invaluable.fr

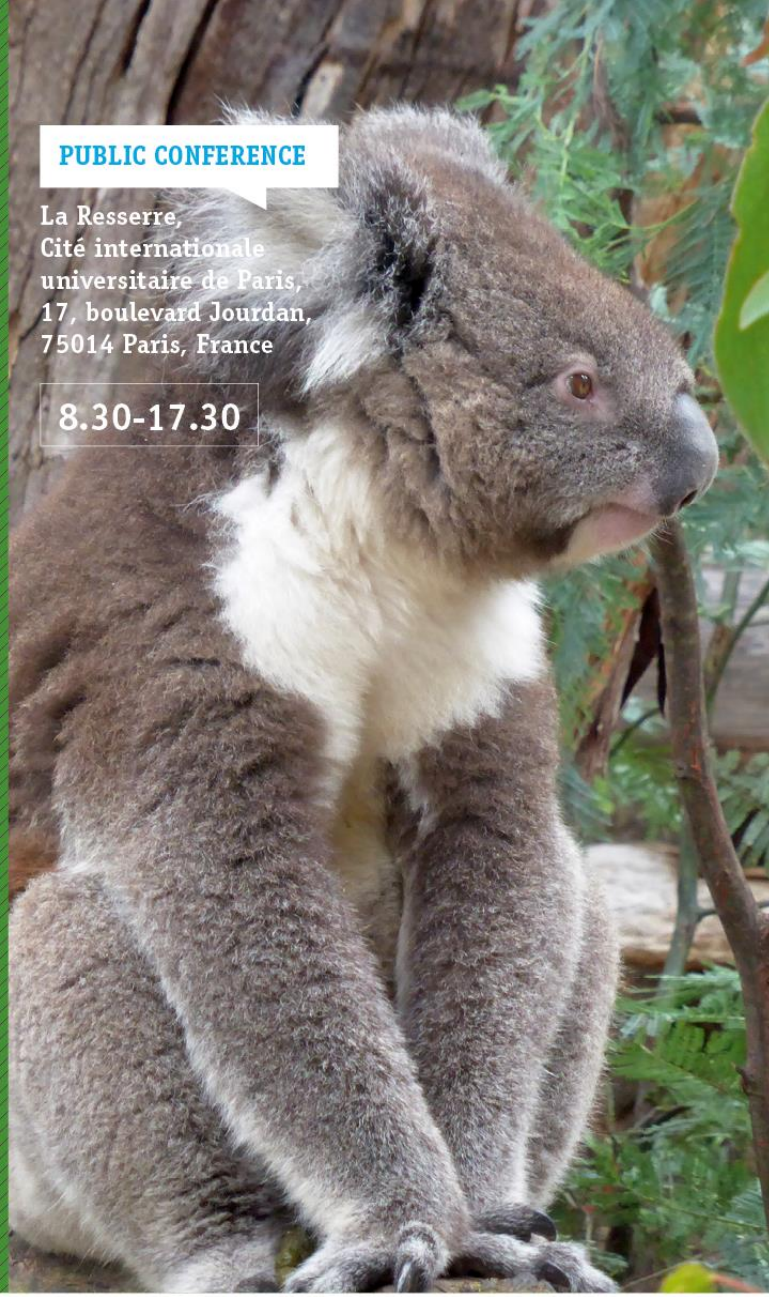
invaluable
Valuations, Markets and Policies for Biodiversity & Ecosystem Services

biodiversa

FRIDAY 19 JUNE 2015 - PARIS

Governing Biodiversity and ecosystem services through market-based instruments?

Theory and practice for decision-makers



PUBLIC CONFERENCE

La Resserre,
Cité internationale universitaire de Paris,
17, boulevard Jourdan,
75014 Paris, France

8.30-17.30

IDDRI

FONDATION D'ENTREPRISE HERMÈS

cirad

Radboud University Nijmegen

CHAIR OF FOREST AND ENVIRONMENTAL POLICY

ifp

UCL Université catholique de Louvain

IRD Institut de recherche pour le développement

icta Institute of Environmental Science and Technology • UAB

Institute for European Environmental Policy

WAGENINGEN UNIVERSITY

invaluable.fr

invaluable
Valuations, Markets and Policies for Biodiversity & Ecosystem Services

biodiversa

Engaging with policymakers on market-based instruments: decision support tool, knowledge and the law

Charles-Hubert Born and Arnold Bregt

PUBLIC CONFERENCE

FRIDAY
19 JUNE 2015
PARIS

Governing Biodiversity and ecosystem services through market-based instruments?

Theory and practice for decision-makers

IDDRI

FONDATION D'ENTREPRISE HERMÈS

cirad

Radboud University Nijmegen

CHAIR OF FOREST AND ENVIRONMENTAL POLICY

ifp

UCL Université catholique de Louvain

IRD Institut de recherche pour le développement

icta Institute of Environmental Science and Technology • UAB

Institute for European Environmental Policy

WAGENINGEN UNIVERSITY

General outline of Session 3

How to enhance policy decisions in MBI design and implementation ?

How to set and implement **effective, equitable and legitimate PES or banking schemes** ?

