the context of sustainable development	77.4 billion	44.6 per cent
Sustainable growth: cohesion	• Support to the competitiveness of less advantaged regions (e.g. innovation and the knowledge economy)	308 billion	
Natural resources	• Securing high safety and quality standards for agricultural products • Supporting the farming community to adapt production to consumers' demands • Support for direct measures to protect the environment • Restructuring and diversifying the rural economy • Promoting sustainable fishing • Supporting crossborder actions to prevent environmental threats	367.9 billion	42.4 per cent
Freedom, security and justice	• Fighting against terrorism, organised crime and illegal immigration based on shared information and common actions within the EU • Better management of migration flows into the Union • Cooperation in criminal and judicial matters	6.6 billion	1.2 per cent
Citizenship	• Promoting and protecting the cultural heritage and richness of the EU • Encouraging the active participation of citizens in social debates • Protecting public health and consumer interests	4.1 billion	
Global issues	• Emergency aid • Long-term assistance for the prosperity, stability and security of third countries	49.5 billion	5.7 per cent
Administrative costs	• Staff and building costs of all EU institutions	49.8 billion	5.8 per cent
Compensation		800 million	0.01 per cent
TOTAL		**864 billion**	

Source: Financial framework 2007-2013 revised for the European Economic Recovery Plan (constant 2004 prices) http://ec.europa.eu/budget/prior_future/fin_framework_en.htm (Accessed 10 July 2009)

3 EU FUNDING FOR BIODIVERSITY

EU funding for biodiversity is focused on aiding the implementation of the European Union's key priorities, including the establishment and management of the Natura 2000 network of protected areas. Financial support for the protection and sustainable use of ecosystems and species in the context of the wider land and seascapes (e.g. outside protected areas) has become an important priority during the past years. In addition, biodiversity related research has been one of the priorities for EU funding for research and development for some time.

Most financial support for biodiversity currently is integrated into a number of sectoral policies (Table 2). The EU Financial Instrument for the Environment (LIFE), established in 1992 to support the implementation of the Union's environmental policy, has traditionally played a major role in funding biodiversity conservation within the EU, although this constitutes a small proportion of total Community expenditure. Numerous projects supporting the establishment of Natura 2000 sites have been funded by LIFE fund's "Nature" component.

In addition, actions supporting biodiversity conservation have received financial support as part of other Community policy areas, such as agriculture and rural development, fisheries, and regional development. For example, one of the largest elements of EU support for biodiversity, through payment for environmentally sensitive agricultural management practices comes from the agri-environment measure within the CAP, first introduced in 1985. Since the 1990s these measures have formed an integral part of the Community's support for rural development, also providing an important avenue for funding the conservation of biodiversity within agricultural ecosystems. Similarly, since the 2002 reform of the EU Common Fisheries Policy protection of the marine environment, including biodiversity, has gained a footing in the context of EU funding for the fisheries sector. Finally, it is accepted that conservation of natural ecosystems and their functions can create the basis for sustainable economic and social development within the EU. Consequently, funding for biodiversity has recently become a more integral part of EU support to regional development and cohesion.

3.1 The integrated funding model for biodiversity in 2007-2013

During the 2007-2013 financing period it was decided that the Community support for financing the EU network of protected areas, i.e. the Natura 2000 network, should be integrated within the funding streams for different Community policy sectors[4]. In addition, supporting conservation and sustainable use of biodiversity in the context of different EU sectoral funds became more pronounced. The actions promoting conservation and sustainable use of biodiversity are supported by seven different Community funding instruments, including EAFRD, EFF, the Structural and Cohesion funds, LIFE+ and the 7th Framework Programme for Research and

[4] As recommended by the EC in the 2004 "Communication from the Commission to the Council and the European Parliament - Financing Natura 2000".
http://ec.europa.eu/environment/nature/natura2000/financing/index_en.htm

Development, all of which now provide possibilities for financing biodiversity related activities (e.g. the management of Natura 2000 sites) (see Table 2 and for more information Miller et al. 2007).

The aim of this so called "integrated funding model" is to further embed the implementation of the EU's biodiversity goals into other relevant policy sectors. For example, it is hoped that integrating the financing of Natura 2000 sites into the wider policy context will help to link them with the broader management of land and natural resources in the area (See Chapters 4 and 7 below for the effectiveness of the integrated model). However, there is no clearly articulated policy line with supporting guidelines to spell out what precisely is to be achieved by the integrated model. In some respects this is a weakness. However, as the majority of the EU funds now available for biodiversity are managed at the national level this, in principle, allows sufficient room to reflect national specificities and conservation priorities in the financial allocations. It also permits Member States to make their own decisions about how important biodiversity is relative to other priorities for spending EU funds.

Given the above, the concrete level of funding available for biodiversity is to a large extent decided at the national level. This can significantly affect the actual amount of financing available for biodiversity in practice (See Chapters 4 and 5 below). While this has merits, and a highly centralised model would be inappropriate, it allows Member States with little political commitment to biodiversity to minimise their expenditure of EU funds in this area. Reluctant Member State authorities continue to face some pressure from the European Commission if biodiversity is absent from ERDF or EAFRD programmes. However, this is not sufficient to ensure that European funding finds its way to the parts of Europe and specific management challenges where it is most needed.

Under the current model, the extent of funding opportunities for biodiversity varies between different funds, reflecting the instruments' general focus and specific rules. For example, the possibilities provided by EAFRD are targeted on conserving biodiversity in rural areas and focus specifically on co-financing measures carried out by farmers or foresters. The Structural Funds can be accessed by a wide range of stakeholders, however actions supported by these instruments need to be linked with the broader sustainable development of the region and funding is not usually available for ongoing management payments. Finally, LIFE+ provides for support to a range of activities aimed at implementing the EU Biodiversity Action Plan. This funding is, however, highly selective and in order to avoid duplication LIFE+ only co-finances activities that are not eligible for funding under the other Community instruments.

Table 2. EU funding for biodiversity in 2007-2013, provided through several Community sectoral policies. See Miller et al. 2007 for more information.

Policy sector	EU fund in 2007-2013	Key funding opportunities
Environment	Financial Instrument for the Environment (LIFE+)	Implementing the EU Birds and Habitats Directives, e.g. Natura 2000 Network Implementing the EU Biodiversity Action Plan, e.g. protection of biodiversity in the context of wider land and seascapes. Note: only finances activities that are not supported by other Community funds.
Agriculture & rural development	European Agricultural Fund for Rural Development (EAFRD)	Support to maintain and enhance biodiversity through the promotion of environmentally sensitive farm management practises in agricultural ecosystems, e.g. management of Natura 2000 sites. Note: financed activities need to be linked with the management of agricultural or forest land.
Fisheries	European Fisheries Fund (EFF)	Support to biodiversity friendly activities in marine and coastal ecosystems, e.g. management of Natura 2000 sites. Note: financed activities need to be linked with fisheries activities.
Regional development & cohesion	European Regional Development Fund (ERDF) European Social Fund (ESF) Cohesion Fund	Support to sustainable regional development, e.g. promoting conservation and sustainable use of biodiversity and ecosystems (e.g. management of Natura 2000). Note: financed activities need to be linked with the broader development of the area.
Research & development	7th Framework Programme for Research and Development (FP7)	Opportunities for certain biodiversity related research activities.

