





### **Management Accounting for Ecosystems:**

# Moving from exploratory assessments to quantified reciprocal commitments

Clément Feger 23 March 2015







## Accounting for ecosystems: is there something missing?



|                       | Environmental reporting |
|-----------------------|-------------------------|
| Management accounting | Financial accounting    |

| <u>Tools</u>   |  |                         | <u>Tools</u> |
|--|--|-------------------------|--------------|
|  |  |                         |              |
|  |  |                         |              |
|  |  | Environmental reporting |              |
|  |  |                         |              |
| Ecosystem services life cycle analysis (Zhang, 2010)   | Management accounting  | Financial accounting    |              |
| Assessing business impacts and dependencies with ES in firm's management accounting (Houdet, 2014; NCP&WBCSD)    | Providing information to managers to improve the organization's environmental performances and find synergies with economic performances |                         |              |
| Multiple ES analytical tools for project planning, priority-setting, risk analysis, performance etc. (BSR, 2015) |  |                         |              |

|  | Environmental reporting  |   |
|--|--|---|
| Providing information to managers to improve the organization's environmental performances and find synergies with economic performances | Financial accounting  Measuring and disclosing the costs of environmental actions undertaken by an organization to prevent or maintain natural capital | "Bilan biodiversité" (biodiversity footprint) (Houdet, 2012)  Triple Depreciation Line model for social and natural capital maintenance (Rambaud & Richard, 2015) |

|  | Environmental reporting  Making organizations more transparent and accountable to external actors and society for their actions and impacts on ecosystems | Global Reporting Initiative (GRI) and new ecosystem services guidelines (GRI, 2011)  EP&L Accounts (Puma, Kering, Yorkshire Water etc.)  Natural Capital Protocol (NCC, WBCSD) |
|--|---|--|
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How do multiple organizations impact the overall ecosystem quality? Environmental reporting Making organizations more transparent and accountable to external actors and society for their actions and impacts on ecosystems Financial accounting Management accounting Measuring and disclosing the Providing information to managers to improve the costs of environmental actions organization's environmental undertaken by an organization to performances and find synergies prevent or maintain natural with economic performances capital

| Exploratory Accounting   | Ecosystem and territorial Accounting   |         |
|--|--|---------|
|  | How do multiple organizations imp overall ecosystem quality?   | act the |
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| ?  | Making organizations more transparent and accountable to external actors and society for their actions and impacts on ecosystems |         |
|  |  |         |
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| Exploratory Accounting   | Ecosystem and territorial<br>Accounting  | "Green accounting" / Green<br>GDP (i.e Sukhdev, Feger,<br>2012; GIST; SEEA; Waves<br>Program etc.) |
|--|--|--|
|  | Measuring and structuring information about the quality of ecosystems on the landscape at different scales                       | Ecosystem Capital Accounts<br>(Weber, 2012; European<br>Environmental Agency)                      |
|  | <u> </u>   | National assessments of birds populations; IUCN  |
|  | How do multiple organizations impoverall ecosystem quality?  | Red Lists etc.   |
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InVEST and other Natural Capital Project tools (scenario making tools etc.)

#### **Exploratory Accounting**

Exploring, caracterising and quantifying the emerging ecological issues on the landscape to elaborate new collective representations

## Ecosystem and territorial Accounting

Measuring and structuring information about the quality of ecosystems on the landscape at different scales

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Environmental reporting

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### What is missing to better organize and act for change?

### Despite many hopes:

- Nat Cap' case studies show that information provision is useful BUT not enough to be systematically a "game changer"
- Gaps between information produced, decision-making and real change for the conservation agenda

### The challenge is thus how to :

- Negotiate, put in place and maintain a long term collective management of ecological issues beyond punctual interventions or exploratory pilot projects...
- ....and without necessarily benefiting from very favorable conditions for change already in place

### Adopting a management accounting perspective

- What is management accounting?
  - In essence, management accounting systems as a set of practices and tools "for gathering and communicating data for the ends of aiding and coordinating collective decisions in light of the overall goals and objectives of an organization" (Horngren and Sundem, 1990, p4 in Quattrone and Busco)
  - Theories and practices aiming to connect information with what is at the core of any organizational processes: A system of accountability and reciprocal rights and obligations
- Why adopting a management accounting for ecosystems perspective
   ?
  - MA to help quantifying, informing and managing reciprocal responsibilities and commitments made by stakeholders in order to reach, through complex organized action, a set of ecological objectives that they collectively agreed on

### **Ecological issues account**

Measuring, tracing and regularly communicating on the evolution of the ecological issues identified by the collective

## Ecological contributions account

Tracing the actions directly contributing to ecosystem management made by each individual stakeholder and assessing:

- its + or impact on the ecological quality of the identified issues
- the costs of these various actions

## Organizational support account

Tracing the activities contributing to the organization of the collective action and its accounting system:

- development and use of the ecological quantification tools used (i.e InVEST)
- coordination work,
   organization of participatory
   workshops, communication
   etc.
- -the costs of these activities

## Finance and resources account

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Completing exploratory tools with strategies and negotiation methodologies

Tools do develop, materialize, and test MAfE accounts in practice/field experiments

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Management Accounting for Ecosystems

Measuring a set of ecological issues managed by a collective and organizing the contributions and resources of each stakeholder

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|   | Management Accounting for  | How do multiple organizations impact the overall ecosystem quality?  |
|   | Ecosystems   | Environmental reporting  |
|   | Measuring a set of ecological issues managed by a collective and organizing the contributions and resources of each stakeholder      | Making organizations more transparent and accountable to external actors and society for their actions and impacts on ecosystems |
| How do collective   | es one organization contribute to ecosystem management projects?   |  |
| Completing management accounting tools of organizations who actively participate in ecosystem | Management accounting  Providing information to  | Financial accounting  Measuring and disclosing the   |
| management (NGOs, firms who deliver environmental services etc.)                              | managers to improve the organization's environmental performances and find synergies with economic performances                      | costs of environmental actions undertaken by an organization to prevent or maintain natural capital                              |
|   |  |  |

# What roles for the Natural Capital Project in a Management Accounting for Ecosystems perspective?



Thank you! Clement.feger@gmail.com

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