







# Understanding the diversity of institutions for Ecosystem Services provision: A tentative integrative conceptual framework

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## Rational

- Many framework around ES
- Diversity of instrument to promote ES provision
- → Importance of institutions to provide ES
- → Which institution / instruments to better enable / facilitate / maintain / secure biodiversity and ES provision?

## Objective

 Propose a framework to understand the diversity of instrument regarding ES provision from ES characteristics and societal variable

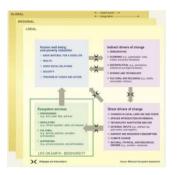
- → In which conditions, do an instrument is prone to be adopted? (analytical position)?
- → Which can be the "best" solution in specific context (prescriptive position)?

# Methodology

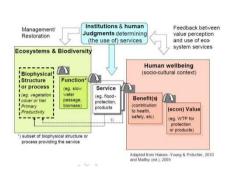
- Revision of the existing frameworks
- Define and classify instruments (as unit of analysis)
- Construction of a integrative tentative framework, using existing frameworks
- Illustration y testing on existing cases

# Frameworks review (1)

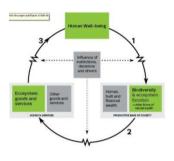
## • Linking ES → Well being



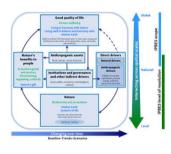
MEA, 2005



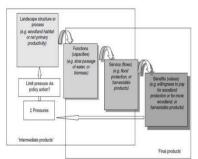
TEEB, 2010



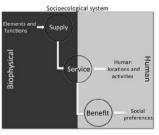
IPBES, 2012

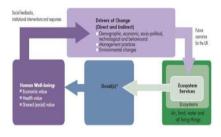


IPBES, 2014

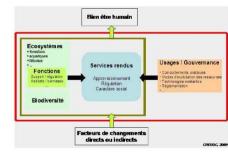


Haines-Young & Potschin, 2009 Tallis et al., 2012





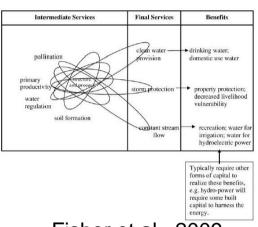
Royaume-Uni, 2011



France, 2009

# Frameworks review (2)

Refining link between ES 
 benefit

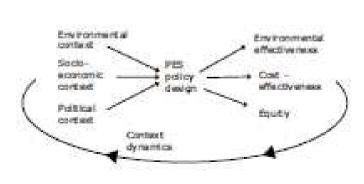


Fisher et al., 2009

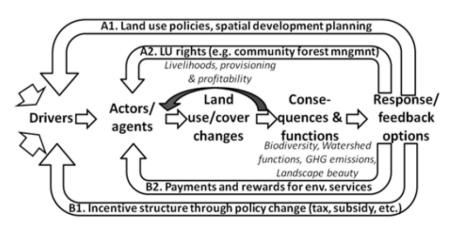


Balmford et al., 2010

## Analyzing effect or diversity of instruments



Jack et al, 2008



Van Noordwijk et al., 2012

# « Limits » of existing frameworks

Institutions are not present

- Institutions as driving force
  - but their choice are not explain

- Explain policy / instruments diversity
  - but loose track of ES characteristics

## Instruments on ES

- Strong attention to PES / RES and then MBI instruments
  - Debate on conceptualization (inclusive to restrictive definition) –
     (e.g. Wunder 2008; Muradian et al, 2010; Taconi, 2012; Van noordwijck et al, 2012; Sattler & Matzdorf, 2013; ....)
  - Various typologies of PES and MBI (Wunder et al, 2008; Laurans et al, 2012; Muradian et al, 2010; Pirard; 2012; Sattler et al, 2013,...)
- Specific attention on governance structure for ES management and PES (Market / Hierarchy, and hybrid) (Muradian & Rival, 2012; Vatn 2010, 2014)
- Relationship between ES economic characteristics and policy instrument (Farley and Costanza, 2010; Kemkes et al, 2010)
- → Empirically, a wide range of instruments and combinaison of instrument "policy mixes" "instruments mixes"

## Instruments

### **No Economic**

### **Economic**

#### Public rules

Environmental regulation

Zoning, land use, species regulation (e.g. prohibition of land use change, land use planning, protected area, ...)

