Laying the Foundation
An Analytical Tool for Assessing Legal and Institutional Readiness for PES
Ecosystem Services are “the benefits humans derive from nature”

<table>
<thead>
<tr>
<th><strong>Provisioning</strong></th>
<th><strong>Regulating</strong></th>
<th><strong>Habitat</strong></th>
<th><strong>Cultural and Amenity</strong></th>
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<tbody>
<tr>
<td>- Food</td>
<td>- Air quality</td>
<td>- Maintain life cycles of migratory species</td>
<td>- Aesthetic information, inspiration</td>
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<td>- Water</td>
<td>- Climate regulation</td>
<td>- Maintain genetic diversity</td>
<td>- Recreation, tourism</td>
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<td>- Raw materials</td>
<td>- Water flow</td>
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<td>- Spiritual experience</td>
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<td>- Genetic resources</td>
<td>- Moderation of extreme events</td>
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<td>- Cognitive development</td>
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<td>- Medicinal resources</td>
<td>- Waste treatment</td>
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<td>- Ornamental resources</td>
<td>- Erosion control</td>
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<td>- Soil fertility</td>
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<td>- Biological control</td>
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Source: Adapted from *The Economics of Ecosystems and Biodiversity* 2010
Background: PES

Payments for Ecosystem Services (PES)

• Commonly in carbon, water, and biodiversity

• Public or private buyers motivated by philanthropy, business interest, or legal obligation

• Sellers are individuals, communities, or state administrative bodies
Example: Mbé Watershed, Gabon

Hydroelectric utility to use payments from electricity users to improve upstream ecosystems, thereby reducing siltation in the reservoirs and regulating water flow through the hydroelectric dam.
Governments and PES

• Why create supportive laws and institutions?
  – Reduce costs, volatility, conflict around food, water
  – Reduce economic costs of natural disasters
  – Create investment opportunities
  – Contribute to sustainable development
Analytical Framework

Level 1—Threshold Conditions
- No PES Prohibition
- Supply and Demand
- Governance Factors
- Tenure Rights
- Rights in Ecosystem Services
- Regulatory Regime

Level 2—To be Developed in Parallel with PES
- Ecosystem Services Inventory
- Methodologies for Measurement, Monitoring, Reporting, and Verification (MMRV)
- Registries
- Public Participation
- Technical Support

Level 3—Streamlining PES
- Refining, Expanding PES Infrastructure
- Facilitating International Investment
- Dedicated Funding via Use Fees
- PES Risk Mitigation
Level 1—Threshold Conditions
No Prohibition on PES

- Is PES implicitly or explicitly prohibited by valid law or provision of the Constitution?

- Rules must be inferred from regulation of, e.g.:
  - Forests
  - Natural resources
  - Agriculture
  - Water
  - Rural and urban development

Level 1 - Threshold Conditions

- No Prohibition on PES
- Identifiable Supply and Demand
- Governance Factors
- Tenure Rights in Land
- Rights in Ecosystem Services
- Regulatory Regime for PES
Identifiable Supply and Demand

Supply and demand needs:
1. Valuable ecosystem service
2. Degradation or loss
3. Perception of the threat
4. Mitigation options

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Evaluating Supply and Demand Opportunities

• Ecosystem service, beneficiaries?
• Drivers of degradation or loss?
• Beneficiary awareness of ecosystem service value and threats to ecosystem service provision?
• Demand driver: international incentives, private sector expectations, conflict over resources, government regulation, other?
Government Intervention to Spur Supply and Demand

- Awareness-raising campaigns
- Organizing supply and demand (e.g., via an exchange)
- Mandatory environmental impacts reporting
- Development regulations (e.g., “no net loss”)
- Conservation subsidies
- Offsets, trading, or mitigation banking programs
Governance Factors

PES investors will require some level of governance:

- Enforcement of contracts
- Public participation
- Transparency
- Access to information
- Accountability
- Rule of law

Level 1 - Threshold Conditions

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Tenure Rights in Land

Sellers’ minimum rights in land and natural resources must include:

• Use rights
• Right to exclude

Level 1 - Threshold Conditions

• No Prohibition on PES
• Identifiable Supply and Demand
• Governance Factors
• **Tenure Rights in Land**
• Rights in Ecosystem Services
• Regulatory Regime for PES
Policy Options for Tenure Clarity

- Formalizing ownership or use rights
- Streamlining title or use registration and access
- Capacity-building
- Granting rights in state-owned lands
- Implementing PES in select areas where tenure is clear
Rights in Ecosystem Services

• Right to own and transfer ecosystem services, e.g. as credits

• Potential rights-holders
  – Private land owner
  – Nation as a whole
  – Natural resource user

• Clarity is important, often critically lacking

Level 1 - Threshold Conditions

• No Prohibition on PES
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• Regulatory Regime for PES
Regulatory Regime for PES

• Which regulatory entities have jurisdiction over PES activities?
• What are the contours of their powers?
• What formal approval processes are involved?
• Credits, if used, are commodities or securities?