Two aspects have been investigated in this regard:

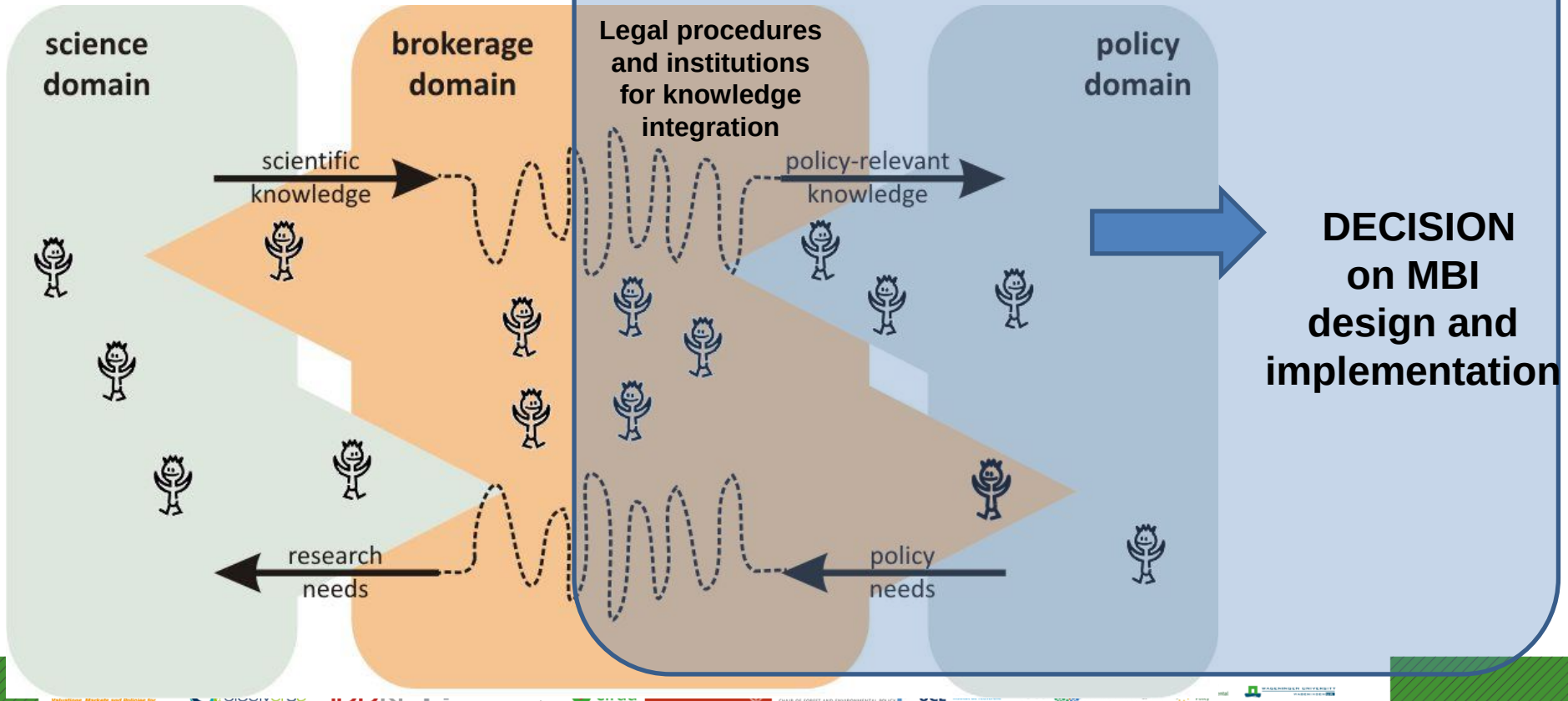
- **Science policy interface**, in theory and in the field
- **Regulation** for MBI design and implementation

In one picture:

Legal Framework

- Legal contraints (EU Law, fundamental rights, …)
- Setting conditions for ecological performance and economic viability
- Ensuring transparency and accountability
- Reducing risks inherent to MBIs

Knowledge brokerage process



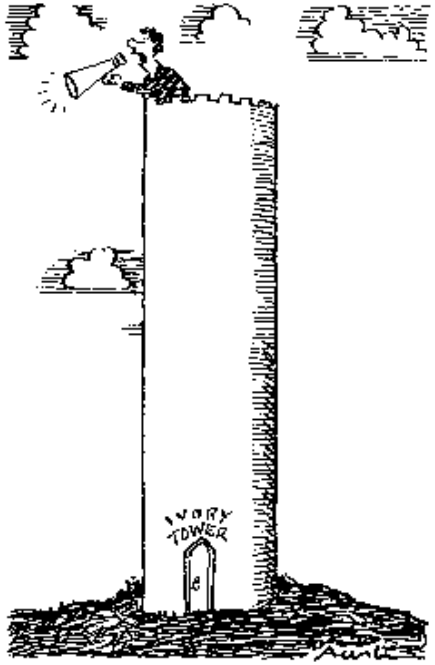
Source: ReSciPI (2011)

I. Science-policy interface: Enhancing the use of knowledge for MBI design and implementation

1) Scientific knowledge and policy

- complex field of biodiversity policy
  in urgent need of ‘usable knowledge’ (Lindblom 1979)
- however, effectively linking
  scientific expertise and political
  decision-making chronically difficult

