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Official statistics' environmental accounting and Biodiversity Resource Mobilization in the frame of the Convention on Biological Diversity

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Preliminary remarks

Environmental-economic accounting and official statistics Environmental-economic accounting: one single label for distinct disciplines. Key words such as e.g. natural capital, ecosystems evaluation, etc, belong to disciplines other than official statistics and to official statistics' environmental-economic accounting as well.

Subject of the presentation

Official statistics' environmental-economic accounting and its potential to facilitate linkages with other knowledge/policy fields that are of interest in the frame of CBD (main focus on Biodiversity Resource Mobilization).

Official statistics as an infrastructure

For several reasons the data delivered may or may not correspond exactly/immediately to data needs as expressed by specific users at any point in time. Suitable processes and time as appropriate can help to reach proper convergence between demand for and supply of official statistics.

Aim of the presentation

To contribute to **enhance convergence for the purposes of CBD**.

Introduction

Aichi Biodiversity Targets (ABT) and national accounting Within official statistics, core national accounts and satellite environmental-economic accounts are involved, even directly, by ABT.

Biodiversity

Is a relatively **emerging topic** within official statistics, as compared to those covered by more traditional social and economic data.

Core NA and satellite environmental-economic accounts
They can play a specific role in supporting initiatives related to CBD
(like other subsets of official statistics) and possibly a **prominent** one.

ABT 2: biodiversity values to be incorporated into national accounting. In the long run, the role of National Accounts appears to be crucial for CBD-related processes (NA supposed to be regularly used to support development strategies and planning processes).

ABT 20: technical assessments to be made as concerns **financial resources needed** for effectively implementing the Strategic Plan for Biodiversity; monitoring of the **financial resources currently made available** to be carried out as appropriate.

SEEA (System of Environmental-Economic Accounting)

International Standard plus subsystems plus Experimental Ecosystem Accounting

SEEA-CF (SEEA Central Framework)

Adopted by the United Nations Statistical Commission as an **international statistical standard**. It includes **EPEA** (Environmental protection Expenditure Account) and **ReMEA** (Resource Management Expenditure Account)

SEEA-Water, **SEEA-Energy**

Subsystems of SEEA: guidelines for specific natural resources.

SEEA Experimental Ecosystem Accounting

It complements SEEA-CF by providing **methodological guidelines specific for ecosystem accounting**; it's not an international standard. In general, biodiversity issues are dealt with in SEEA Experimental Ecosystem Accounting more in depth than in other SEEA parts. One exception in this regard are EPEA and ReMEA as far as expenditure for conservation of biodiversity is concerned.

WAVES (Wealth Accounting and the Valuation of Ecosystem Services) A global partnership. Mentioned in the Fifth Report of the the European Union to the CBD, June 2014, it includes EU financial support. The aim is to develop **experimental** environmental accounts with a view to formulate a tentative international standard on ecosystems valuation, for possible inclusion in the SEEA.

Resource needs assessments and calculation of current levels of resources. What about actual expenditure?

Assessment of financial resource needs. Official statistics data from the core System of National Accounts (**SNA**) and **SEEA** satellite accounts a **unique and valuable support** for use by economic and other experts assisting governments (modelling).

Calculation of current levels of funding. E.g. EEA's set of SEBI indicators on streamlining European biodiversity used to monitor the implementation of the EU 2020 Biodiversity Strategy and the attainment of the corresponding ABT. SEBI 25 (*Financing biodiversity management*) a proxy to answer a key policy question: how much public funds are being committed to conservation of biodiversity.

Calculation of current levels of expenditure. The SEEA modules Environmental Protection Expenditure Accounts (EPEA) and Resource Management Expenditure Accounts (ReMEA) deemed to be special accounting tools for calculation of actual national expenditure, including for BD.

Possible issue: data on public funds committed to conservation of BD and sustainable use of its components vs data on national expenditure actually carried out for the same purposes. What about using the latter data both for assessments of financial resource needs and in calculation of resources made available, might it still be an option?



International standards for official statistics

Statistics are needed for an accurate picture of society. In particular, decision-makers need statistical data to make decisions, the general public to evaluate the performance of politicians and other decision-makers. Providing users with **high-quality statistical information is a key task for democratic societies**; these are deemed not to function properly without a solid basis of reliable and objective statistics.

UN Fundamental principles of official statistics, European Statistics Code of Practice. They target both the statistical production processes and outputs (official statistics), as well as institutional and organisational factors. The ESCP includes 15 principles and a set of indicators of good practice for each of them; mandatory quality assurance procedures and quality reporting are adopted within the statistical community.

ESCP 15 principles: Professional Independence, Mandate for Data Collection, Adequacy of Resources, Quality Commitment, Statistical Confidentiality, Impartiality and Objectivity, Sound Methodology, Appropriate Statistical Procedures, Non-Excessive Burden on Respondents, Cost Effectiveness, Relevance, Accuracy and Reliability, Timeliness and Punctuality, Coherence and Comparability, Accessibility and Clarity.

