



European policy review – assessing policy impacts on biodiversity[☆]

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Summary

Trends in international policy show improvement in integration of biodiversity concerns in other sectors, movement from development and implementation of biodiversity policy to evaluation of effectiveness, and development of entirely new policies. There is an increasing need to assess and quantify the impacts of policies on biodiversity. Biodiversity research as well as monitoring has a strong role to play to suit this need.

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Biodiversity concerns should be integrated in all policies and sectors. This credo has been repeated for at least a decade now. Policies at all geographic levels have an impact on biodiversity that is mostly detrimental. In general, the threats come from direct land use (such as in transport infrastructure), introduced species (e.g. through global trade and mobility), environmental pollution (e.g. conventional energy sector), too many people in certain areas (urbanisation), and unsustainable forms of consumption. These five main threats are referred to as HIPPO: habitat loss, introduced species, pollution, population, over consumption.

Many efforts are made to take biodiversity into consideration when revising or developing new

sectoral policies. The most prominent example of this is situated within the agricultural sector that, at least in Europe with the Common Agricultural Policy, gradually moves towards a more sustainable approach. But also in transport policy, fisheries or even banking biodiversity is taken as a guiding principle. Again in Europe, over the past few months, seven thematic strategies have been adopted under the EC Sixth Environment Action Programme that all integrate biodiversity in some way or another. Strategies were developed for air pollution, waste, marine environment, soil, pesticides, sustainable use, and urban environment (EC, 2006).

A trend that can be observed in the biodiversity conservation policies *sensu strictu* is the move from policy development and implementation to evaluation of effectiveness. At the global level this is illustrated by the Convention on Biological Diversity for which issues such as 'Review of the effectiveness and impacts of the Convention bodies,

[☆]This section provides a short analysis of and opinion on international biodiversity policymaking throughout Europe. It focuses on highlights and major developments of the last months. The views expressed are those of the authors.

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processes and mechanisms' and progress towards implementation of the 2010 target (see Delbaere, 2004) are included in the agenda of the 8th Conference of the CBD Parties.

In Europe, for example, the Natura 2000 network of protected areas is taking shape and discussions have begun on how to assess effectiveness of these areas, while also considering the role of climate change. One needs to assess whether the species and habitats for which the Natura 2000 network is developed are actually showing positive trends. Will connectivity between areas need to be enhanced? Are more or different areas required? How do other sectors influence what happens inside Natura 2000? And what level of quality must be ensured for the wider countryside, cities or the sea?

A third movement that is happening right now is that of dealing with dilemmas between options for society that both seem to have positive and negative effects. New policy measures are being developed to tackle environmental or economic issues, which in itself seem to be positive for the environment as a whole. What is unclear, however, is to what extent these measures have an impact on biodiversity. A recent example of that is the discussion on biofuels. As such fuel that is derived from growing plants seems to result in less air pollution. Increasingly, however, the damaging effects to biodiversity of the enormous land area that is required to grow biofuel crops are yet to be fully assessed.

Assessment of the impact of these three policy trends (integration, evaluation of implementation, and innovation) requires reliable data, tools, methods and research. Policymakers from various sectors need to know to what extent their respective policy is impacting negatively or positively on biodiversity, how serious this is and what they can do about it. They want readily available information, clear messages or answers from science and monitoring.

In Europe processes are underway that can fulfill this requirement. Continent-wide research networks for biodiversity, such as ALTER-Net for terrestrial biodiversity (see Delbaere, 2005) provide the basis for integrating not only sectors but also research institutes, science disciplines, information platforms or public involvement. Pan-European cooperation is underway through 'Streamlining European 2010 Biodiversity Indicators' (SEBI2010) to ensure a harmonised approach between European countries that will allow indicator-based assessment of the 2010 target in

Europe. The European Environment Agency plays a central role in information collection, assessments and reporting towards policymakers. And the Countdown 2010 process brings the various parts together and ensures Europe-wide communication and stakeholder involvement.

However, assessment of impacts from sectors on biodiversity is often still rather descriptive and based on examples or snapshot information. This is illustrated by the Millennium Ecosystem Assessment (2005) and the second Global Biodiversity Outlook that is currently being produced for the CBD. A challenge still is to harmonise indicator and monitoring approaches internationally so that they can be used in European or global models that help assess different policy scenarios. The GLOBIO model is an example of such an approach globally. In Europe a project has now been funded by the EC Sixth Framework Programme for Research and Development, called BioScore. This project aims at integrating sensitivity of species to individual environmental variables as a means to quantify impacts of various drivers and pressures while using a modeling approach.

Despite the fact that much is happening in Europe there are still too many gaps in knowledge and data. Gaps that need to be filled by the scientific community together with policymakers and society. These gaps can only be filled if political commitment is present and sufficient funding is provided. Such commitment can be enforced with the upcoming opportunities of the CBD/COP8 and the EC's forthcoming biodiversity policy 'Halting the loss of biodiversity by 2010—and beyond'.

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