Permit (e.g.

Standards (Organic, iso9002)

information/education/ awareness raising

#### Collective rules

Local regulationCommunity based zoning, regulation...

#### • Private rules and preference

- Corporate Social and environmental responsibility
- Standards (NAAS)
- Norms (consumer preference)
- Information/education/ awareness raising

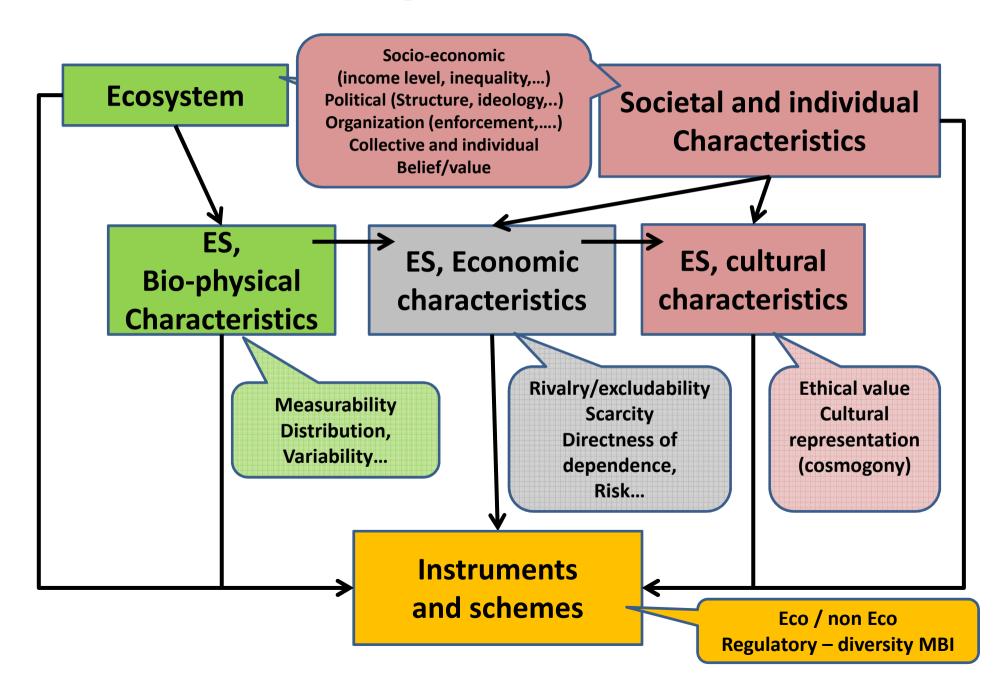
#### Transfer of property rights (e.g. Land acquisition)

- Voluntary price signal (Labeling e.g. Rainforest Alliance, 3AAA, Starbucks)
- Private Contractual agreement

   (e.g. Coasian type PES agreement)
- Public private contract (e.g. "Pigouvian" PES type)
- Regulatory price changes / Taxes and subsidies / Pigouvian instruments
- Earmarked taxes and tariffs
- Environmental financing (e.g. Water tariff)
- Tradable permits

   (e.g. biodiversity or Carbon offset)
- Auctioning (e.g. landscape auctioning)
- **Derived market** (e.g. Ecotourism)
- Donation

## A tentative integrative causal framework



# Preliminary conclusion and further steps

- Preliminary conclusions
  - A possible added value to "graft" ecological, economic and policy approaches
  - Potential to identify relevant characteristics for instrument design
  - A dimension of "instruments mix" whereas a stand alone instruments analysis
- On going process, further step
  - Integration of diverse cases to further identify specific explicative factors and interaction between factors
  - Integrate a dynamic dimension (feed back)

# Thanks for attention and comments!!

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