Agenda 21 and SEEA as an international statistical standard

Agenda 21

A21 is at the origin of the statistical standard character of SEEA: it highlighted the importance of integrating policy decision-making in the various fields as well as the statistical evidence that informs policy. A system approach appeared to be necessary for monitoring the transition to sustainable development and, in line with this, Agenda 21 proposed to develop integrated environmental-economic accounts. The provisional concepts and methods already developed at that time were the starting point; the objective was their revision and standardization.

A global consultation for SEEA

In the process promoted by Agenda 21 for the development of environmental-economic accounting, consultations led by the UN Committee of Experts of Environmental-Economic Accounting (UNCEEA) were crucial steps. Each SEEA component has undergone a global consultation that involved countries, UN agencies, World Bank, IMF, OECD and the European Commission.



SEEA's features and policy-makers' needs

SEEA's distinctive characteristics

SEEA provides a comprehensive conceptual accounting framework which builds on SNA utilizing its principles of economic accounting. It brings together basic economic, environment and sociodemographic statistics and describes the relationship between them. Starting from a variety of data, the various SEEA modules organize and reconcile them.

SEEA's invaluable potential

Based on such an integrated accounting approach, SEEA facilitates linkages with official statistics and allows the construction of time series of consistent, comparable and comprehensive statistics and indicators. As a result of this, the trade-offs of policy-makers' decisions that affect natural resources and associated services are made explicit. The accounting system as a whole can best support policies pointing at sustainable development and green economy.



The European legal base for mandatory production of national environmental-economic accounts

Establishing a legal base in the EU: the momentum

The 2006 conclusions of the European Council called for the extention of national accounts to key aspects of sustainable development. Accordingly, the same accounts were to be supplemented with integrated environmental-economic accounts providing fully consistent data.

One of the five actions proposed by the European Commission with its 2009 Communication **GDP and beyond** included extending national accounts to environmental issues.

In 2011 The European Parliament and the Council recognised that SEEA brings together economic and environmental information in a common framework to measure the contribution of the environment to the economy and the impact of the economy on the environment. Also, they recognised that SEEA provides policy-makers with appropriate indicators and descriptive statistics to monitor these interactions as well as a database for strategic planning and policy analysis to identify more sustainable paths of development.



Mature and less mature environmental-economic accounts: a modular approach adopted in the EU (1)

The basic Regulation of the European Parliament and of the Council on European environmental economic accounts (No 691/2011): establishes a common framework for the collection, compilation, transmission and evaluation of European environmental-economic accounts, by providing methodology, common standards, definitions, classifications and accounting rules intended to be used for compiling environmental economic accounts. As concerns quality criteria, Regulation No 223/2009 shall apply.

Three modules fully in line with SEEA as a first step

Air emissions accounts

Environmentally related taxes by economic activity Economy-wide material flow accounts.

Provision for possible proposals concerning new modules to be added in subsequent steps

Environmental Protection Expenditure, Environmental Goods and Services Sector, Energy Accounts, Environmentally Related Transfers (subsidies), Water Accounts, Waste Accounts, Forest Accounts, **Ecosystem services Accounts**.

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> 10 Istat

Mature and less mature environmental-economic accounts: a modular approach adopted in the EU (2)

Second Regulation adopted in April 2014 (No 538/2014): introduces three more modules fully in line with SEEA Environmental protection expenditure accounts Environmental goods and services sector account Physical energy flow accounts.

Relevance of these three new modules

They are intended to contribute directly to the **EU's policy priorities** of green growth and resource efficiency by providing important information on indicators such as market output and employment in the Environmental goods and services sector account, national environmental protection expenditure and the use of energy.

Environmental protection expenditure accounts

Environmental protection includes all activities and actions which have as their main purpose the prevention, reduction and elimination of pollution and of any other degradation of the environment. The module is particularly relevant as accounting tool for calculation of economic resources devoted by resident units to environmental protection, including for conservation of BD.



Protection of biodiversity and landscape within EPEA

CEPA

international standard Classification of Environmental Protection Activities and Expenditure

CEPA item 6 - Protection of biodiversity and landscapes

Refers to measures and activities aimed at the protection and rehabilitation of fauna and flora species, ecosystems and habitats as well as the protection and rehabilitation of natural and seminatural landscapes. [...]. Measurement, monitoring, analysis activities as well as administration, training, information and education activities are also included.

Excluded is the protection and rehabilitation of historic monuments or predominantly built-up landscapes, the control of weed for agricultural purposes [...].

CEPA item 6 breakdown

- 6.1 Protection and rehabilitation of species and habitats
- 6.2 Protection of natural and semi-natural landscapes
- 6.3 Measurement, control, laboratories and the like
- 6.4 Other activities

Protection of biodiversity and landscape within ReMEA

CReMA

Classification of Resource Management Activities developed within the European Statistical System for compiling statistics on the Environmental Goods and Services Sector.

