



# Ecosystem accounts for policies in France

## *An overview*

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# Introduction



*By 2020, at the latest, biodiversity values have been integrated into national and local development and poverty reduction strategies and planning processes and are being incorporated into national accounting, as appropriate, and reporting systems.*



*SDG 15, target 9 : By 2020, integrate ecosystem and biodiversity values into national and local planning, development processes, poverty reduction strategies and accounts*

*« Based on a survey for statistical offices and ministries and independent experts worldwide, we confirm that there is very little use of natural capital accounts for public policy decisions and, more so, in developing countries. The most relevant obstacles are the lack of political support by key people and institutional leadership unable to promote policy use by other ministries. » (Recuero Virto, Weber and Jeantil, 2016)*

## Outline

- 1) Background information
- 2) Ecosystem service accounts
- 3) Measuring the cost of degradation

# Background informations

## Existing reflections

**2008 : "Stiglitz-Sen-Fitoussi" Commission (Measurement of the Economic Performance and Social Progress) :**

*« Recommendation 11: Sustainability assessment requires a well-identified dashboard of indicators. The distinctive feature of the components of this dashboard should be that they are interpretable as variations of some underlying “stocks”. A monetary index of sustainability has its place in such a dashboard but, under the current state of the art, it should remain essentially focused on economic aspects of sustainability. »*

**2009 : "Chevassus-au-Louis" Commission (An economic approach to biodiversity and ecosystem services. Contribution to public decision-making)**

*« Considering that all of the research on these spatially characterised productions and benefits has still not defined them and that many key roles (thresholds, keystone functions) are not documented, and that various forms of value are not attainable by “econometric” means, but that we are not at liberty to wait to preserve biodiversity, it seems necessary supplement the current knowledge on the values of services rendered by the study of the implicit values (“shadow prices”), revealed by past political decisions. The backwards calculation could apply to very many forms of political decisions involving biodiversity. » (p. 267)*



# Background informations

## *A developed ecosystem monitoring system in France*

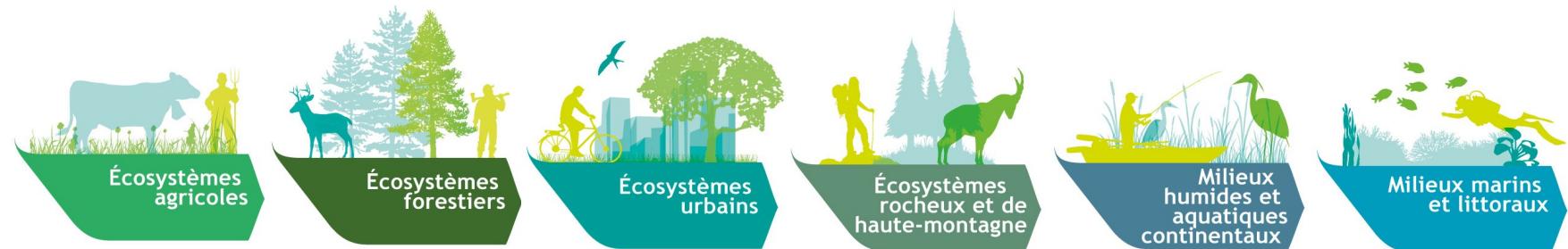
No natural capital accounts but a developed ecosystem monitoring system and multiple initiatives ;

- **A developed ecosystem monitoring system** : a forest national inventory, monitoring systems resulting from the Marine strategy and water framework directives
- **that supports**
- **Some ecosystem-related accounts** (encompassing economic components), e.g. Ecosystem carbon accounting (LULUCF), Forest integrated environmental and economic accounting (IEEAF, since 1998), « Comptes de l'environnement » (environmental protection and natural resources management expenditures, annually since 1999).
- **And multiple assessments** : SDGs monitoring indicators, « Revue de l'état de l'environnement en France » (a 4-year and exhaustive account of the state of the environment), forest sustainable management indicators, IFRECOR (coral reefs), observatoire national de la biodiversité (ONB) et de la mer et du littoral (ONML).



# Ecosystem services values

- Currently in the EFESE : a **review of ecosystem condition and associated ES values**



- **No plan for developing economic ES accounts *per se*** in the short term ;
- Rather, (scarce) resources are focused on strengthening the salience, credibility, legitimacy of some strategic ES values (Cash et al, 2003, Ash et al, 2010) :
  - Assessing **ES values related to strategic issues** : adaptation to climate change, solidarity and inequalities ;
  - Developing **valuation methodologies for decision support**.
- In addition, an *interest* for developing an experimental system of ecosystem accounts at the national level that encompasses
  - **Ecosystem extent and condition accounts** both consistent with the SEEA-EEA and the French national regulatory frameworks ;
  - A complement with an **economic measure of the cost of degradation**.

# Measuring the cost of degradation

## *Existing proposal for a policy-relevant value*

- A greater emphasis on reporting a distance to **an environmental standard**
- Tantamount to **the notion of *unpaid ecological costs***, proposed by André Vanoli (see e.g. Vanoli (2015) and Devaux (2015) for an application in France)
  - Separate Nature accounts (→ ecosystem extent and condition accounts)
  - An environmental standard on the state of Nature that derives from many considerations (including non-use) and politically legitimate arbitrages (e.g. GES in MSFD or WFD, « no net loss »);
  - *Unpaid ecological costs* are the cost of the economically efficient measures that would be required to guarantee the achievement of the standard and not already implemented (e.g. some of the costs of the PoM in the MSFD or WFD).
- Conceptual attractiveness
  - Consistent with the principles of the SNA and easy to integrate (Vanoli, 2015) ;
  - Consistent with rational decision-making processes in complex and uncertain environment (see e.g. Farmer and Randall 1998).



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# Measuring the cost of degradation

## *Why is it policy relevant?*

- **Realism** : data exists and is often already used!
  - Cost-based measures of the cost of degradation of the Marine strategy framework directive in France ;
  - the costs of compensation measures are the practical values recommended for valuing biodiversity in official CBA in France (Quinet et al., 2013).
- **Policy relevance and multiple potential uses :**
  - Facilitates an explicit process for defining an operational environmental standard on ecosystem condition (assessment of the discrepancy between ambition and means, discussion about the costs and benefits of the norm) ;
  - Focus the discussion and allocation of the (scarce) economic assessment efforts on how to efficiently avoid ecosystem degradation ;
  - Strengthen existing economic assessment ;
  - Inform about budgetary requirements ;
  - Get an aggregate to communicate on the overall state of ecosystems in comparison with GDP.
- **Some illustrations** : budget allocation, democratic deliberations, etc.





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