Scientists‘ perspective



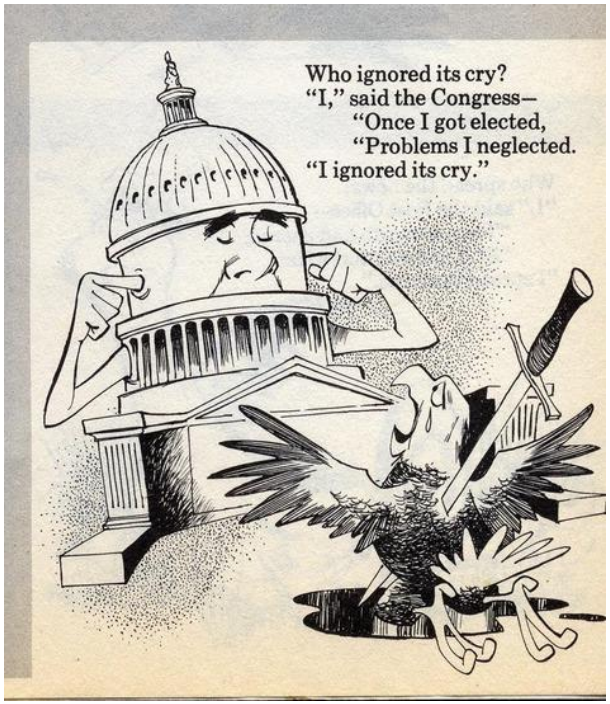
Policy makers‘ perspective

2) People, stakeholders and policy

- non-scientific knowledge and values also essential for equitable and legitimate decisions

"Great News Dear—they have dropped the plans for the Windfarm"

Citizen's perspective



Land owner's perspective

SPI issues investigated in INVALUABLE

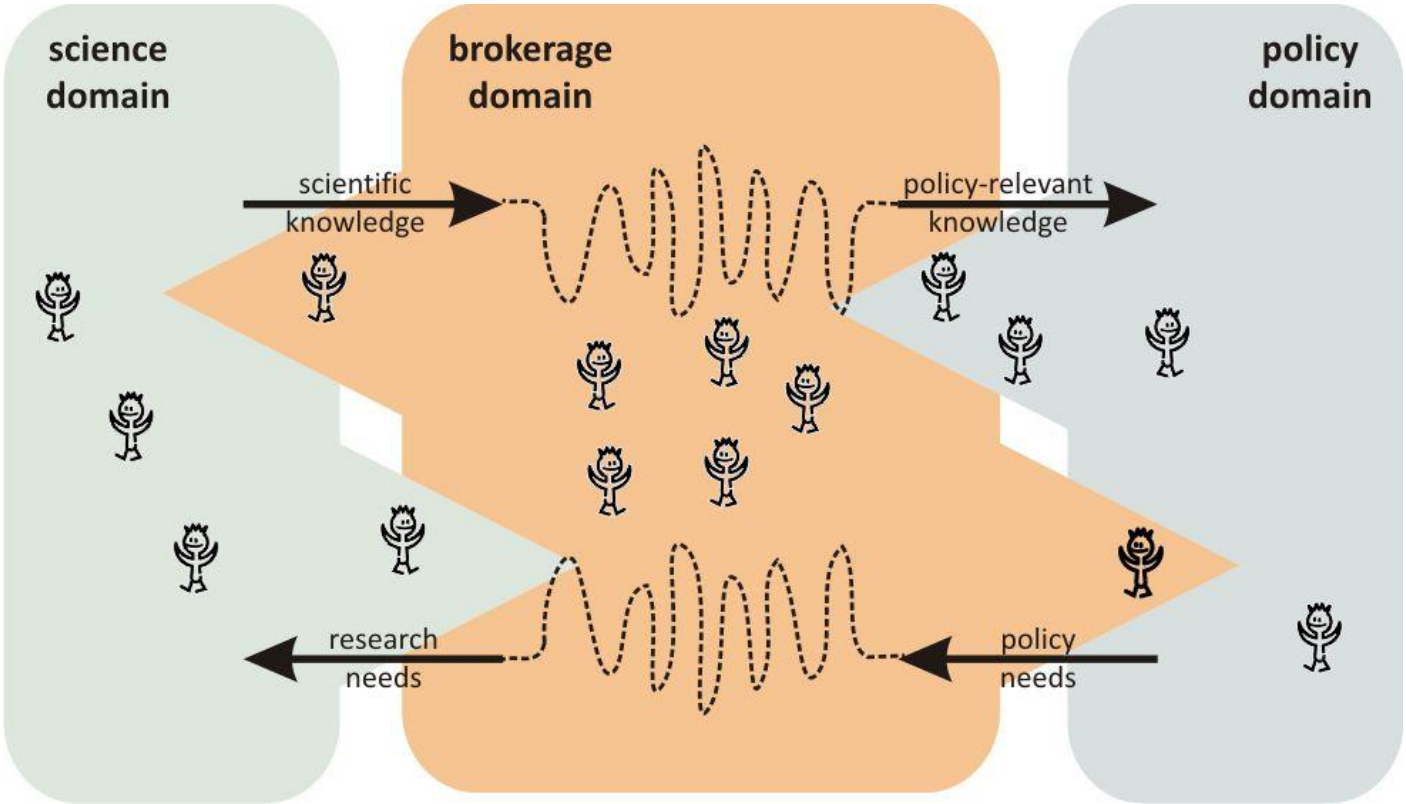
1. **Scientific advisory organisations/mechanisms**
   - Case study: Climate Services
2. **Administrative implementation**
   - Case study: conservation triage; PPP
3. **Decision Support Systems**
   - Case study: QUICKScan
4. **Legal regulation for better knowledge integration**
   - Case studies: PES, Habitat banking

1. Scientific advisory organisations and mechanisms

’Knowledge brokerage’ organisations and practices in climate services: a role model for biodiversity policies?

