HANDBOOK OF INCENTIVE MEASURES FOR BIODIVERSITY: DESIGN AND IMPLEMENTATION

EXECUTIVE SUMMARY

1. About this *Handbook* and How to Use it

Why a *Handbook* on incentive measures for biodiversity ?

Biological diversity is a valuable asset for both present and future generations, as well as an important basis for sustainable development. It encompasses the conservation of a variety of different species, genetic variability among individuals within each species, and the existence of a variety of ecosystems. Conserving this diversity is essential for human economic development - it provides food, energy, raw materials, industrial chemicals, and medicines, as well as important social and cultural benefits.

However, because many of the benefits of biodiversity conservation accrue to the public as a whole, and because of information, market and government failures, biodiversity resources are often utilised at levels that are not sustainable. As a result, species extinction caused by human activities continue at an alarming rate, particularly for mammals and amphibians. Incentive measures are required to internalise the full costs of biodiversity loss in the activities that lead to this loss, and to provide the necessary information, support and incentives to sustainably use or conserve biological diversity. The Convention on Biological Diversity therefore recognises the importance of incentive measures and encourages all Contracting Parties to "... adopt economically and socially sound measures that act as incentives for the conservation and sustainable use of components of biological diversity" (Article 11).

How to use this *Handbook?*

This *Handbook* is designed to assist policy makers and their advisors in the design and the implementation of incentive measures for encouraging the conservation and sustainable use of biological resources. Different policies are applicable depending on the ecosystems in need of protection and the sectors that are exerting pressure on the biological resources. In addition to providing guidance on how to implement incentive measures, the *Handbook* also describes which measures are most suitable for which ecosystems and sectors and what the drawbacks of each incentive measure are and how these can be overcome through utilising a combination of instruments. The recommendations are drawn from the practical experiences of OECD Member countries in implementing such incentive measures, presented in twenty-two case studies (see Annex II for a summary of the case studies).

The *Handbook* can be used to browse and to search for topics of interest, such as a specific ecosystem or a specific incentive measure. it can also be used as a gradually expanding compendium in which the discussion of issues relating to the development of policies to tackle biodiversity depletion becomes increasingly deeper and more detailed. The annexes provide further information and orientation. Perhaps the quickest and easiest way for a policy maker to use the *Handbook* would be to go directly to Chapter 11 and simply follow the checklist provided there f the most important issues that need to be addressed in the design and implementation of any incentive measure to encourage the sustainable use or conservation of biodiversity

However, while the checklist represents a condensed version of the policy advice contained in the Handbook, this procedure is not recommended. The rest of the Handbook provides important information on the context and environment (both political and physical) in which incentive measures are applied. Thus, Chapter III gives an overview of the context in which this work has been undertaken, and Chapter IV a general perspective on biodiversity values

and incentive measures for its protection. Chapter V describes the characteristics of the main ecosystems in OECD countries. Chapters VI and VII form the main part of the Handbook, outlining respectively the processes required for successful implementation of incentive measures and the lessons drawn from the case studies about the different incentive measures that can be used.

The first Annex describes the structure of the "Framework for Case Studies", under which each of the case studies provided by Member countries was prepared. This is followed by Annex II, which provides an overview of the common Framework used to develop the twenty-two case studies undertaken by Member countries and short summaries of each of the studies with contact details for further information. Annex III is a glossary of important terms, with references to the sections of the Handbook where they can be found.

What this *Handbook* is likely to tell you?

Biodiversity provides a range of goods and services to human society, including those with privately-appropriable values and those with public ones. Because of the intrinsic complexity of biological diversity and the pressures that act upon it, designing incentive measures to realise both the public and private values associated with it presents policy makers with unique challenges. This Handbook identifies some of the incentive measures that can be used, the experiences OECD Member countries have had with their application, and the best strategies for designing and implementing the most appropriate measures for the pressures faced by different ecosystems, and arising from different sectors. Many biological resources can be used for economically productive purposes in a sustainable manner. Where this is possible, both the privately-appropriable values of the resources and the public benefits of their continued existence can be realised. in such cases, the most appropriate incentive measures to ensure that their use does not lead to biodiversity depletion are the creation of markets and the assignment of well-defined property rights to realise the full private benefits of the resources, in combination with regulations and standards to proscribe the allowable levels and types of use. in addition, this requires the removal or reform of adverse incentives which induce actors to use the resources at unsustainable levels.

Such measures can include policies as diverse as the implementation of a certification or eco-labelling scheme to create a market for biodiversity-friendly products and services, the attachment of a legal covenant to a piece of land specifying what activities can or cannot be undertaken there, or the removal of subsidies for agriculture or development which encourage the clearance of biologically-rich areas. Where these measures are insufficient on their own to induce the desired behaviour, positive incentives are needed in the form of support for biodiversity-conserving activities or the creation of environmental funds for the express purpose of supporting such activities. These can help to bridge the profitability gap between sustainable activities and unsustainable alternatives, and are also the most likely to gain support from local communities and the private sector.

In some cases, sustainable use of the resources will not be possible. This will be the case, for example, where a species is depleted to such an extent that any consumptive use may contribute to its potential extinction or where ensuring compliance with restrictions for sustainable use is either not possible or would be excessively expensive. In such cases, pure preservation measures will be required instead. These generally require restrictions on access to the biological resources or ecosystems, such as through the development of natural parks to protect ecosystems or habitats, or implementing regulations which prohibit the harvesting or other use of a particularly threatened or endangered species. A general message that arises from the *Handbook* is that well-defined property rights and economic incentives should be utilised wherever possible to realise sustainable use, and regulations, access restrictions and subsidisation of sustainable use wherever necessary.

Some considerations apply to *all* incentive measures. Because of the range of stakeholders concerned with the conservation or use of biological resources, and the complexity of the systems involved, it is important to strengthen scientific and technical capacity, to involve all the relevant stakeholders in the decision-making processes, to ensure that the available information about the resources and the pressures on them is transmitted to the the appropriate parties, and to strengthen or construct appropriate institutions for handling the policy decisions, the implementation

and enforcement of the incentive measures and the monitoring of the biological resources. While all of these activities can be seen as incentive measures in their own right to enable or encourage the sustainable use or conservation of biological diversity, they are also essential framework conditions for the successful implementation of any of the other incentive measures listed above. As such, they provide an important foundation to build a coherent and successful policy mix upon.

Even where these essential contextual framework conditions are in place, often a mix of incentive measures will be required to realise the full value of biodiversity. This is particularly important for biodiversity policies because of the uncertainties surrounding the pressures on the resources and the effects on the resources of these pressures, as well as the number of actors involved. Because of this complexity, it is often difficult to design a single policy instrument that will successfully provide the right incentives for the sustainable use or conservation of the resources by all the relevant actors. instead, it is often preferable to employ a range of incentive measures in order to address all the pressures and actors and which, through some overlap in the measures, can provide essential backup in case any one measure fails to provide sufficient incentives.

The Expert Group on Economic Aspects of Biodiversity and the OECD Secretariat, which together prepared this *Handbook,* hope that it will contribute to facilitating the understanding of the issues surrounding biodiversity depletion and the implementation of appropriate incentive measures. in the final instance, no conceptual guidance can substitute for the political will to conserve and sustainably use biodiversity. The impressive engagement of OECD Member countries demonstrated by the provision of twenty-two case studies, in combination with the conceptual work of the Secretariat, however, constitutes a substantial step forward towards the protection of biodiversity and the implementation of the Convention on Biological Diversity.

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