3.2 How much money is there for biodiversity - in principle and in practice?

Over the 2007-2013 financing period 368 billion EUR of the total EU budget is dedicated to the budget heading 'the sustainable management of natural resources'. This includes both Community co-financing for activities that support environmental conservation, e.g. conservation and sustainable use of biodiversity (Table 3), and so far as those that are damaging to nature.

Of this 368 billion EUR the only fund earmarked specifically and solely for the environment, the LIFE+ fund, amounts to 2.1 billion EUR[5]. This represents only around 0.6 per cent of the entire funding for natural resources and 0.1 per cent of the total EU budget. Furthermore, only around 40 per cent of LIFE+ expenditure is foreseen to be used for nature and biodiversity projects (approximately 840 million EUR), with the remaining 60 per cent spent on other environmental priorities such as energy and climate, and the management or waste and water. This amounts to about 114 million EUR of funding for biodiversity per year, which scales down the biodiversity funding from this fund to a bit more than 0,1 per cent of the total EU budget, see Table 3.

In relation to the Common Agricultural Policy, which constitutes the major part of the "natural resources" budget heading, the most substantial contribution for financing biodiversity comes from payments under the agri-environment measure (AE) (under Axis 2 of the EAFRD). The total allocation for this measure over the 2007-2013 programming period amounts to almost 20.3 billion EUR, representing 2.4 per cent of the total EU budget for this period[6]. This is about 2.9 billion EUR per year. However, only a minority of AE spending will be directed to promote biodiversity conservation (see below). EAFRD also includes measures which provide opportunities for supporting the management of forest ecosystems (e.g. the forest environment measure), however this measure has been taken up by only a few Member States and generally on a small scale.

Other rural development measures support biodiversity conservation indirectly, for example the natural handicap (or Less Favoured Area, LFA) measures can be used to maintain extensive livestock based farming systems. If appropriately managed, these are crucial for biodiversity conservation, e.g. by helping to maintain species rich semi-natural pastures but the impact on the ground will vary between regions (IEEP 2006). Altogether 12.6 billion EUR will be spent on the LFA measures in 2007-2013 (i.e. 1.8 billion EUR per year)[6]. Finally, rural development support can also be directed to compensate for costs incurred and income foregone by land managers due to the implementation of the Birds and Habitats Directives (e.g. so called Natura 2000 payments). However, the expenditure on these specific Natura 2000 payments (including payments for both agriculture and forest land) is rather low, i.e. 0.58 billion EUR[7]. Some funds for biodiversity, especially in Germany and Austria, are also channelled through the measure for aid for diversification into non agricultural activities within EAFRD.

[5] Regulation (EC) No 614/2007 concerning the Financial Instrument for the Environment (LIFE+) (23 May 2007)
[6] COM/2008/864 and SEC/2008/3044
[7] According to indicative financial plans prepared by the Member States for expenditure under article 36 a+b iii of EAFRD

In relation to cohesion policy, which constitutes the budget heading "sustainable growth", a total of 2.7 billion EUR has been allocated (according to indicative financial plans prepared by Member States for their Operational Programmes under ERDF) to support the protection of biodiversity and nature. This is available through EFRD in 2007-2013[6]. In addition, 2.5 billion EUR is available for the promotion of natural assets and the protection and development of natural heritage, some of which could be directed to actions supporting biodiversity. These contributions amount to a funding potential of 380 and 360 million EUR per year, respectively. Overall, however, these opportunities also amount to no more than 0,6 per cent of the total EU budget.

Finally, the financial allocations under EFF do not include the amount allocated to certain measures or operations, therefore it is not possible to single out biodiversity related expenditure from other environmental measures financed under the fund[6]. It does appear that more than half of the Member States have directed some element of EFF funding towards environmentally-friendly fisheries. However, this investment is likely to be rather negligible when set against the large sums being devoted to environmentally damaging activities, including investments in maintaining and increasing the capacity of the EU fleet, which is already excessive relative to the resource available.

In general, it is difficult to estimate the precise value of the total EU contribution to biodiversity conservation. This is because the exact levels of spend on biodiversity under the different EU financial instruments are not always transparent or easy to identify. For example, AE schemes are not only focused on biodiversity but they can also be targeted at a range of other objectives including reduced water pollution, landscape management, soil management and conversion to organic production. Therefore, the total amount of money either allocated specifically for biodiversity conservation, or that has indirect biodiversity benefits remains unclear (e.g. Boccaccio et al. 2009). Similarly, projects assisted by the European Social Fund (ESF) and the Cohesion Fund can in some cases be targeted in a way that either directly or indirectly benefit biodiversity (e.g. through capacity building and supporting biodiversity-friendly infrastructural developments). However, as the breakdown of funding under these instruments is not "biodiversity specific" it is very difficult to estimate the actual contribution of these funds to the biodiversity agenda. Furthermore, the analysis of possibilities for financing biodiversity presented here is to a large extent based on the indicative distribution of the EU funds proposed at the outset of the budget period by the Member States. Therefore it is not a reliable guide to the final outcome either with regard to the actual distribution of funding between the headings and projects or with respect to the actual nature of the projects funded. These are frequently presented in an environmentally positive light in order to attract support from the Commission. The impact on the ground may be very different. Consequently, it is not possible at this stage to say to how well these allocations will hold.

Regardless of the problems above, the estimates for 2007-2013 clearly indicate that conservation of biodiversity is not among the core areas currently supported by the EU budget. For example, the amount specifically earmarked for biodiversity (i.e. LIFE+ expenditure (0.84 EUR), EAFRD Natura 2000 payments (0.58 EUR), and

the allocation for biodiversity under ERDF (2.7 EUR)) is only 4.1 billion EUR (0.47 per cent of the EU budget). In comparison, the agricultural spending on market and income support measures, covering direct payments to farmers and market related subsidies is estimated to amount to a total of 286 billion EUR (Farmer et al. 2008). This is more than 30 per cent of the total EU budget, i.e. significantly higher than any of the financial allocations benefiting biodiversity.

Finally, it has also been acknowledged that a number of activities funded from the Community budget can actually have both direct and indirect negative effects on biodiversity. For example, EU funding for regional development and cohesion actively supports infrastructure development such as improving road networks and promoting hydroelectricity. These activities can, however, significantly contribute to the fragmentation of habitats and landscapes, jeopardising the normal functioning of ecosystems. In case of fisheries, funding related to the maintenance or enhancement of fishing capacity can be highly damaging. In the recent years, more attention has been given at the EU level to minimising potential conflicts between biodiversity conservation objectives and other priorities for Community funding. However, more work on this area is needed in order to improve the overall biodiversity friendliness of the EU funding framework[8].

