National Monitoring Data & Accounting for Biodiversity

MAIA — Mapping and Assessment for Integrated ecosystem Accounting

UN environment programme **WCMC**

Introduction

There is now a growing group of countries producing SEEA Ecosystem Accounts for mainstreaming biodiversity into decision-making. The core accounts of the SEEA EA allow for the broad measurement of ecosystem-level biodiversity and integration with standard economic information. The SEEA EA also describes thematic accounting for biodiversity, as one of four themes in Chapter 13. Thematic accounting for biodiversity opens up the potential for integrating information on ecosystems to better support decision-making.

In order to achieve the best representation of biodiversity in ecosystem accounts, account compilers need data that accurately describes the distribution and condition of different components of biodiversity. National biodiversity monitoring programmes allow the collection and integration of such data, both at the ecosystem and species level, for thematic accounting for biodiversity as described in the SEEA EA.

As part of the MAIA project, UNEP-WCMC has coordinated a 'National Monitoring Data & Accounting for Biodiversity' report. This provides a synthesis of the Accounting for Biodiversity work being undertaken in MAIA countries and provides a rich overview of a range of practical approaches for implementing biodiversity accounting across the European Union. The report is being currently updated to capture further progress by MAIA countries. A preliminary version of the report can be accessed in the internal environment for consortium members of the MAIA web portal.

Objectives

The report aims to answer two main research questions:

1. How can existing national biodiversity monitoring processes be adapted for informing Biodiversity and Ecosystem Condition Accounting?
2. What specific biodiversity data items could be included in SEEA EA accounts for better guiding decisions on biodiversity?

Methods

- Interviews & email exchanges with MAIA country partners
- Literature review – Secondary research
- Follow up meetings with project partners
- Direct inputs to the draft from contributors

MAIA Countries Covered

- Bulgaria
- Finland
- France
- Germany
- Greece
- The Netherlands
- Norway
- Spain and Andalusia

Q1: Using National Biodiversity Monitoring for Ecosystem Accounting

- Ecosystem established processes for organizing monitoring data for reporting on the EU Nature Directives and National Biodiversity Indexes can support ecosystem accounting.
- National IUCN Red List type assessments can be used to compile thematic 'Species Accounts'.
- Species abundance and richness accounts developed from national biodiversity monitoring data can inform ecosystem condition and cultural services accounts.
- Where spatial referencing for national biodiversity data is limited, information on species can be assigned to different broad ecosystem types based on habitat preferences.
- Structured frameworks such as Elite Index (Finland) and IBECA index (Norway) can be adapted to inform SEEA EA Ecosystem Condition Typology.
- Defining reference conditions for compiling ecosystem condition accounts is very challenging.

Q2: Biodiversity data items for better decision-making

- Integrating red list assessment data can help inform a more integrated planning for achieving conservation objectives.
- Compositional state indicators need to be included in Ecosystem Condition Accounts as other condition characteristics do not adequately reflect trends in species assemblages.
- Extended analyses by France and Germany allow for a "Biodiversity Debt", Underinvestment, and Budgetary investments to be determined.
- Integration of thematic 'Protected Area Accounts' into SEEA EA can help decision-makers evaluating different land use and sustainable development options.
- Biodiversity trends presented in ecosystem accounts need reference thresholds for decision-makers to realise what is in good or poor condition.
- Science-based policy targets provide reference levels to track progress towards national biodiversity objectives.

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