- **‘Knowledge brokerage’(KB) concept:** iterative process aiming at bringing *relevant and integrative* knowledge together with policy makers through intermediary organisations and procedures

  → bottom-up approach to SPI, decision-oriented and drawing on stakeholders’ perspective



Research focus: Learning from **climate services (CS)** for biodiversity SPI

- **Climate services:** nodal-like structures, specialized staff of ‘intermediaries’, customer-driven, ‘bottom-up’ exchange

- **Claim:** *facilitating* local to national action (decision support), not only *transferring* or bridging existing knowledge

- **In-depth case studies:** UK (UKCIP), Germany (CSC), Scotland (CXC), Switzerland (ProClim) → investigated on how they realize knowledge brokerage (KB).

Key messages

• The concept of ”**knowledge brokerage**” (KB) is useful to analyze and better understand SPI

• **Scientific credibility, practical saliency and democratic legitimacy** are key criteria for effective SPI; in practice,

- CSs enacted salient, credible and legitimate advice fairly differently
- in practice, **legitimacy is often set aside** for sake of scientific credibility;
- **only UKCIP** puts high emphasis on **legitimacy** and **policy-orientation**

• CS model per se **promising** but **simple transfer to biodiversity policy not advisable** because of:

(i) ambiguous results and
(ii) the question of **transferability** from climate to biodiversity remains open

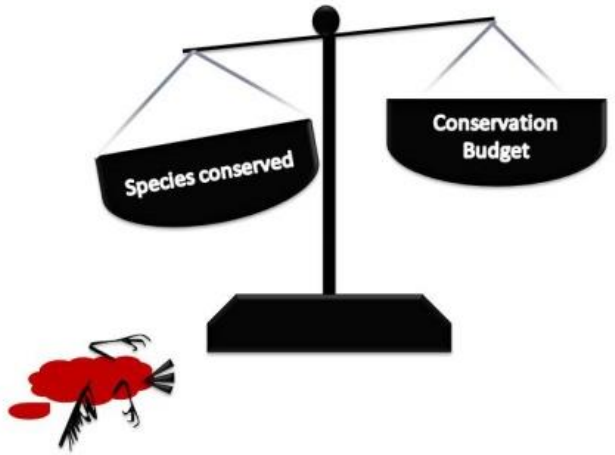
2. Administrative implementation of SPI

Priority-setting for species conservation planning in Australia and New Zealand

- **Research rationale:** insight on the use of economic approach to species conservation planning

- **Concept:** '*conservation triage*', i.e. approach to solve "Noah's Ark" dilemma: efficient use of limited budget to save species

- **Case studies : Project Prioritization Protocol** (PPP)
  Conservation planning process to prioritorize species **:** PPP in New Zealand; "Saving Our Species" (SOS) framework in New South Wales, Australia



Limited budgets for conservation cause a 'Noah's Ark' policy dilemma Picture: S. Reinecke

Source : http://conservationbytes.com/2009/03/27/classics-ecological-triage/

Key messages:

- Setting priorities in threatened species management is ultimately a **social process (not expert)**
- Economic approaches for priority-setting **need** to be both more **rigorous and transparent**
- **Meaningful involvement of different stakeholders is fundamental** for acknowledging and incorporating societal values associated with threatened species in decision-making processes
- Translation of science into “clear” **numbers** may **obscure high uncertainty** in ecological systems; may create false certainty in decisions and may exacerbate risks

3. Do decision support tools really support the science-policy interface?

The QUICKScan Case

Setting – spatial problems

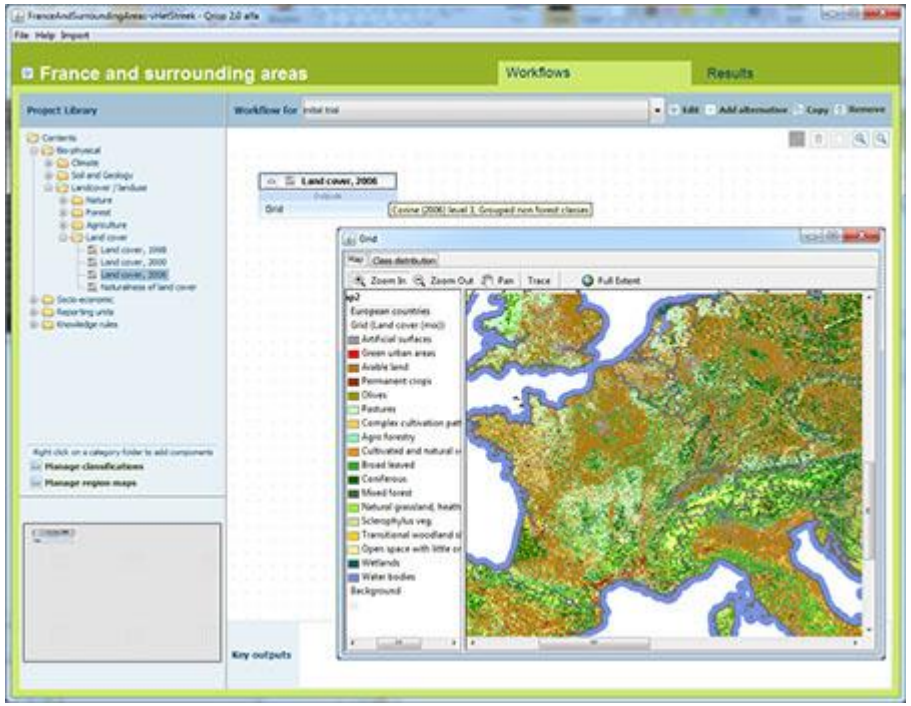
Science policy interface - approaches and tools