Table 3. EU financing foreseen for biodiversity in 2007-2013.

Fund	**Possible Community contribution for financing biodiversity** (EUR)[9]	**Proportion of the total EU budget**	**Comment**
Environment: LIFE+	0.84 billion	0.1 per cent	40 per cent of the total LIFE+ funding earmarked for biodiversity
Agriculture & rural development: EAFRD	20.3 billion for agri-environment measures (AE) 0. 58 billion for Natura 2000 payments and Water Framework Directive (WFD) payments (agriculture and forest) 12.6 billion for natural handicap measures (LFA)	2.4 per cent 0.07 per cent 1.4 per cent	AE schemes are not only focused on biodiversity but often address other goals (see section 3.2 above). Therefore, the total amount of money either allocated specifically for biodiversity conservation, or that has indirect biodiversity benefits remains unclear LFA funding is **not earmarked** for promoting biodiversity conservation, i.e. final allocations for biodiversity not clear

[8] See WWF´s related report: WWF. 2006. Conflicting EU Funds: Pitting Conservation against Unsustainable Development. WWF Global Species Programme, Wien. 72 pp. http://www.panda.org/?uNewsID=61960

[9] As according to COM/2008/864 and SEC/2008/3044, based on analysing the preliminary budgetary allocations by Member States, includes the Community contribution only (i.e. not MS co-financing)

Fisheries: EFF	No estimate available		
Regional development & cohesion: EFRD	2.7 billion for the promotion of biodiversity and nature protection 1.1 billion for promotion of natural assets 1.4 billion for protection and development of natural heritage	0.3 per cent 0.1 per cent 0.2 per cent	Funding for promotion of natural assets and protection and development of natural heritage **not earmarked** for promoting biodiversity conservation, i.e. final allocation not clear
Research & development: FP7	1.9 billion for environmental research Support to biodiversity projects to date: 29.6 million	0.2 per cent	Funding for environmental research **not all earmarked** for promoting biodiversity conservation, i.e. final allocation not clear

4 THE EFFECTIVENES OF EU BIODIVERSITY FUNDING

4.1 Is the amount of financial support sufficient?

There are no estimates available indicating how much money would be required to reach the EU goal of halting the loss of biodiversity. Therefore, there is no clear reference point against which to compare the adequacy of current EU funding, whether from Community, national or other sources. However, available information on the financing needs of protected areas shows that the current level of support to biodiversity conservation is far from satisfactory. It has been estimated that only 20 per cent of the total financing needs for managing protected areas in Europe are being met (TEEB 2009). In 2004 it was estimated that the management of Natura 2000 Network would require an investment of 6.1 billion EUR annually[10]. This figure, already known to be an underestimate in some respects as it applies only to 25 Member States, is four times higher than a possible indicative annual contribution of the present EU budget to biodiversity[11]. This is sobering. However it must be noted that such estimates build on a large set of assumptions. For example, it is often assumed that all farmers need to be paid for management of every hectare of a site

[10] COM/2004/431, for EU-25

[11] Estimated as the annual sum of the EU 2007-2013 allocations for biodiversity: earmarked furning for biodiversity under LIFE+; EAFRD Natura 2000 payments; the earmarked funding for biodiversity and nature under ERDF; and assuming 1/3 of EAFRD AEM expenditure to be allocated for biodiversity.

which in fact may not be necessary. On the other hand, however, the scale of the necessary protected marine sites is often underestimated.

Many of the EU biodiversity indicators point to continuing declines in biodiversity[12]. This indicates that current levels of funding, coupled with protected area legislation, is insufficient to halt this decline. Furthermore, the higher agricultural commodity prices expected in future coupled with increasing pressures for land use change indicate that the opportunity costs to farmers of participating in voluntary agri-environment schemes and undertaking biodiversity sensitive management will increase significantly. This means that payments to incentivise these actions will need to be higher, i.e. the 'costs' of delivering biodiversity conservation within an agricultural context in the future will increase. We can also expect higher land prices, not least in coastal areas, putting up the cost of conservation in the face of competing land users and development.

The EU financial contribution to biodiversity conservation also seems to be meagre when considering the fundamental role that biodiversity plays in supporting human welfare. According to current estimates, the loss of biodiversity and ecosystem services at the current rate for the world as a whole is likely to result in annual costs of 50 billion EUR over the period 2000 – 2010, reaching the total cost of 275 billion EUR / year in 2050 (TEEB 2008). The total global loss of welfare due to the cumulative loss of biodiversity and ecosystem services is estimated to be equivalent to 7 per cent of projected global GDP for 2050.

Furthermore, benefits arising from biodiversity conservation can be significant even at a regional level. For example, the purification of drinking water by nearby forest ecosystems has been estimated to bring the city of New York at least $6 billion (around 4.2 billion EUR) in total savings in water treatment costs, again exceeding the current earmarked contributions for biodiversity from the EU budget (Dudley and Stolton 2003). Similarly, tourism in Northern Germany's 30,000 ha Muritz National Park, generates over US$ 17.7 million (around 11 million EUR) in net earnings per year (Job et al. 2005, Vogtmann 2007). These benefits, provided by one individual protected area, already match around 13 per cent of the annual Natura 2000 payments (i.e. 1/7 of the 0. 58 billion EUR, see Table 3) for the whole of the EU.

However, despite the remaining questions on the actual financial needs and regardless of whether the monetary benefits of conservation outweigh the costs, it is clear that the loss of biodiversity is likely to continue at a substantial rate and it is already apparent that the EU's objective of halting the loss of biodiversity by 2010 will not be reached (e.g. see the Message from Athens 2009[13]). This indicates that the current efforts and investment in protecting biodiversity are not enough and further support, including from the EU budget, will be needed to address the loss of biodiversity in a more effective manner.

[12] EEA CSI indicators
http://themes.eea.europa.eu/IMS/ISpecs/ISpecification20041007131627/IAssessment1116497137063/view_content

[13]Message from a high-level conference to frame EU post-2010 biodiversity policy (Athens 2009)
http://ec.europa.eu/environment/nature/biodiversity/conference/index_en.htm

4.2 How successful is the current EU financial framework in practice?

In theory, the current EU financing framework should provide a number of new opportunities for biodiversity. This is because during the period 2007-2013 activities supporting the protection and sustainable use of biodiversity can receive support from several existing EU funds. However, as explained earlier, the actual decisions on how to allocate the Community financing are mainly taken at the national level, greatly affecting the actual amount of financing available for biodiversity in different Member States.

