

# RESEARCH ON INNOVATIVE FINANCIAL MECHANISMS: RESULTS FROM INVALUABLE

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# CONTEXT: CBD COP DISCUSSIONS

- **CBD High Level Panel estimates:**
  - US\$ 150 billion-US\$ 440 billion per year (20 Targets)
  - US\$ 9 billion-US\$ 85 billion per year (Target 11)
  - US\$ 3 billion-US\$ 5 billion per year (Target 12)
- **CBD COP12 adopted targets for resource mobilization:**
  - Double total biodiversity-related international financial resource flows by 2015 (...)
  - Mobilize domestic financial resources FROM ALL SOURCES

# CONTEXT: CBD COP DISCUSSIONS (2)

## OPERATIONALIZATION

- **SRM, goal 4** calls to “explore **new and innovative financial mechanisms** at all levels”
- **The Strategic Plan for Biodiversity 2011-2020** calls for “**developing innovative mechanisms**” (decision X/2, paragraph 23)
- **Payments for ecosystem services** and **biodiversity offset mechanisms** among 6 types of IFMs (CBD)

# CONTEXT: CBD COP DISCUSSIONS (4)

## RESEARCH NEEDS

- Discuss **new and innovative financial mechanisms** VERSUS/AND **collective action and non-market-based approaches**
- Respond to the need to understand the **performance of economic instruments**, as well as improved guidance and tools to develop positive incentives

# CONTEXT: CBD COP DISCUSSIONS (5)

## RESEARCH NEEDS 2

- Respond to the need to understand **behavioral change** when implementing IFMs
- Design of **voluntary guidelines on safeguards** (PIC, institutions, sustainability) in IFMs

# INVALUABLE CONTRIBUTION

**Clarify the potential of market-based instruments (MBIs) to better integrate biodiversity & ecosystem services (B&ES) into society**, based on appropriate institutional arrangements for relevant public policies and an **improved utilization of relevant knowledge**

# INVALUABLE CONTRIBUTION (2)

## THEORY AND DISCOURSES

- Elaborate a **comprehensive theoretical framework**, to develop a typology of instruments, and **identify their scope of application**
- Analyse the role of **stakeholders' motivations** and **governance** for the management of B&ES.

# INVALUABLE CONTRIBUTION (3)

## PRACTICE

- Develop a conceptual and methodological framework for **comparative case-study research**
- Investigate the role of Biodiversity Offsets and PES in reinforcing public conservation policies, and **examine their supporting governance frameworks and outcomes** to date, drawing comparative lessons across case studies.



# TERMINOLOGY ISSUES WITH IFMs

- **Confusion about IFMs** and their economic characteristics (market):
  - More than 25% of scientific articles cite MBIs in general
  - 50 different names to designate MBIs
- **Unfounded fears and over-expectations**
- **Advantages & Risks are different for each category of IFMs**

MBI typology		Direct market	Market with intermediaries
<p><b>Price Based</b></p> <p>Setting or modifying prices to reflect ecosystem services</p> <p><i>Example:</i> Conservation auction such as BushTender (Victoria) purchases ecosystem services using an auction mechanism and landholder contracts.</p>	<b>Direct markets</b>	e.g. cork stoppers for sustaining Mediterranean cork forests	Incomplete combination of traded and non-traded (based transactions)
	<b>Tradable permits</b>	e.g. mitigation banking, REDD+	market PES systems (water, biodiversity, carbon)
	<b>Reverse auctions</b>	e.g. BushTender and EcoTender programs in Australia	CDM projects (public buyers)
	<b>Coasean-type agreements</b>	e.g. PES (Wunder), conservation easements	
	<b>Regulatory price changes</b>	e.g. agro-environmental subsidies, land taxes	
	<b>Voluntary price signals</b>	e.g. eco-labelling in organic farming, shade coffee certification	

motivated by  
 self-interest or personal  
 or principle

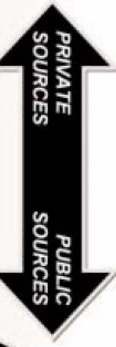
giving and  
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Private  
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NGO  
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# TERMINOLOGY ISSUES WITH IFMs (2)

- Most significant confusion:

**Payments for ES** *versus* **Markets for ES**

- Actually, **PES are not MBI/MES**, i.e. a place where buyer(s) and seller(s) exchange a well-defined (homogenous) good/service and where the price is defined through the confrontation of demand and supply
- **Bilateral governance** *versus* **market governance**
- PES: **no commodification** of nature,  
**no real marketization**