	SDSS offer	SDSS demand (from policy view point
Approach	Powerful modelling	Flexible tools
Toolbox	Close	Open
Time	Anticipation (10-100y)	Policy cycle (2-10y)
Analysis	Expert support	Decision support
Uses	Implement solutions	Explore options
Runs	Complex validation	Easy iteration

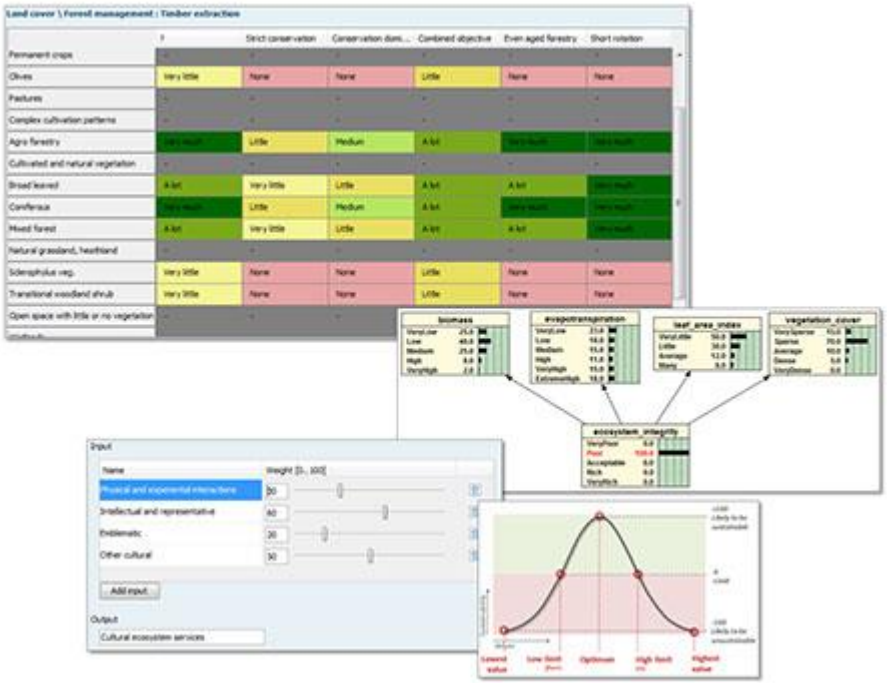
After Verweij et al. 2012

QUICKScan (www.quickscan.pro)