The allocations presented in Chapter 3 suggest that, in comparison with the opportunities available, the uptake of biodiversity related funding possibilities in the Member States has been limited. For example, more than ten Member States allocate less than 20 per cent of their total EAFRD expenditure[14] to financing agri-environment measures, including Member States with widespread areas of biodiversity rich "high nature value" farmland such as Greece, Spain, Portugal and Romania (Farmer et al. 2008). Similarly, Natura 2000 payments for agricultural and forest land are only adopted by 14 and 11 Member States, respectively[15], although in many cases Member States have chosen to deliver management of Natura 2000 sites through the agri-environment measure instead. There are also clear indications that the possibility of providing financing for Natura 2000 in the context of the EFF has not really been taken up at national level (Torkler et al. 2008).

Apart from the actual budgetary allocations, a number of Member States also have problems with effectively "absorbing" available EU funds for biodiversity at national, regional and local level (WWF 2009). For example, the lack of capacity to effectively mobilise and use the funds obtained, e.g. stakeholders' limited capacity and resources to apply for EU funding, is known to be an issue in many new Member States in particular. Furthermore, the bureaucracy and administrative burden associated with the EU funds can make them inaccessible or unappealing for some stakeholders. There are also problems related to insufficient resources within the governments to ensure both the design and effective delivery of biodiversity financing schemes (e.g. lack of staff with appropriate training and expertise). Similarly, the possibilities of complementing EU funding for biodiversity with national resources have been limited in some Member States, creating a further constraint for the uptake of EU funds (Torkler et al 2008). This indicates that the administrative procedures and co-funding requirement associated with the EU financial framework can also hinder the effective use of Community funds for biodiversity.

Naturally, the final effectiveness of EU funding depends on how well the Community co-financed measures to promote conservation and sustainable use of biodiversity and ecosystems succeed on the ground. In general, EU environmental funding specifically dedicated for biodiversity, provided mainly through projects financed by LIFE, is usually estimated to deliver successful results on the ground. Similarly, agri-environment measures are generally considered as an important way to support biodiversity conservation in agricultural ecosystems and a number of examples exists that demonstrate their potential in practice (Boccaccio et al. 2009). At the same time

[14] Total public expenditure = EU co-financing + national contribution
[15] COM/2008/864 and SEC/2008/3044

there is still considerable room to further improve the efficiency of these measures in delivering maximum biodiversity benefits. As for regional development, no detailed assessment is yet available on the concrete impacts of biodiversity related activities carried out under the Structural Funds.

5 THE FUTURE OUTLOOK - MAKING THE CASE FOR CONTINUED COMMUNITY FUNDING

The EU budget review provides a vital and timely opportunity for increasing the profile of biodiversity within the upcoming negotiations on the Community's post-2013 financial period, both in terms of guaranteeing an adequate level of funding and addressing the shortcomings of the current funding framework. It is, therefore, not to be missed.

Naturally, biodiversity is not the only contestant in the race for the EU funds and it is important that it is not sidelined in the debate. There are several other policy priorities competing for the limited amount of Community resources (e.g. new political concerns such as climate change, and food and energy security). Thus, in order to secure future funding for biodiversity it is important to start by making a solid case for why the conservation of biodiversity continues to be of high importance at the EU level and therefore justifies continued and increased financial support from the Community budget.

To achieve this, continued Community funding for biodiversity should be clearly justified under the general principles governing the Union's budgetary spending, including by showing that the agreed EU policy objectives for biodiversity conservation cannot be achieved by Member States alone but that Community level support is needed (i.e. the subsidiarity principle outlined in Chapter 2). In addition, a clear case should be made that funding is indeed the most appropriate policy instrument to achieve this biodiversity goal (i.e. the best policy instrument principle). Furthermore, it should be demonstrated that the requested amount and form of Community funding is proportionate to the efforts necessary to achieve the EU biodiversity goals (i.e. the proportionality principle).

There are a number of reasons why a significant proportion of the necessary funding should be provided at the European level. Biodiversity values are commonly considered to be a public good of fundamental EU-wide importance that merit being addressed at the Community level. Because of this and the transboundary nature of many conservation requirements, the EU has agreed on a set of shared biodiversity objectives. In doing so it is accepted that benefits will extend beyond national frontiers and costs that will be unevenly distributed. It is entirely consistent and indeed likely to be more effective in this context to share the costs between the broader EU level and national authorities. Given the urgency of meeting the objectives a sizeable contribution from the EU budget is needed at present. Cohesion arguments suggest that this EU contribution should be greatest in the least rich countries which made the greatest contribution to Europe's overall biodiversity. In

addition, it is also increasingly apparent that biodiversity and related ecosystem services are crucial for the Union's economy and for the wellbeing of EU citizens, further justifying EU action to secure their conservation (e.g. TEEB 2008, Kettunen et al. 2009).

EU funding for biodiversity meets the three requirements outlined below:

Subsidiarity: It is clear that the biodiversity challenge cannot be addressed by Member States' actions alone. For example, several key threats to biodiversity and ecosystems, such as climate change, air pollution and the contamination of transnational water bodies, are of a transboundary nature, therefore requiring measures to be taken beyond the national at the EU level. Similarly, a number of biodiversity issues, including the conservation of migratory species and the fragmentation of European ecosystems as a whole, can be effectively addressed only when tackled also at a wider Community level. Where EU funding is made available on the basis of common objectives and requirements, including biodiversity conservation, it is reasonable to take measures to ensure that these funds are applied to this purpose rather than to permit national governments to direct them to purely local objectives.

Best Policy Instrument: Reaching the EU biodiversity goals requires a range of interventions of different kinds and in a variety of sectoral policies. Given the need to obtain the cooperation of private land managers and other interests it is not considered feasible to pursue these goals by legislative instruments alone but there is a need for a wider range of measures, including the provision of incentives and financial support to biodiversity conservation. The role of financial support from the Community budget in securing the effective implementation of the key EU legislative instruments for biodiversity conservation has been demonstrated in practice. For example, Community co-financing has been essential in enabling the establishment of Union's Natura 2000 network, particularly in Member States and candidate countries with limited resources[16].

There are also a number of areas and ecosystems where EU support remains fundamental to create the political will and commitment for securing biodiversity conservation in the future. For example, the establishment of Natura 2000 network in marine areas is still far from being completed and it is likely that financing the establishment and management of marine protected areas continues to be a low priority in several Member States. Therefore, Community funding is foreseen to play an important role in reaching the EU biodiversity goals in marine areas, in particular in areas situated outside national jurisdictions. Similarly, EU financial support for rural development is still seen as one of the key means of preventing the abandonment

[16] E.g. in Spain LIFE funding facilitated the establishment of marine sites (Project: "Inventario y designación de la Red Natura 2000 en Áreas marinas del Estado Español"); in Romania PHARE EUROAID funding was used to support the establishment of Natura 2000 sites (Project: PHARE "Implementarea retelei Natura 2000 in Romania"); and in Croatia LIFE, PHARE and IPA financing has supported the identification and setting-up the Natura 2000 network (Projects: LIFE "Building up National Ecological Network as a part of the Pan-European Ecological Network and NATURA 2000 (CRO-NEN)", PHARE "Institutional Building and implementation of NATURA 2000 in Croatia - State Institute for Nature Protection" and IPA "Identification and Setting-up of the marine part of NATURA 2000 network in Croatia – Marine NATURA 2000")

of land management within remote areas in order to maintain extensively farmed pastures with high biodiversity value.