CReMA item 12 - Management of wild flora and fauna

Refers to activities aimed at the minimisation of the intake of wild flora and fauna through in-process modifications as well as withdrawals reduction and regulation measures. Restoration activities (replenishment of wild flora and fauna stocks) are included when aiming at maintaining/increasing the consistency of stocks (otherwise they come under CEPA item 6). Measurement, monitoring, analysis activities as well as administration, training, information and education activities are also included.

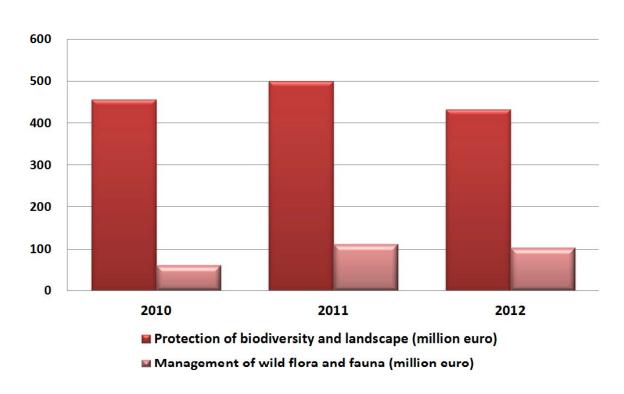
Excluded is the protection of biodiversity which concerns essentially threatened species (under CEPA item 6).

CReMA item 12 possible breakdown

- 12.1 Reduction of the intake
- 12.2 Replenishment of wild flora and fauna stocks
- 12.4 Measurement, control, laboratories and the like
- 12.5 Other activities.

National expenditure for conservation of BD is regularly calculated in Italy according to EPEA and ReMEA (1)

for example: expenditure for conservation of BD actually carried out by Italian Ministries

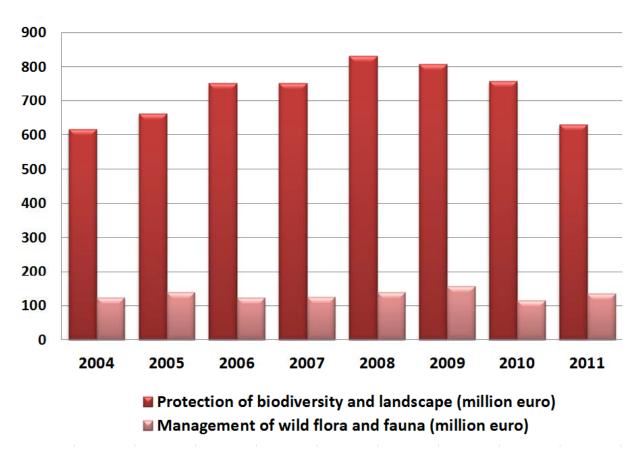


Cesare Costantino Carolina Ardi Emanuela Recchini Source: data from the Italian Ministry of Economy and Finance as processed by ISTAT, Environmental-related monetary accounts: L'Ecorendiconto dello Stato - years 2011, 2012 and 2013



National expenditure for conservation of BD is regularly calculated in Italy according to EPEA and ReMEA (2)

for example: expenditure for conservation of BD actually carried out by Italian Regional administrations



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Source: ISTAT, Environmental-related monetary accounts

Istat's cooperation with MATTM in the frame of BRM

EPEA and ReMEA data has been the focus in the cooperation between Istat and the Ministry in the frame of BRM during last years. Istat's environmental accountants have been providing MATTM experts with methodological support for the purposes of the Italian Permanent Board for CBD Resource Mobilization Strategy.

Issues emerged

An important point has concerned **soundness of existing data and their comparability** both at national and international level. The issue was whether **concepts**, **definitions and classifications of official statistics** could be adopted **while best observing the rules given by the reporting framework**.

E.g., as concerns **indicators focused on funding** - like Indicator 1 in the Methodological Guidance - one limitation is that they **do not show quality of resource utilization**, as it had been highlighted in the Draft Proposal for Expert Consultation of the of June 2011.

Double-counting was considered **a specific risk**.

Major areas were identified where efforts had to be concentrated in order to have **a more complete picture** (e.g. private flows, flows indirectly related to biodiversity).



Concluding remarks

It appears that there are good reasons in the BRM process for understanding **mobilization of resources just as funding**. At least, policies can easily and significantly be developed by committing financial flows to given purposes, while it is not that easy to define them directly in terms of actual utilization of money.

However, actual utilization of the financial resources committed to CBD's purposes does matter as well. Indeed, efforts made in real terms for conservation of BD would be what really matters. So a provocative remark is made here by recalling that perhaps **funding vs expenditure** is an issue that is still there in some way. **Is there room to discuss that? Would some reflection on that still make sense?**

The usefulness of official statistics derived from **SNA** and **SEEA** seem to be out of discussion (ABT 2) especially as far as **Resource** needs assessments are concerned (AT 20). The point might be to discuss the extent to which expenditure data from **EPEA** and **ReMEA** can be considered to be appropriate for calculation of resources made available (ABT 20).



Thank you for your attention

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