

# Laying the Foundation

An Analytical Tool  
for Assessing Legal  
and Institutional  
Readiness for PES

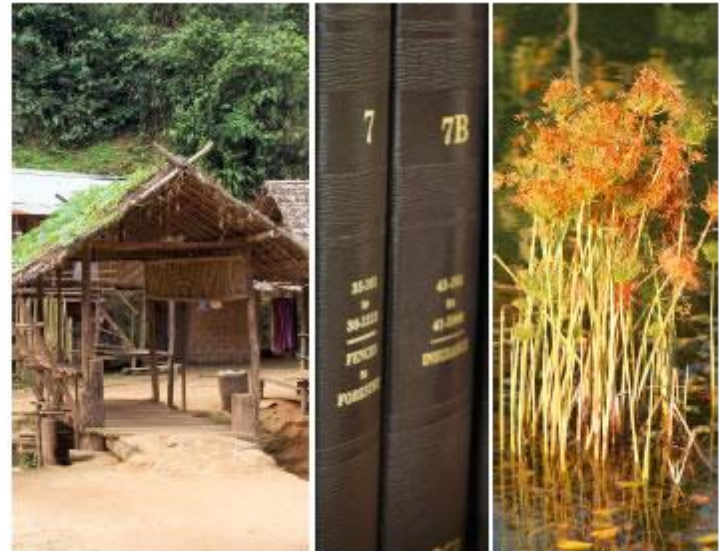


the  
**katoomba**  
group



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# Background: Ecosystem Services

**Ecosystem Services** are “the benefits humans derive from nature”

## Provisioning

- Food
- Water
- Raw materials
- Genetic resources
- Medicinal resources
- Ornamental resources

## Regulating

- Air quality
- Climate regulation
- Water flow
- Moderation of extreme events
- Waste treatment
- Erosion control
- Soil fertility
- Pollination
- Biological control

## Habitat

- Maintain life cycles of migratory species
- Maintain genetic diversity

## Cultural and Amenity

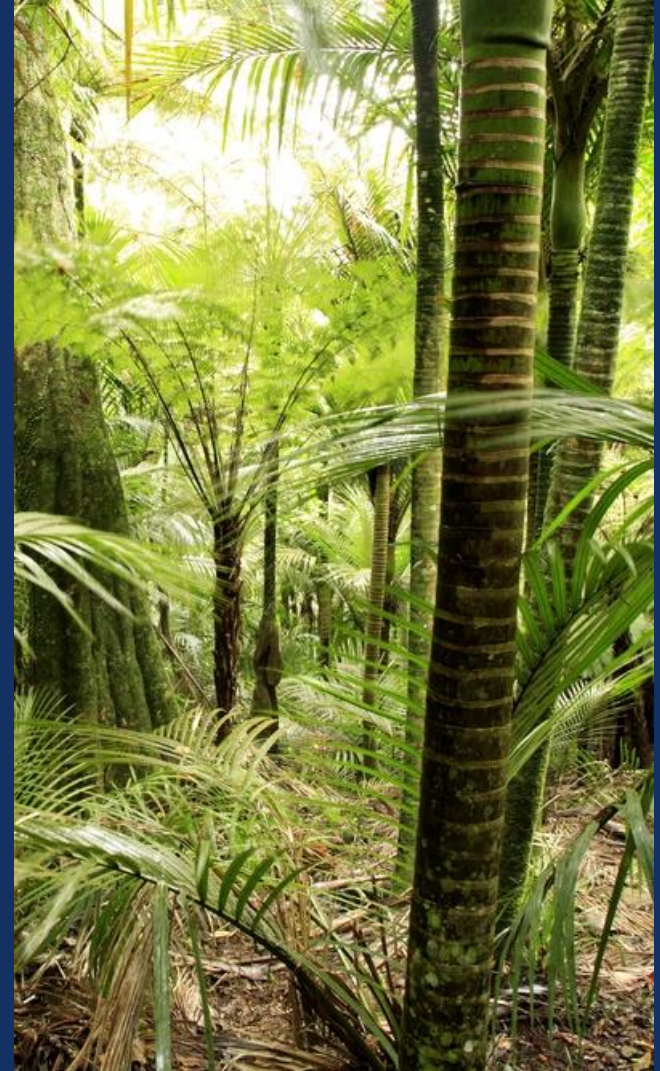
- Aesthetic information, inspiration
- Recreation, tourism
- Spiritual experience
- Cognitive development