Proportionality: Finally, the projected costs of continued biodiversity loss together with the apparent failure to reach the EU 2010 biodiversity goal indicate that current financial support for biodiversity is not yet proportional to the current policy challenge. Given the above there is solid argument and practical basis for bringing biodiversity concerns into the heart of the EU budget debate and arguing for continued funding to support the conservation of biodiversity within the Union.

6 PRIORITIES FOR FUTURE FUNDING

6.1 Funding to support ecosystems & their services

In addition to supporting the conservation of species and habitats (See section 6.2 below). The debate on EU biodiversity policy has become more focused on the protection and sustainable use of overall ecosystems. This has occurred since the EU Biodiversity Action Plan was adopted in 2006.[17] The aims include securing ecosystem integrity, functioning and resilience while also maintaining or restoring the services that ecosystems provide to humans (e.g. Kettunen et al. 2006, Kettunen et al. 2009, TEEB 2009). It is anticipated that these new priorities will feature in the Community's funding for biodiversity in the future

The current EU financing framework already provides several opportunities for maintaining and restoring ecosystem services. For example, prevention of environmental risks is one of the priorities supported by the Structural Funds. This offers possibilities for funding actions that aim to maintain or restore the natural capacity of ecosystems to mitigate flooding, wild fires and droughts. Similarly, EU funding for rural development can be used to support several services provided by agricultural or forestry ecosystems, including preserving the natural pollination of crops, maintaining water and soil quality, protecting landscape and cultural values, and supporting rural ecotourism and recreation. Until now, however, the uptake of these opportunities, particularly under the Structural Funds and the European Fisheries Fund, has been limited. (See Chapter 7 for further discussion).

Naturally, not all ecosystem services need to be supported by public funding. Funding to maintain or augment the supply of ecosystem services is needed where the maintenance of a level of services is a public priority but it is being undermined by adverse changes (including neglect). Where funding is required, some should be delivered at the EU level. Targeted Community funding for ecosystems and their services could, for example, be provided for maintaining and restoring those ecosystem services that are considered to be of EU-level importance and that cannot effectively be addressed by Member States alone, e.g. the threats to these services

[17] COM/2006/216

need to be tackled at the EU or transnational level. Such services could include, for example, protecting and enhancing some ecosystems' ability to mitigate the impacts of climate change and to regulate the occurrence of extreme events and natural hazards (See also 6.3 below). Similarly, EU financial support could be used to safeguard ecosystems and landscapes that play a fundamental role in maintaining unique natural and cultural values within the EU. Funding could also be directed to preserving ecosystems' natural capacity to maintain water quality, for example by managing and restoring important wetlands within the EU and supporting the implementation of the Water Framework Directive.

Support for the maintenance of valued ecosystem services could take a variety of forms, for example:

- Funding for the protection of critical ecosystems, such as wetlands or old growth forest.
- Support for the management of such ecosystems, including maintenance and enhancement.
- Support for inter-linked ecosystems and forms of management with a broader goal in mind, for example the provision of ample clean water in a catchment.
- Support for services that are fragile at a broader level, for example pollination where it might be imperative to address diseases in bees, their management and the forms of land use contributing to their health.

Some of these activities fit within more traditional site based conservation and the associated funding tools, others might fall within the remit of existing EU funds (e.g. EAFRD, EFF and ERDF), others still might require more novel approaches to funding. (See Chapter 7 below)

6.2 Secure funding for Natura 2000 – but going beyond!

Despite the increased focus on ecosystems and their services, the protection of species and habitats still has a strong place at the heart of EU biodiversity policy. As commonly acknowledged (e.g. in the EU Biodiversity Action Plan) biodiversity has value in its own right and therefore deserves protection regardless of the benefits it provides to people. Additionally, it is the variety of species and habitats that creates the "building blocks" for naturally functioning ecosystems and the services they deliver. Several studies also indicate that focusing only on securing the maintenance of ecosystem services does not necessarily provide sufficient protection for individual species or habitats, e.g. secure the effective protection of the most biodiversity rich or important areas (e.g. Anderson et al. 2009, Kettunen et al. 2009, Naidoo et al. 2008). Therefore, it is fundamental that the future funding for EU biodiversity policy would adequately cover both of these aspects.

Consequently, continuing to secure financing for managing the Natura 2000 network should remain as one of the key priorities for EU funding. It is also increasingly acknowledged that protected areas, such as Natura 2000 sites, can maintain important ecosystem services and provide socio-economic benefits, both amongst the sites and in the wider environment. These considerations provide a further reason to ensure that

the implementation and management of the Natura 2000 network (including finalising the network, especially the marine sites) receives adequate financial support from the EU budget.

In addition to the Natura 2000 network, it is increasingly important to focus on the protection and sustainable use of the wider countryside and seascapes, taking into account both the conservation of biodiversity and securing the maintenance of ecosystem services. There is already EU funding in this area but more will be required as the pressures continue to mount. One of the key priorities in this context would be to further secure the maintenance of extensive or HNV (High Nature Value) farming and forestry systems on a European scale. These systems harbour a large number of rare and more widespread European species and they also can provide several important ecosystem services, such as maintaining the population levels of pollinating insects, preserving cultural and landscape amenity values, and supporting rural tourism (See also section 6.4 below). Active protection and management is needed to meet the target of no net loss of biodiversity in Europe.

Similarly, significant efforts are still needed to improve the protection and sustainable use of the marine environment not least because the current fishing practises within the EU still continue to degrade marine biodiversity and ecosystems. As mentioned earlier, measures to target biodiversity conservation in the context of the European Fisheries Fund (EFF) have made limited progress despite the commitment to the "ecosystem based approach" to management (e.g. Torkler et al. 2008). The EU budget review and the upcoming review of the Common Fisheries Policy (envisaged to be finalised by 2012) provide a good opportunity for trying to increase the emphasis on biodiversity within EU funding for the fisheries sector.

6.3 Seeking synergies with funding for climate change

The discussions on EU budget reform have revealed growing policy support for redirecting the EU budget to help to mitigate the impacts of climate change. In principle, this is positive news for the environment and, if appropriately addressed, it can also create synergies with biodiversity conservation.