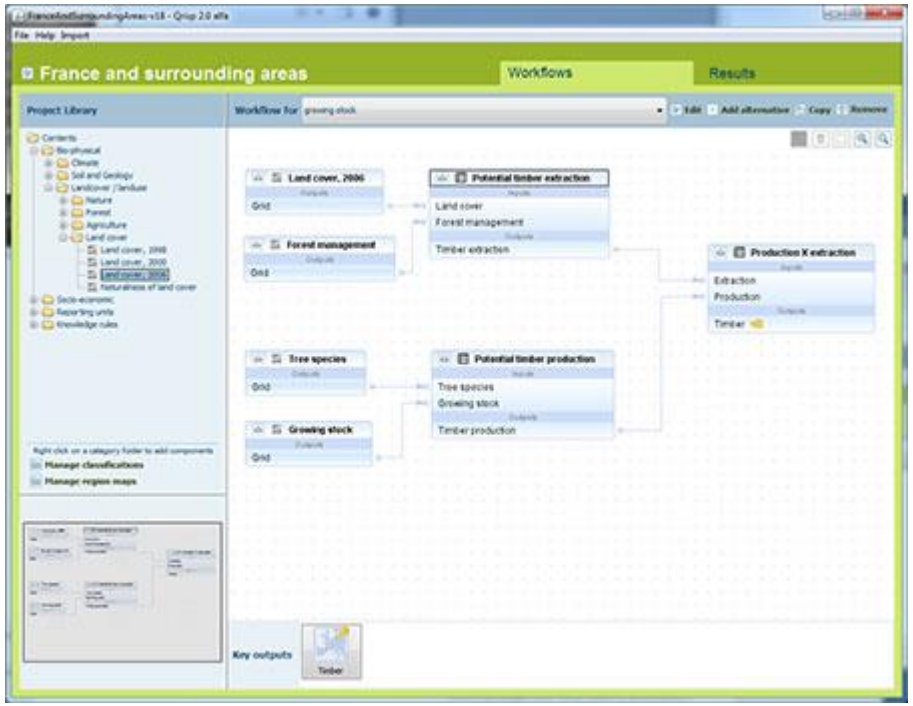
Base maps



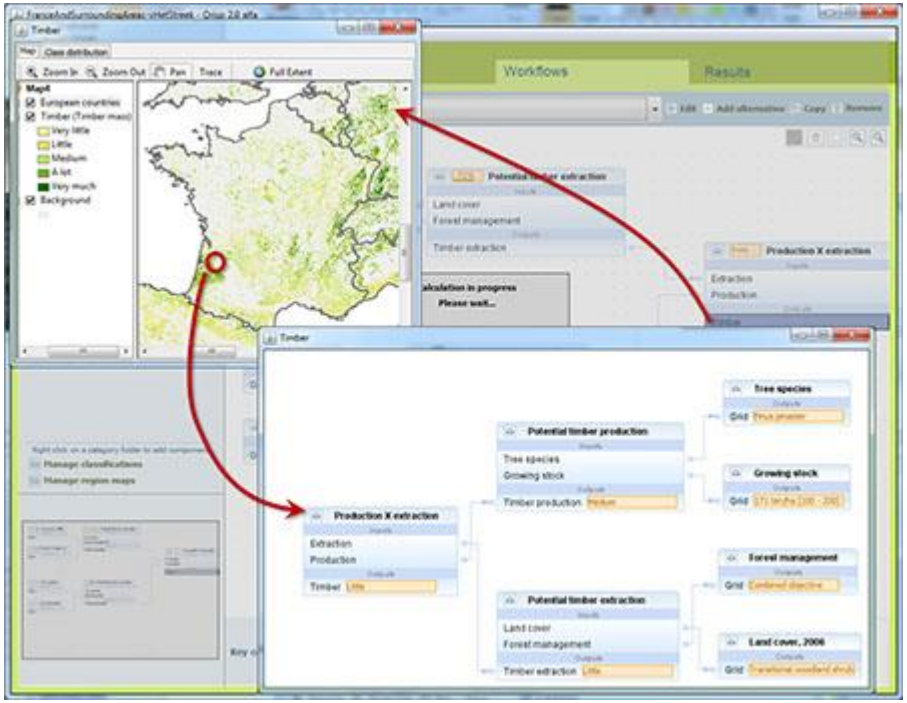
Rules



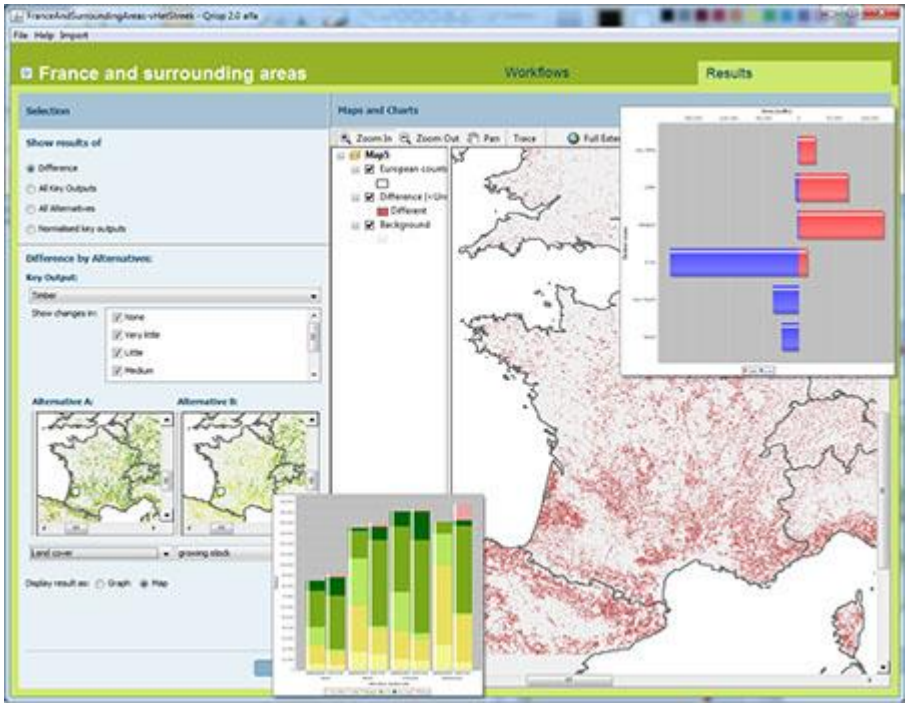
Modelling Canvas

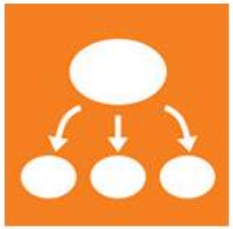


Transparent



Alternative comparison





Applications

Case 1- European Green infrastructure

Case 2 - Wetland conservation in the Yellow River Delta in China

Case 3 - Soybean expansion in Brazil

Case 4 - Resettlements of displaced persons in South Darfur

Case 5 - Landscape attractiveness of the Dutch countryside

Case 6 - Urban sprawl in Europe

Evaluation – did it work?