Level 1 - Threshold Conditions
• No Prohibition on PES
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Level 2—Essential Aspects to be Developed in Parallel with PES
Ecosystem Services Inventory

• Inventory and valuation—baselines/reference levels
• Scale may be national, subnational, project level
• Setting baselines at project level (bottom-up), jurisdiction level (top-down), or a combination
• Integration with conservation planning, priority-setting, and economic-ecological zoning

Level 2 - Essential Aspects to Be Developed in Parallel with PES

• Ecosystem Services Inventory
  • Methodologies for MMRV
  • Registries
  • Public Participation
  • Technical Support
Measurement, Monitoring, Reporting, Verification (MMRV)

• Key goals:
  – Transparency, accuracy, certainty, reduced costs

• Government’s role
  – Endorsing or supporting 3rd party methodologies
  – Internal development and promulgation of MMRV

Level 2 - Essential Aspects to Be Developed in Parallel with PES

• Ecosystem Services Inventory
• Methodologies for MMRV
• Registries
• Public Participation
• Technical Support
MMRV Guidance

• Key aspects of MMRV for a government to consider and provide guidance around include:
  – What ecosystem services and how measured?
  – What set of activities make up MMRV?
  – When and how often?
  – What geographical limits?
  – What is considered to be ecological equivalent?
Registries

• PES Registry—electronic database of information on projects, transactions, tradable credits, and potentially other aspects

• Potential functions:
  – Capturing geographical project information
  – Registering PES participants and activities
  – Displaying environmental, social, technical, other criteria
  – Tracking PES performance
  – Recording PES credit issuance or payments made
  – Issuing and tracking tradable PES credits

Level 2 - Essential Aspects to Be Developed in Parallel with PES

• Ecosystem Services Inventory
• Methodologies for MMRV
• Registries
• Public Participation
• Technical Support
Public Participation

- Transparency, consultation, information dissemination
- Safeguards for under-represented small-scale, rural, and community interests
- Supports rights of indigenous peoples

Level 2 - Essential Aspects to Be Developed in Parallel with PES

- Ecosystem Services Inventory
- Methodologies for MMRV
- Registries
- Public Participation
- Technical Support

M. Richards, 2010
UN Declaration on the Rights of Indigenous Peoples

Recognizes indigenous peoples’ rights to:

• Customary management over traditional lands

• Free, prior, and informed consent (FPIC)
  – Consent before measures are undertaken that affect citizens, lands, or resources
  – With full knowledge and understanding
  – Using traditional consultation processes
Technical Support

• Trainings, information dissemination, direct technical assistance
• Via the government, civil society, private sector, or a combination of these
  – For example: government funds capacity building, information-provision, and trainings, while PES participants contract with private sector for direct technical assistance
• Potential government role in queuing up supply, connecting supply with demand, and informing prospective buyers or sellers of PES opportunities
Level 3—Streamlining PES
Refining and Expanding PES Infrastructure

- Adaptive learning and development on top of basic infrastructure building blocks
- Scaling-up PES in light of lessons learned

Level 3 - Streamlining PES

- Refining and Expanding PES Infrastructure
- Facilitating International Investment
- Dedicated Funding via Use Fees
- PES Risk Mitigation
Refining and Expanding PES Infrastructure - Examples

- Building up environmental or social safeguards in response to observed risks
  - Adjusting baselines, MMRV, eligible activities
  - Adding or strengthening consultation requirements
  - Strengthening programs to protect the poorest of the poor
- Adding flexibility for local circumstances
- Shifting investment based on cost-effectiveness, new opportunities, or shifting development priorities
International Investment

- Clarifying or eliminating regulatory restrictions in order to facilitate international investments
  - Foreign exchange controls
  - Foreign direct investment restrictions
  - Special restrictions and rules for foreign investors
- Balance between facilitating investment and maintaining domestic control over resources and revenues

Level 3 - Streamlining PES

- Refining and Expanding PES Infrastructure
- **Facilitating International Investment**
- Dedicated Funding via Use Fees
- PES Risk Mitigation
Dedicated Funding via Use Fees

- Sustainable PES funding via resource usage fees
  - Levied on ecosystem service beneficiaries—mandatory contributions to state-managed PES program
  - Or from unrelated sector, diverted from general revenues
- Requires political will and legal authority

Level 3 - Streamlining PES

- Refining and Expanding PES Infrastructure
- Facilitating International Investment
- Dedicated Funding via Use Fees
- PES Risk Mitigation
PES Risk Mitigation

- Key risks for PES projects
  - Leakage
  - Permanence
  - Project Performance
- Managed by, and allocated between, project participants
- Government can support risk mitigation
  - Provide/strengthen legal mechanism of servitudes or covenants to support long-term PES promises
  - Support formal insurance instruments for PES
  - Create/support pooled reserve accounts in case of unintentional reversal or leakage, reducing costs at individual project level

Level 3 - Streamlining PES

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Thank you!

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