Healthy and resilient ecosystems play a major, and often cost effective, role in combating climate change (Message from Athens 2007[18]). Therefore, EU funding for appropriate climate change related activities can assist ecosystem based mitigation of and adaptation to climate change, including the maintenance and restoration of key habitats and ecosystems. For example, the conservation of old growth forests maintains some of the Earth's most important carbon stores while the restoration of wetlands and forests can help to mitigate flooding and prevent water shortage during droughts (Kettunen et al. 2009). Similarly, ensuring a representative and well-managed network of protected areas can help species to adapt to climate change.

[18] Message from a high-level conference to frame EU post-2010 biodiversity policy (Athens 2009) http://ec.europa.eu/environment/nature/biodiversity/conference/index_en.htm

Unfortunately, however, the current discussions on the EU budget and climate change pay very limited attention to biodiversity. Therefore, there is a clear need to ensure that the need to finance biodiversity on a European scale does not lose out to climate change and that future financing for climate change and for biodiversity are mutually supportive. It should also be ensured that actions to mitigate climate change do not have any net negative impacts on biodiversity. This will include attention to compensation projects since some losses from new energy infrastructure etc. are unavoidable.

6.4 Agriculture & rural development – public funding for public goods

Depending on the agricultural land use and regional context, farming practices can provide a number of so called "public goods". For example, as highlighted already in section 6.2, certain types of farming practices will help to maintain farmland biodiversity, underpin cultural landscapes and support high levels of animal welfare.

There is support among a number of stakeholders, e.g. environmental NGOs, and a nascent interest within the European Commission for future agricultural funding through the Common Agricultural Policy to be redirected more towards financing the provision of these public goods. In principle, if future EU agricultural funding were directed to supporting those farming systems that provide public goods and to supporting farming practices that provide environmental benefits, including in areas where public goods are currently in short supply, this will increase the total funding available for biodiversity by a substantial amount. For example, this could lead to increased support for maintaining several important agricultural ecosystems in the EU, including areas of high nature value. The potentially large sums involved make the redirection of CAP funding a particularly high priority for biodiversity. In addition, focusing the EU's agricultural financing on public goods is also likely to help to reduce the negative impacts of the EU budget on biodiversity. At the same time, some binding requirements to minimise the negative environmental impacts of all agricultural spending would still be needed in order to maintain a certain minimum level of environmental protection across the sector (i.e. as the current cross-compliance requirements).

Providing Community level support to the agricultural sector, in particular agricultural production, has been widely criticised in recent years, as have the uses to which the available funding is put. Given the prominent role of agriculture in shaping the EU countryside and landscapes both in term of its negative and beneficial impacts, a continued role for EU intervention for the agricultural sector aimed increasingly to improve the environmental sustainability of rural areas would seem justified. This needs to include setting strategic goals, developing a robust legislative baseline, designing common measures and, importantly, continuing to provide financial support to the provision of public goods, including biodiversity conservation.

Finally, despite recent reforms, the EU Common Agricultural Policy still remains heavily focused on supporting production. This continues to have direct and indirect negative impacts on biodiversity. The same also applies in the fisheries sector where

EU subsidies have been used to enhance the fishing capacity, resulting in overcapacity and continued depletion of marine resources. Therefore, removing harmful subsidies remains as one of the important goals of agricultural and fisheries funding.

7 POSSIBILITIES FOR THE POST-2013 FUNDING MODEL FOR BIODIVERSITY

7.1 The future of integrated funding?

There have been several positive examples of the use of the integrated EU financing model for biodiversity. For example, several new Member States have been rather active in financing biodiversity conservation from the Structural Funds (i.e. EFRD in particular) (WWF 2009, Torkler et al 2008). Similarly, a number of Member States have spent a high proportion of their EAFRD budget on the AE measure and within this a significant share on biodiversity[19]. However, the uptake of the existing EU possibilities for financing biodiversity conservation still remains relatively low across the EU. For example, there are only a few examples of directing funding under EFF for biodiversity and the use of ERDF in the old Member States has been rather limited. This indicates that further and more targeted efforts are needed to prioritise the integration of biodiversity issues into national funding priorities in the future.

To achieve this, the requirements for financing biodiversity could be made more directional and explicit, e.g. the principle of clearly earmarking a proportion of financing for biodiversity within different EU funds could be established. There might also be possibilities for increasing the Commission's capacity to oversee the national level implementation of different funds, in order to better ensure the allocation of financial support to biodiversity in the context of relevant sectoral policies. This could include, for example, improving the screening of national programmes to ensure that biodiversity considerations are adequately taken into consideration and developing new and/or improved indicators for monitoring and evaluating programmes' biodiversity impacts. The focus of some funds, such as parts of the EFF, could be changed substantially to put biodiversity in a more central role.

In practice, setting a baseline and creating transparency in this area can be quite challenging. There have been difficulties in verifying how much of the current EU budget is allocated to support biodiversity conservation in reality. As explained, this is because several EU financial instruments, such as EAFRD, EFF and EFRD, do not require a full breakdown of specific biodiversity related expenditure from Member States. Naturally, many land management activities supported by the EU funds can be targeted to provide multiple benefits, e.g. to simultaneously support the conservation of landscapes, biodiversity and water quality. Therefore, it might not always be feasible, nor cost effective, to try to single out spending on biodiversity per se.

[19] COM/2008/864 and SEC/2008/3044

However, the current expenditure categories under different EU funds could be monitored more closely (e.g. ERDF) and / or revised (e.g. EFF) to better reflect direct and indirect spending on biodiversity. This is confirmed by a recent review by the European Environment Agency (EEA) which pointed to the weakness of biodiversity in the Structural Funds: "While some intervention codes appear to include biodiversity, it is neither clear – from the overview data – what share of the spending is committed to this goal, nor what types of project are actually supported" (EEA 2009). Better indicators are, therefore, required. The EEA also pointed to useful work on monitoring in Austria as a sign of progress and the framework now used for monitoring rural development measures has also established indicators for biodiversity. These approaches would need to be taken further in the future.

Experience at the national level also shows that the bureaucracy and administrative burden associated with accessing the EU funds can make them inaccessible or unappealing for some stakeholders. This is particularly the case with the current integrated financing model where seeking financial support under several different funds is often required (Torkler et al. 2008). There could be scope, therefore, to simplify the process for accessing different Community co-financing instruments, coupled with capacity building (e.g. through technical assistance from the funds) in Member States to help them use multiple funds more effectively. This could further improve the uptake and effective use of EU funds for biodiversity.

In principle, the integrated funding model can also be used to finance the conservation and restoration of ecosystem services and examples from some existing funds are shown in Table 4. Similarly, the existing funding framework can also provide for support to ecosystem based mitigation of and adaptation to climate change. The low uptake of these opportunities at the national level suggests, however, that more explicit guidance and/or requirements may be needed to ensure allocation of funds to ecosystem services in practice. Also, further discussion might be needed to determine a number of high priority ecosystem services that are considered to be of EU-level importance and that cannot effectively be addressed by Member States alone (See Chapter 6.1 above).