Oct 2014, the Tomintoul & Glenlivet Landscape Partnership

Analysis

- **Two workshops (Scotland)**
- **Pre - post questionnaire (measure perception)**
- **Users appraisal (in line with suggestions current SDSS lit.)**

Results – Role of QUICKScan and tranparancy

Has the QUICKScan tool helped you to understand the position other participants' have on these topics?

***5.8** (Workshop 1) **4.8** (Workshop 2)*

Was the process to produce the maps comprehensible to you

***6** (WS 1) **5.3** (WS 2)*

Note: Higher than 4 positive

Results – Shared understanding (7 highest score)

Evaluation of the discussion between participants: ***6*** *(WS 1)* ***5.8*** *(WS 2)*

Agree with the position of the majority: ***5.9*** *(WS 1)* ***5.4*** *(WS 2)*

Has your position changed: ***4*** *(WS 1)* ***3.6*** *(WS 2)*

. **Key messages:**

- For science policy support mutual understanding is essential

4. The role of regulation in the development of effective and better-informed MBIs

How law may enhance knowledge integration into MBI design and implementation ?

. **Key messages:**

- Conservation **planning** and **impact assessments** procedures are essential for providing **scientific evidence**

- Legal procedures and institutions ensuring **public participation and dialogue between stakeholders** are important adhesion and legitimacy factors

- '**Knowledge brokerage**' practices should be established through specific legal provisions

- Remember the '**backing role of legal principles** (esp. precautionary principle and polluter-pay principle)

Example 1: farm advisory system (Art. 12 Regulation n° 1306/2013/EU).

Example 2: Recovery plan for the Red-Cockaded Woodpecker in the Conservation Banking scheme (2012)

II. The role of regulation for sound MBI design and implementation

What role for private and public regulation in PES/BS design and implementation for greater effectiveness, equity and legitimacy ?

Public regulation : unilateral norms enacted by public authority (binding or not)

Private regulation : any voluntary norm negotiated and adopted by private and/or public parties, such as in private contracts

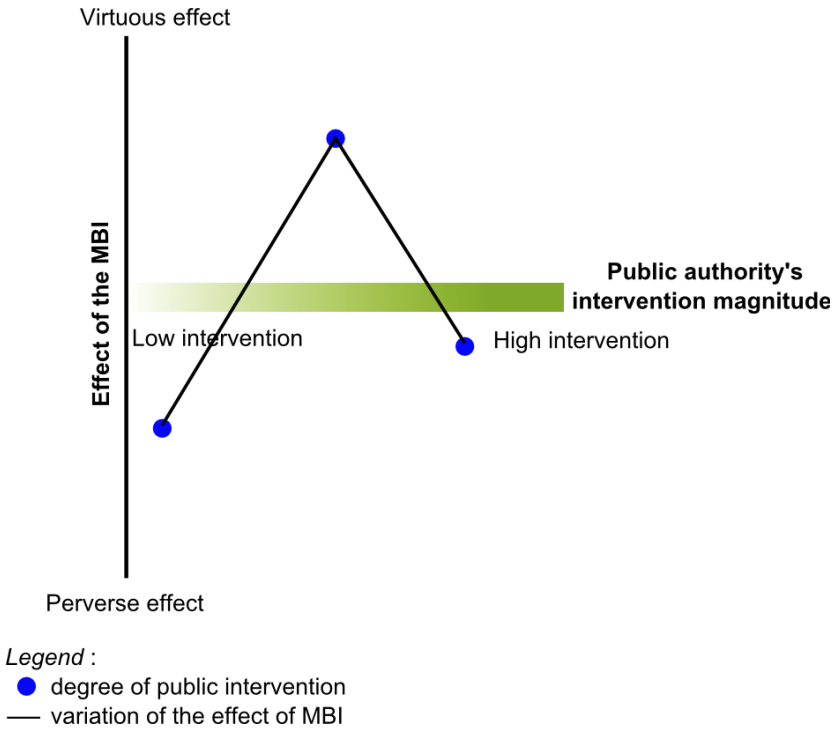
Case studies:

