

Outline for Developing International Payments for Ecosystem Services

Part 1: Introduction

a) Making the case for PES:

- Addressing the criticisms/scepticisms and explaining why we need PES, why it is timely, and why it is better than other forms of compensation
- Putting PES into context (when are they appropriate and what value added do they offer?)
- Clarifying what kind of externalities can be addressed best with (I)PES
- Natural capital as a central component of wealth (from local to global)
- Discussing the potential trade-offs between ecosystem services

b) Making the case for IPES:

- Addressing international ecosystem services:
 - i. Global level
 - ii. Trans-boundary level
 - iii. Regional level (i.e. Africa, Asia, regional seas, etc...)
- Components of biodiversity providing globally significant ecosystem services (existence, insurance, option, bequest values)
- How IPES can make conservation more cost effective, efficient, and equitable
- Tapping into additional sources of funding
- Better matching supply and demand at the global scale
- Other international ES:
 - i. Scenic beauty (World Heritage Sites)
 - ii. Trans-boundary watersheds
 - iii. Carbon sequestration
 - iv. Resistance to invasive pests and pathogens
 - v. Trans-boundary regulating services (storm buffering, soil formation/retention, habitat protection for migratory species)

c) IPES as a means of linking climate change and biodiversity conservation objectives

- Biodiversity loss and climate change (avoided deforestation as an IPES opportunity)

Part 2: The demand side of IPES

a) The beneficiaries:

- Differentiating between private and public beneficiaries
- Private sector (businesses, investors, consumers)
- Tourism industry, pharmaceutical/perfume industries
- NGO's and foundations
- The public

- b) ***The motivations:***
 - Providing users with an incentive to take full account of the costs of their actions, and to compensate providers for the costs incurred
 - Reducing the costs of complying with regulations
 - Business advantages (lower costs, new opportunities)
 - Branding and reputation
- c) ***The challenges:***
 - Disconnect between the spatial and temporal scales at which the costs and benefits occur
 - Lack of information
 - Lack of institutions
 - Establishing a business case for conservation
 - IPES still relatively new and controversial
- d) ***Translating benefits into WTP:***
 - a. What services to include?
 - b. What is the appropriate scale at which to create markets?
 - c. What do we know about global WTP for option/insurance/existence/bequest values? And how can they be measured?

Part 3: The supply side of IPES

- a) ***The providers:***
 - Identifying relevant groups and individuals
 - Role of national governments
 - Integrating scales
- b) ***The production of ecosystem services at the global level:***
 - Carbon sequestration
 - Biodiversity-related
- c) ***The production of ecosystem services at the regional level:***
 - Watershed protection
 - Pollination
 - Soil conservation
 - Storm buffering
 - Microclimatic regulation
- d) ***Biodiversity and the production of ecosystem services:***
 - Biodiversity as a determinant of ecosystem services?
 - Direct and indirect values of biodiversity
 - Concepts of redundancy, resilience and functional diversity
 - Components of biodiversity as providing globally significant ecosystem services
 - Existence values associated with certain species and ecosystems
 - Option values associated with crop- and animal-genetic resources
- e) ***Institutional conditions governing providers' choices in the production of ecosystem services:***
 - Transaction costs

- Opportunity cost of conservation – what variations in the costs of supplying ecosystem services?
- Property rights
- Land tenure regimes
- Control over inputs and outputs
- Role of stochastic/unpredictable factors

Part 4: Matching demand and supply sides

a) Current situation and need for improvement:

- Ongoing efforts – moving beyond carbon market
- What additional markets for ES are needed and how can we develop them?
- How do we get the WTP for globally significant ES from beneficiaries in one part of the world (mostly developed countries) to the suppliers of these ES in another part of the world (mostly developing countries)?
- How can we develop markets in trans-boundary ecosystems?

b) Guiding international principles:

- CBD – 2010 targets
- RAMSAR
- CITES
- UNFCCC
- World Heritage Convention
- European Union Directives
- Others?

c) Criteria for successful matching

- Efficiency:
 - i. Enabling transactions
 - ii. Long-term security of funding
 - iii. Additional sources of funding
- Equity:
 - i. Making IPES pro-poor
 - ii. Even participation
 - iii. Sustaining local benefits
 - iv. Avoiding excessive government capture through taxes
- Conservation:
 - i. Additional benefits
 - ii. Socio-cultural values
- Other objectives:
 - i. Rural development
 - ii. Agroforestry
 - iii. Employment
 - iv. Sustainable trade

d) Significant challenges:

- Quantification of ecosystem services
 - i. Limits to measuring biodiversity
 - ii. Measuring interdependencies between ES
- What roles for international, regional, national and local institutions?

Part 5: The choice of institutional mechanisms

a) *General points:*

- Checks for enabling of matching of supply and demand
- Checks for possible contribution to the criteria
- Combining voluntary and regulatory mechanisms? – determining the right mix in various settings

b) *Decentralized approach (open marketplace, auctions, certification, cap-and-trade, ...):*

- Requirements:
 - i. Allocation mechanisms and the need for commodification – does one need a single metric?
 - a. Commodity markets and the law of one price
 - b. Markets for heterogenous or unique goods: auctioning mechanisms
 - ii. Creating scarcity – quantity targets
 - iii. Tradability of rights and entitlements
 - iv. Stable market structure
 - v. Payment mechanisms – different forms of payment? (technology transfer, medicine,...)
- Participants:
 - i. Beneficiaries (individuals or associations/governments?) – focusing on rich countries
 - ii. Providers (individuals or associations/governments?) – focusing on poor countries
- Institutional conditions:
 - i. Property rights
 - ii. Transparency
 - iii. Compliance
 - iv. Transaction costs
- Institutional templates:
 - i. Carbon market
 - iii. Avoided deforestation
 - iv. Ecosystem Marketplace
 - v. Debt-for-nature swaps
 - vi. Millennium Development Goals
 - vii. Official Development Aid (ODA) targets
- Assessing marketplace-based approaches relative to criteria:
 - i. Efficiency
 - ii. Equity
 - iii. Conservation
 - iv. Other

c) *Centralized approach: (funds, offsets, banking,...):*

- Requirements:
 - i. Commensurability – multidimensional metric?
 - ii. Prioritization rules
 - iii. Setting up of compliance and enforcement mechanisms
 - iv. Payment mechanisms – different forms of payment?
- Participants:

- i. Individuals
 - ii. Governments
 - iii. NGOs
 - iv. Private sector
- Institutional templates:
 - i. GEF
 - ii. Mitigation/nutrient/wildlife banking
 - iii. Biodiversity offsets
- Assessing centralized approaches relative to criteria:
 - i. Efficiency
 - ii. Equity
 - iii. Conservation
 - iv. Other
- d) *Integrated/multiple approaches – diversified funding mechanisms within a given area (region, watershed)***
- e) *Other mechanisms***

Part 6: Evaluating concrete IPES institutional mechanisms

- a) *Cap-and-trade:***
 - The model (Kyoto, avoided deforestation)
 - The pros and cons
- b) *Prototype fund:***
 - The model (GEF?)
 - The pros and cons
- c) *Virtual Marketplace***
 - The model (EcosystemMarketplace?)
 - The pros and cons
- d) *Certification and offsets***
 - The models (BBOP, FSC, mitigation banking,...)
 - The pros and cons
- e) *Other options?***
 - An integrated approach?
 - Piggy-backing on the carbon market?
 - Internet-based tools?
 - An international framework for a landscape/ecosystem approach?
 - World Heritage Sites as a foundation for something else...?
 - Global network of Protected Areas?

Part 7: Summary and conclusion