In general, it is still too early to judge with confidence the overall strengths and weaknesses of the integrated funding model in financing Natura 2000 (and also the wider goals of biodiversity conservation) in the EU, although a number of problems are apparent and the resources devoted to funding Natura 2000 seem insufficient. Consequently, it is also premature to pass any final judgements on the possible role of this model in the context of the post-2013 financial framework for the overall needs of biodiversity conservation.

Table 4. Current possibilities for supporting the maintenance and restoration of ecosystem services under the EU integrated funding model for biodiversity (2007-2013)

EU fund in 2007-2013	**Examples of ecosystem services that could receive funding**	**Possible recipients of funding** (i.e. actors maintaining ecosystem services)
Financial Instrument for the Environment (LIFE+)	No specific focus on ecosystem services at the moment but could, in principle, provide funding for this purpose (as support the implementation of EU Biodiversity Action Plan)	All possible, e.g. public administrations and NGOs
European Agricultural Fund for Rural Developments (EAFRD)	Water quality Soil quality Flood mitigation Cultural and landscape values Wild fire mitigation by supporting sustainable forestry practices and maintaining the active management of open landscapes Biological control and pollination by supporting farming practises that maintain high levels of insect diversity Genetic / species diversity maintenance, e.g. protection of local and endemic breeds and varieties Rural ecotourism & recreation	Farmers, foresters, land managers and –owners
European Fisheries Fund (EFF)	Sustainable production of fisheries and aquaculture products Ecotourism & recreation possibilities in marine and coastal ecosystems Cultural values related to rural fisheries communities	Fishermen and aquaculturalists
European Fund for Regional Development (EFRD) European Social Fund (ESF) Cohesion Fund	Climate / climate change regulation Water purification & waste management services Flood prevention, Storm damage control	All possible, e.g. public administrations, NGOs, SMEs

	Wild fire mitigation Ecotourism & recreation possibilities Maintenance of cultural and landscape values	
7th Framework Programme for Research and Development (FP7)	Development of biochemicals & pharmaceuticals Research related to the functioning and maintenance of all ecosystem services	Research institutions

7.2 Specific funding for ecosystems and their services?

Given the increased interest and political focus on ecosystems and their role in maintaining human wellbeing, the idea of having a specific funding mechanism for supporting ecosystem services has been suggested. These considerations are still preliminary in nature and there have been no detailed discussions yet on how this new idea would complement the existing arrangements for financing biodiversity.

In principle, directing EU financing for securing the maintenance of ecosystems and their services (e.g. related socio-economic benefits) could increase the political and public support for EU spending on biodiversity, hopefully resulting in an increased overall budget for the conservation of biodiversity and ecosystems. There are, however, a number of issues that merit further consideration.

As emphasised earlier, focusing on the maintenance and restoration of ecosystem services alone cannot replace targeted efforts to conserve the diversity of habitats and species, e.g. to protect EU's endangered fauna and flora (See section 6.1). Even though these two goals can be mutually supportive, conflicts can also exist. For example, restoring floodplains for flood control can have negative impacts on the nesting of birds in the area. Therefore, targeted EU funding for ecosystem services should be seen as complementary, not as an alternative to, dedicated funding for species and habitats of EU interest, e.g. continuing to support the implementation of the nature conservation directives and the Natura 2000 network.

In addition, there is a need to think carefully what the possible implications of having separate and specific funding for ecosystem services would be in terms of continuing the integration of biodiversity into different EU sectoral policies. Several opportunities for funding biodiversity conservation under the existing funding instruments actually already involve the financing of ecosystem services (See Table 4). For instance, the Structural Funds' support to biodiversity often occurs indirectly through promoting nature related tourism and recreation or via restoring the ability of ecosystems to mitigate natural hazards. Similarly, advocating a specific funding mechanism for ecosystem services would have implications for any future focus of

the agricultural budget for the provision of public goods - as some of these public goods (e.g. amenity, cultural and recreational values of landscapes, and the maintenance of pollinators and soil quality) are also *de facto* ecosystem services. These considerations are important as the different EU financing instruments cannot be used to fund identical priorities and actions. Therefore, a fund for ecosystem services would at least partially overlap with existing funding priorities within other sectoral policies and could potentially undermine the attempts to re-enforce the role of biodiversity within these.

In principle, the existing integrated funding model could already cover a range of ecosystem services (See Table 4). However, the drawback of the current framework is that funding for biodiversity and related ecosystem services is often conditioned by the underlining objectives of different funds and their associated rules, e.g. actions under ERDF need to generally support the broader goals of regional development. In addition, the conservation of biodiversity and ecosystem services has to constantly compete for funding with several other, often more generally appealing political priorities, such as development of infrastructure and support to regional employment. These "framework" conditions can hinder the use of existing opportunities to fund ecosystem services. For this reason there could be value in a funding mechanism devoted to the advance of certain European priorities defined primarily in terms of biodiversity and ecosystem services. This could bring added value by allowing the targeting of EU resources towards this explicit goal, without being diluted by socio-economic, sectoral or regional priorities. Further work in identifying these priorities would be useful.

8 RECOMMENDATIONS: TOWARDS IMPROVED EU FUNDING FOR BIODIVERSITY

There is a general view that the future EU budget needs to be more environmentally targeted in order to better reflect the present Community policy priorities and to address the key environmental challenges the EU is currently facing. Undoubtedly, the loss of biodiversity can be considered as one of these major challenges. The threats facing biodiversity are escalating and there are increasing losses of both biodiversity and related ecosystem services, with significant implications at the EU level. It is also evident that this biodiversity challenge cannot be addressed by Member States alone but continued Community actions are needed to reach the agreed EU goals. Therefore, as outlined in this paper, it is **justified to continue utilising Community resources to support the conservation of biodiversity in the EU**. Several recommendations can be identified to feed into the discussions on the future of funding for biodiversity, particularly in relation to the ongoing EU budget review.

There is a need to ensure that the amount of funding provided by the EU budget is sufficient to deliver real benefits for biodiversity. Whilst formally biodiversity is one of the priorities for several EU funds, one of the major limitations for delivering biodiversity benefits is the lack of overall (and earmarked) budget available. In order to guarantee adequate funding for biodiversity there is a need for more elaborated

estimates of both the investment and ongoing management need, e.g. regularly updated cost estimates for managing the Natura 2000 network and new estimates of the amount of support needed to conserve biodiversity within the wider land- and seascape. This will include investment needed to maintain High Nature Value (HNV) farming and forestry systems and the restoration of degraded habitats. A possible way forward in the current economic climate is to dedicate a significant proportion of a reformed CAP to biodiversity alongside other public goods after 2013.