- 6 payments for ecosystem services
- 4 habitat banking schemes

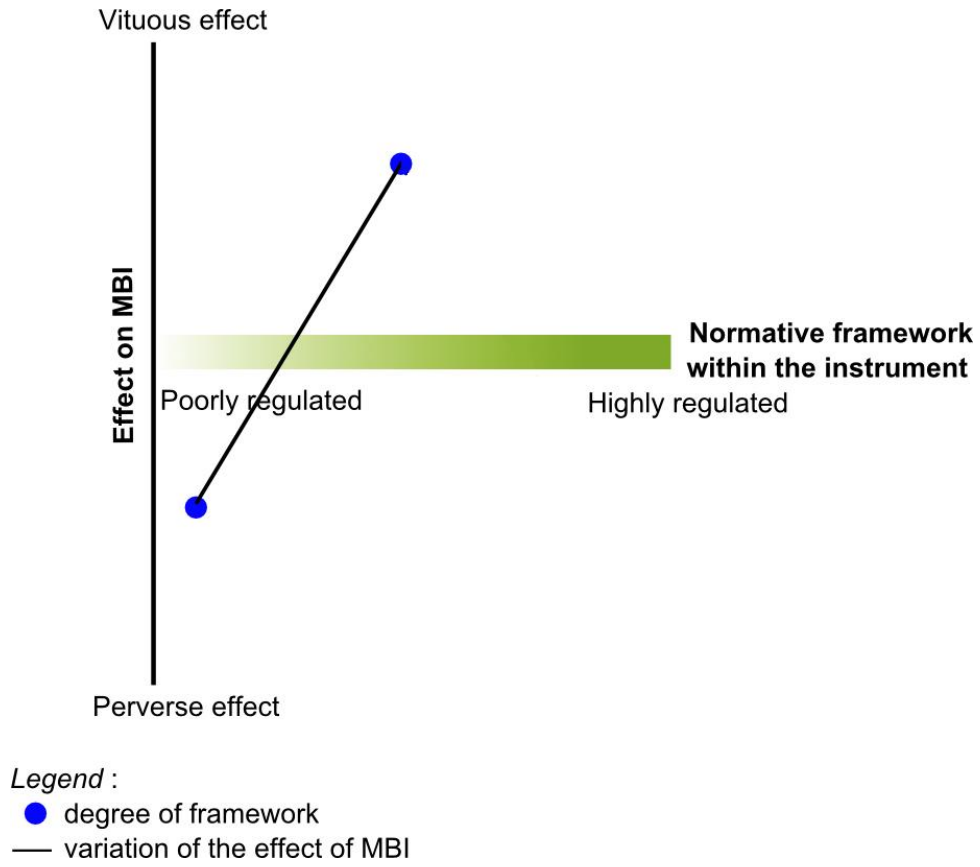
Key messages

- The **binary distinction between 'public' and 'private' MBI is not relevant** from a legal point of view

- A **gradient model** of public intervention seems to be more accurate



- The **intensity and quality** of the scheme's **normative framework** appears **fundamental for MBI success**:



Legal framework is a key to MBI success, according to the context, through :

- Ensuring ecological performance conditions are met through precise and targeted requirements
- Ensuring public participation and scientific foundation of the schemes
- Ensuring transparency and accountability in the scheme
- Ensuring effectiveness through monitoring, compliance and enforcement of the schemes
- Ensuring MBI integration into broader legal and policy context of resources management
- Ensuring legal constraints are not infringed

Main message:

Flexible *and* effective market-based instruments need extensive regulation !

Example : Conservation Banking Guidance 2003

invaluable.fr

invaluable
Valuations, Markets and Policies for Biodiversity & Ecosystem Services

biodiversa

PUBLIC CONFERENCE

FRIDAY
19 JUNE 2015
PARIS

Governing Biodiversity and ecosystem services through market-based instruments?

Theory and practice for decision-makers

Thank you for your attention

IDDRI

FONDATION D'ENTREPRISE HERMÈS

cirad

Radboud University Nijmegen

CHAIR OF FOREST AND ENVIRONMENTAL POLICY

ifp

UCL Université catholique de Louvain

IRD Institut de recherche pour le développement

icta Institute of Environmental Science and Technology · UAB

Institute for European Environmental Policy

WAGENINGEN UNIVERSITY

KBA type*	Sub-variants
1) Identify knowledge needs	❖ classical systematic state-of-knowledge reviews initiating new research ❖ stakeholder consultations
2) Coordinate and network	❖ 'research peers' for integrated knowledge ❖ 'beyond peers' for dialogue with practice ❖ 'match making' for linking knowledge seekers and providers
3) Compile and translate	❖ classical synthesis and assessment processes ❖ user-tailored translation: executive summaries, policy briefs, Wikis, podcasts
4) Build capacity	❖ 'ready-made' guidance: manuals, scientific models/simulations ❖ engaging / interactive interfaces, trainings or workshops
5) Analyse, evaluate & develop policy	❖ more 'indirect' scholarly policy assessments or benchmarking ❖ elaborating or drafting concrete policy options, strategies, or legislation
6) Personal consultation	❖ ad hoc, e.g. hearings ❖ more permanent consultative venues, e.g. committees ❖ quasi-political representation by experts, e.g. country delegate

Source: adopted from Reinecke et al. (2013). *The seventh type of *outreach activities* that targets the media and broader public is excluded from this policy-oriented paper.

Type of KBA	CSC	ProClim-	UKCIP	CXC
KBA1: identify needs	consultation: survey, forums	consultation: forums	consultation: user forum	consultation: direct contact
KBA2: coordination	Peers: services/science Stakeholder: CSC network Match: online help-desk	**Peers: IPCC etc., InfoSystem** **Match: online help desk, parliamentary lunch lecture**	Peers: CSs/research programs Stakeholder: user forum, RCCP	**Peers: CXC network** **Match: call down service**
KBA3: compilation and translation	**fact sheets, customized products, commissioned work**	**assessments, IPCC/ OcCC communication, position papers, commissioned work**	fact sheets, communication UKCP09	**assessments, 'call down' briefs**
KBA4: capacity building	simulation tools, manuals, trainings on knowledge use	---	**manuals, guidance, tools, trainings**	---
KBA5: policy analysis and development	assess / identify economic or policy options	through OcCC assess / identify policy options	---	assess / identify economic or policy options
KBA6: personal advice	director/staff in (inter)-national advisory bodies	director in (inter)national advisory bodies	director/staff in (inter)-national advisory bodies	director in (inter)national advisory bodies

* **White bold letters before grey background = major activity**; grey letters: minor activity