



The “values connected to ecosystems” methodological proposal

CHALLENGES IN THE MEASUREMENT OF NATURE IN OFFICIAL STATISTICS

SESSION 2. ACCOUNTING FOR THE DIVERSE ECONOMIC VALUES CONNECTED TO ECOSYSTEMS

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Introduction & Purpose

- ▶ **Ecosystem Accounting** (or *Natural Capital Accounting*) aims to highlight the **importance of nature** for the economy and society
- ▶ **UN SEEA-EA**: monetary values, meant as prices, do not have a statistical standard status, but are only considered for principles and recommendations
- ▶ Regulation **2024/3024**: *'The aim of establishing monetary values should be to **raise visibility on the cost of non-action**'* (Regulation 2024/302, Recital 11)
- ▶ Our approach/position* was first conveyed to the Italian Natural Capital Committee and then proposed to Eurostat with contributions from Estonia, Austria, Spain, France, Germany, Netherlands, Norway as an input to the "assessment of methodological possibilities and the feasibility of monetary valuation", to highlight the reasons why **the mainstream 'pricing approach' does not serve the purpose** to represent the importance of Nature and the cost of non-action



Monetary valuation of Nature: a controversial matter.....

- ▶ Consistency with economic theory and moral implications
- ▶ Consistency with accounting principles
- ▶ Information/Communication issues
- ▶ Risk of misusing monetary values

Consistency with economic theory and moral implications

- ▶ Prices reflect **scarcity** (real physical or artificial) but more frequently they can depend on **institutional arrangements**, different **market structures**, **purchasing power inequalities**, ...
- ▶ **Using markets** as the reference context for establishing the costs of non-action, the loss of services that are essential, both for vital systems and for our economic systems, is questionable
- ▶ **Nature is not a collection of ordinary goods**
- ▶ And **the monetary metric** tends to reducing it to a **fungible, substitutable, fully homogeneous and interchangeable, additive, replaceable, reproducible value** (if pricing is used with the idea of promoting the protection of nature, then the paradox is that its substitutability is admitted)

Consistency with accounting principles

Pricing is legitimate in 2 cases out of 3

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1. An ES is the actual object of exchange (e.g. carbon offsets, PES) => observable prices/values/incomes (rents).
2. An ES's exchange values' is «embodied» in transacted goods or services (e.g. in the price of a hotel room, in the value of crops) => «implicit rent» concepts;
3. The (observable or implicit) exchange value of something else, i.e. a produced good or service or transaction or financial asset... , different from the income actually derived from owning/using the ES, is arbitrarily assumed to be the (exchange) value of the ES and use it «as if it was». Instead, it is just a connected or dependent value that may also convey interesting information, which could be of use in policy-making, if correctly communicated and understood, for what they directly represent (IV Report on the State of Natural Capital in Italy, Estonia and the Netherlands applications)

Information/Communication issue

- ▶ **Legitimate pricing** mostly **provides low values** for ecosystem services (insignificant figures), because ES have no production costs and crucially depend upon institutional settings
 - ▶ E.g., **rents** are exchange values of ES, but they basically represent the outcome of a negotiation between factors of production and concern income distribution rather than the actual importance of ES as an input to production
- ▶ **‘Illegitimate’ exchange values** (eg: potential benefits or costs related to ecosystems such as avoided costs, replacement costs, restoration costs,...) might **provide the most significant figures and important information**, but they are values *connected* to ES and not their exchange value
 - ▶ Each relevant connected value should be communicated for the meaning it has, in order to convey the right information to policy
 - ▶ They are in general not homogeneous nor additive

Risks of misusing monetary values (adverse paradoxes)

- ▶ Monetary values have such a **powerful communication impact** that our duty is to make sure that the risk of misinterpretation is minimised
- ▶ The **importance of ecosystem services** should not be equated with market-driven price fluctuations: the **increase in monetary value**, due to a particular *market regime* or *institutional arrangement*, might be neutral for **biophysical quantity** or even accompany its **decrease**
- ▶ Overpricing does not tell us that Nature's value is really increasing but only that few nature-based goods/services are accessible only to the wealthy (**'drift to luxury goods' paradox**)
- ▶ **'Over-exploitation'** paradox: an ecosystems being degraded by overuse may get **higher economic value** (eg: nature-based tourism or flood mitigation), at the same time **protected** ecosystems may be valued **less**, simply because they are not commercially exploited

The Proposed Alternative Approach

- ▶ Monetary values should be presented as not to obfuscate **physical values** that remain the most reliable indicator for ecosystem health and policy guidance
- ▶ Measures of **rent-like income** derived from owning or using ES are interesting of their own, they are included in SNA (system of national accounting) figures, and are in some cases visible (e.g. land)
- ▶ In most cases, monetary estimates of ES that reflect **potential costs and benefits** or **economy-wide values dependent upon ES**, may be good representations of the costs of non-action.
- ▶ A **dependent or connected value approach** clarifies policy uses for supporting sustainable decision-making, prevents from undervaluing Nature and is neutral with respect to Nature's commodification (which is a choice belonging to policy, not to statistics)



THANK YOU FOR YOUR ATTENTION

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