There is a need to improve the effectiveness of the EU funding model for biodiversity. Despite several pioneering examples on how to use the current integrated model to fund Natura 2000 and biodiversity conservation, the uptake of the existing possibilities at the Member State level still leaves much to be desired. This indicates that further efforts are needed to reinforce the integration of biodiversity issues into national funding priorities. In addition, there is also a need to improve stakeholders' capacity to make use of the available opportunities in practice.

Funding for conservation of biodiversity and the maintenance of ecosystem services should be complementary, not exclusive of one another. There is an increased interest and political focus on ecosystems and their role in maintaining human wellbeing. However, it is acknowledged that biodiversity also deserves protection in its own right and focusing only on securing the maintenance of ecosystem services does not necessarily provide sufficient protection for individual species and habitats, e.g. secure the protection of the most biodiversity rich areas in the EU. Therefore, it is fundamental that the future funding for EU biodiversity policy would adequately cover both of these aspects.

There is a need to continue to improve the monitoring and verification of biodiversity benefits (and costs) delivered by the EU funds. This helps both to establish how far the EU investment has delivered benefits for biodiversity (and ecosystem services) beyond those which would be provided in the absence of this expenditure and can inform the further development and re-design of funding instruments to improve their effectiveness. The former is of essential importance to ensure political and public support for continued EU biodiversity funding in the long-run.

It is important to continue analysing and improving the communication of the benefits arising from biodiversity conservation, e.g. estimates of the benefits of biodiversity and related ecosystem services and the estimated costs of losing biodiversity. The communication of benefits helps to "balance out" the costs of conservation and it can be of great help in creating stronger political support for investing in biodiversity conservation, i.e. demonstrating that the costs of appropriate management are likely to be much less than the associated welfare benefits or the costs long term of biodiversity loss.

All EU policy sectors and the funds that support them need to be "biodiversity friendly". It is not the task of specific biodiversity funds to pursue the overall environmental sustainability of all EU policies. Environmental protection has to be integrated into all EU policy sectors and appropriately reflected in concrete decision-making, at the Community, national and more local level.

National funding is needed to complement Community support. The EU budget is just over 1 per cent of EU GDP and therefore Community level support on its own will never be sufficient to secure the conservation of biodiversity and ecosystems in the whole EU. Both EU and national funding need to be employed in a strategic framework, with EU contributions likely to be proportionally greater in poorer parts of the Union with the highest levels of biodiversity and ecosystem services. National budgets have a pivotal role, not only in relation to biodiversity per se but also in supporting more sustainable patterns of resource / land use and consumption.

9 REFERENCES

Adelle, C., Cooper, T. & Baldock, D. 2009. Understanding and Influencing the EU Budget Review. Final Report for the Environment Agency. Institute for European Environmental Policy (IEEP), London. 37 pp.

Adelle, C., Pallemaerts, M. & Baldock, D. 2008. Turning the EU Budget into an Instrument to Support the Fight against Climate Change (SIEPS 2008:4). Swedish Institute for European Policy Studies, Stockholm, Sweden.

Anderson, B. J., Armsworth, P. R., Eigenbrod, F., Thomas, C. D., Gillings, S., Heinemeyer, A., Roy, d. B. and Gaston, K. J. 2009. Spatial covariance between biodiversity and other ecosystem service priorities. Journal of Applied Ecology, 46: 888–896.

Boccaccio, L., Brunner, A. & Powell, A. 2009. Could do better - How is EU Rural Development policy delivering for biodiversity? Birdlife International, Brussels, Belgium. 44 pp.

COM/2008/864. A mid-term assessment of implementing the EC Biodiversity Action Plan. http://ec.europa.eu/environment/nature/biodiversity/comm2006/bap_2008.htm
Dudley, N. & Stolton, S. 2003. Running Pure: The importance of forest protected areas to drinking water. World Bank / WWF Alliance for Forest Conservation and Sustainable Use. WWF, Gland, Switzerland.

European Environment Agency. 2009. Territorial Cohesion: Analysis of Environmental Aspects of the EU Cohesion Policy in Selected Countries. Copenhagen.

European Commission. 2008. General budget of the European Unionfor the financial year 2009 - The figures.
http://ec.europa.eu/budget/library/publications/budget_in_fig/syntchif_2009_en.pdf

Farmer, M. Cooper, T., Swales, V. & Silcock, P. 2008. Funding for Farmland Biodiversity in the EU: Gaining Evidence for the EU Budget Review A Report for the RSPB. 80 pp + Annexes.

Gros, D. and Micossi, S. 2005. A Better Budget for the European Union: More value for money. CEPS Policy Brief No 66/February 2005. CEPS. Brussels.

IEEP. 2006. An Evaluation of the Less Favoured Areas Measure in the 25 Member States of the European Union: Report for DG Agri. Institute for European Environmental Policy (IEEP). London.

Kettunen, M., Bassi, S., Gantioler, S. & ten Brink, P. 2009. Assessing Socio-economic Benefits of Natura 2000 – a Toolkit for Practitioners. Output of the European Commission project Financing Natura 2000: Cost estimate and benefits of Natura. Institute for European Environmental Policy (IEEP), Brussels, Belgium. 191 pp. + Annexes.

Kettunen, M. & Gantioler, S. 2008. The EU budget and biodiversity. Brussels in Brief – and insert to the IUCN Newsletter, no 17. IUCN, Brussels, Belgium. 8 pp.

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.

Miller, C., Kettunen, M. & Torkler, P. 2007. Financing Natura 2000 Guidance Handbook. Output of a project for the European Commission. Brussels, Belgium. 112 pp. http://ec.europa.eu/environment/nature/natura2000/financing/index_en.htm

Naidoo, R., Balmford, A., Costanza, R., Fisher, B., Green, R. E., Lehner, B., Malcolm, T. R. and Ricketts, T. H. 2008. Global mapping of ecosystem services and conservation priorities. PNAS, 105/28: 9495–9500.

SEC/2008/3044. Accompanying document to the mid-term assessment of implementing the EC Biodiversity Action Plan. http://ec.europa.eu/environment/nature/biodiversity/comm2006/bap_2008.htm

TEEB. 2008. The Economics of Ecosystems and Biodiversity – interim report. The European Commission. 64 pp.

TEEB. 2009. The report for international and national policy makers. (to be published).

Torkler, P., Arroyo, A., Kettunen,. M. 2008. Linking Management and Financing of Natura 2000. Final report. 51 pp.

Vogtmann, H. 2007. Role of Science in Conservation of Biological Diversity. Federal Agency for Nature Conservation (BfN), Germany.
www.bfn.de/fileadmin/MDB/documents/service/07_05_31_Novosibirsk.pdf

WWF. 2009. Good and innovative examples of financing Natura 2000 in the EU. Output of the EC project: Financing Natura 2000: Cost estimate and benefits of Natura 2000. 106 pp. (Final draft)s

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