# PRACTICAL ISSUES WITH IFMs: PES

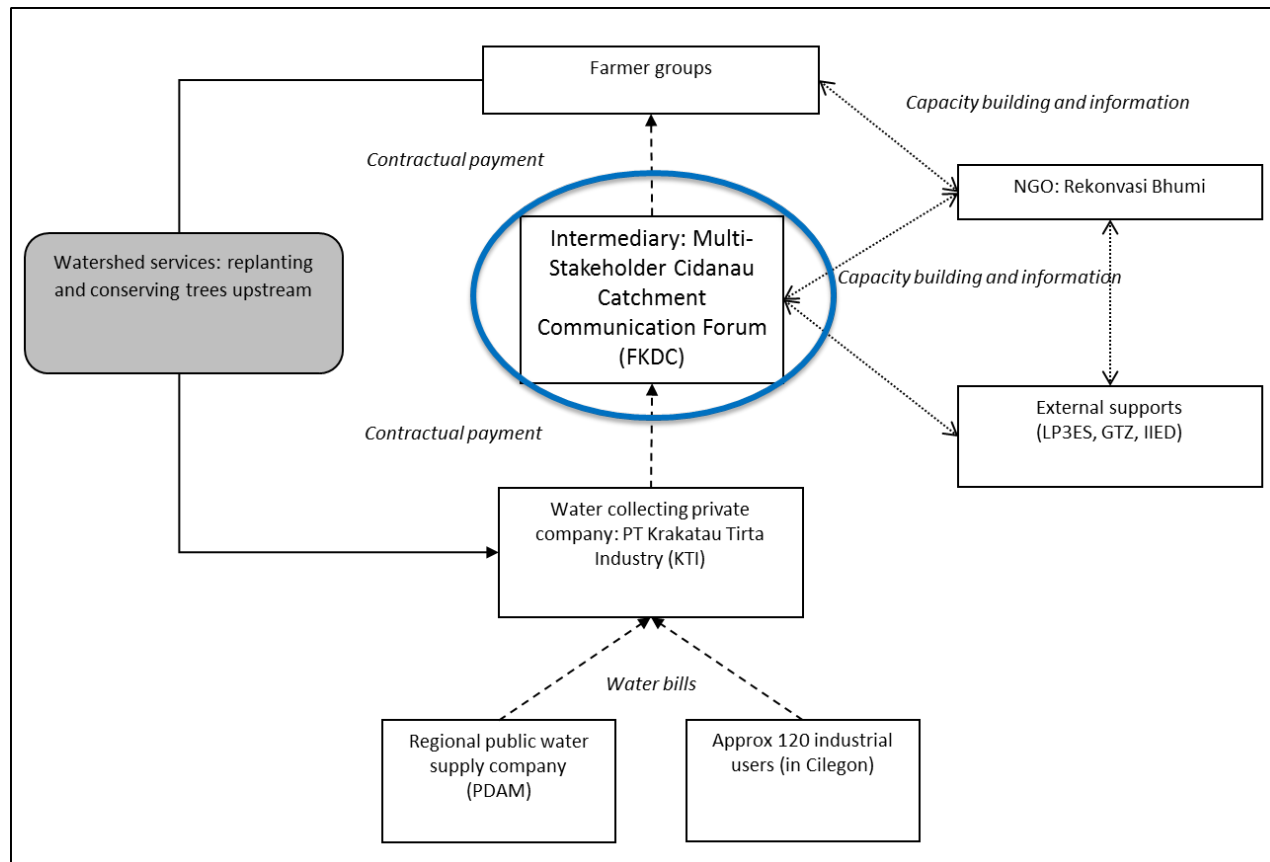
- **Performance of PES:**

Counterfactual analysis of the **Mexican PES** reveal **4% additional impact on reduced deforestation**

**BUT**

- Low additionnality in Indonesia: **Governance structure with an intermediate is not enabling**

# PRACTICAL ISSUES WITH IFMs: PES (2)



# PRACTICAL ISSUES WITH IFMs: PES (3)

- Low additionality in Indonesia: **Governance structure with an intermediate is not enabling**
  - ✓ No information sharing: the **issue of procedural equity**
  - ✓ **Economic signal (payment) is not well interpreted** (90% of farmers do not know level and date of payment)
  - ✓ **Inefficient targeting of farmers:** social connections (political process) are important for choosing groups and farmers (leader, neighbours): 75% of farmers did/will not change their forest strategies

