

# **The Economics of Ecosystems and Biodiversity: The Ecological and Economic Foundations (TEEB D0)**

The TEEB D0 report provides the science basis for the economics of ecosystems and biodiversity, whereas the other TEEB products (D1-D4) are dedicated to specific audiences be they policy makers, administrators, business or consumers.

**Chapter 1:** frames the linkages of economy and ecosystem services, it summarizes recent developments and describes TEEB's basic framework.

**Chapter 2:** presents the current state of knowledge on the relationships between biodiversity, ecosystems and ecosystem services. It explores the underpinnings of this relationship for economic valuation.

**Chapter 3:** provides a review of existing biophysical measures and indicators that are used to quantify and map our knowledge on biodiversity and ecosystem services, including their merits and shortcomings.

**Chapter 4:** establishes the basis for a much needed encompassing understanding of valuation, including ecological, economic and social values, before it more specifically discusses the social and cultural contexts of biodiversity and ecosystem service valuation.

**Chapter 5:** provides a detailed discussion of the merits, issues and challenges to applying (i) monetary valuation techniques and then (ii) benefits transfer in the context of this assessment.

**Chapter 6:** explores some of the ethical issues for economic valuation, in particular the use and selection of discount rates that have to be critically reconsidered both with respect to ecological uncertainties and distributional equity.

**Chapter 7:** presents a synthesis of the empirical economic valuation literature in the form of a matrix of values for the main types of ecosystems and ecosystem services.

**Chapter 8:** makes a preliminary analysis of the costs of action and inaction for several biomes including terrestrial and marine. This analysis is based on a review of available models and recent global assessments, on a selection of scenarios, and on combining various methodologies and sources for the monetary valuation of benefits and costs.

**Chapter 9:** explores the macroeconomic dimension of loss of ecosystem services. By focussing on green accounting, trade and multi sector growth models, this chapter assesses the state of knowledge on changes in ecosystem services and its economy wide implications.

**Chapter 10:** draws key conclusions and recommendations from the TEEB D0 report.