# PRACTICAL ISSUES WITH IFMs: PES (4)

## ■ Risks of PES: the Cambodian example

Scheme	Directness of transfer	Link between conditions and level of payment: commodification	Importance of the economic incentive vs. other interventions	Significance at individual and landscape levels
1. Conservation agreements (2006 - )	+ CI → commune → individual farmers (Non-voluntary)	+ Compliance with land-use, non-logging & non-hunting rules (livelihood, law) → Level of payment do not depend on level of ES / effort	+ Mix of communal in-kind and individual in-cash payments Community-based institutions Strong law enforcement	++ 17 out of 23 villages around CCPF (920 HH) Between 8000 to 21000USD/com mune

### Method

- Survey (N= 205 + 120)
- Reveal motivations & create a typology: utilitarian, monetary, intrinsic
- Matching and with-without impact assessment



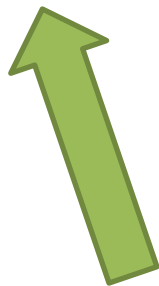
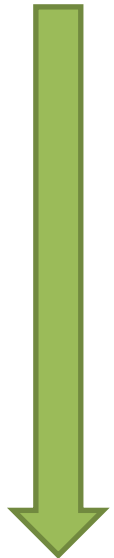
### Impact on motivations

CAs emphasized monetary motives over preexisting utilitarian motives and, to some extent, intrinsic motives

### Link with env. Effectiveness

The substitution of utilitarian and intrinsic motives might have effectiveness implications in the long run, if payments stop

Explanatory variable	Mean Non-monetary	Mean Monetary	Effectiveness analysis	
			Control	Treated
			%	total %
Benefits / Y (USD)	154	261		27
impact_norm (scale 1-5)	2.14	2.56		62
land_tenure (% secure)	54.39	30.23		11



### Underlying mechanisms

- Changes in motivations directly induced by the scheme are mainly driven by the level benefits people receive at the individual level.
- Links with CI's land sparing and forest-based income generation strategy
- The CAs is not the only institution influencing this switch: the level of exposure to other external institutions also matter.



# PRACTICAL ISSUES WITH IFMs: Offsets

## Biodiversity offsets in Europe: 2 cases (France, Germany)

- Can be imposed as a **permitting requirement by competent authorities: increase since 1976**
- **Various legal regimes on compensation** (Natura 2000, Endangered Species, etc.)

# PRACTICAL ISSUES WITH IFMs: Offsets (2)

**Mitigation hierarchy recognized in both cases:**

- Avoid > Reduce > Compensate
- **Compensation must be subsidiary and exceptional: last resort solution**

**Criteria for compensation** according to the “Doctrine ERC”:

- **Equivalence**, like-for-like (geographical closeness)
- **Additionality** (versus reference scenario)
- **Sustainability** (time of residual impact)

# PRACTICAL ISSUES WITH IFMs: Offsets (3)

Developers can **(1) compensate themselves** or **(2) execution of such obligation can be transferred** to service providers, farmers, NGOs, municipalities, etc.

## TWO APPROACHES FOR OUTSOURCING

- **On demand:** compensation is **tailored ex-post** to comply with permitting requirements
- **On supply:** habitat banking type of compensation, where compensation measures are defined on an **ex-ante basis in anticipation** of impacts that may be generated and mutualized on certain types of habitats & species

# PRACTICAL ISSUES WITH IFMs: Offsets (4)

Offset banks as IFMs in **Plaine de la Crau** and **Baden Wurttemberg** ?



# PRACTICAL ISSUES WITH IFMs: Offsets (5)

## ■ Advantages

- ✓ Safeguarded by equivalence criteria: **limited marketization**
- ✓ Increase **transparency and visibility** for developers (TCs)
- ✓ Larger **pooling of mutualized compensation** measures (ecological networks and optimal scale)

## ■ Risks

- ✓ **Administrative lack of expertise, no standardized methodology, low cost of compensation:** licence to trash?
- ✓ **Long-term maintenance** is unclear: issue of permanence beyond time of development
- ✓ **Monitoring measures:** administrative weakness

# THANK YOU!

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