*Source: Adapted from The Economics of Ecosystems and Biodiversity 2010*

# Background: PES

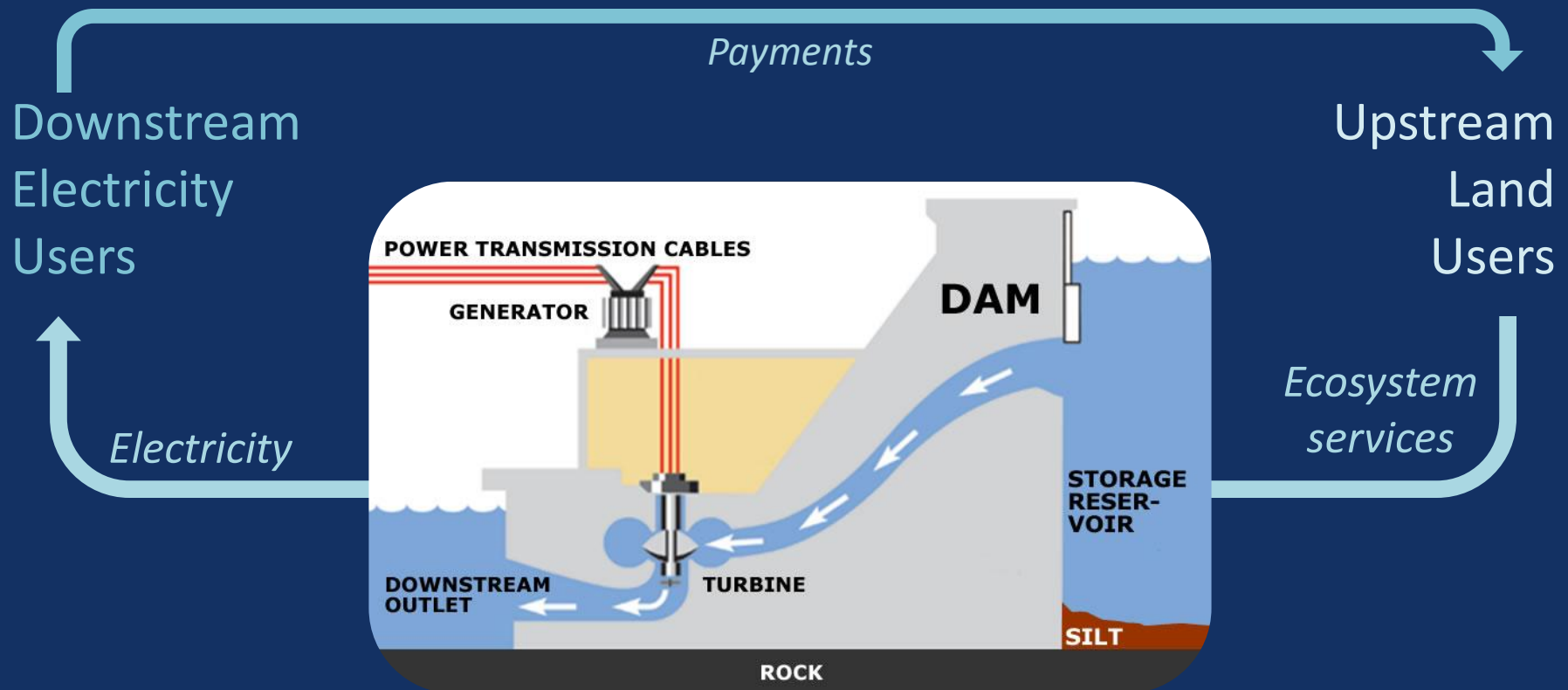
## Payments for Ecosystem Services (PES)

- 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?
  - Example: Article 74 of the Constitution of Ecuador (2008)
- 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

### Level 1 - Threshold Conditions

- No Prohibition on PES
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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

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

# Tenure Rights in Land

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

- Use rights
- Right to exclude

## Level 1 - Threshold Conditions

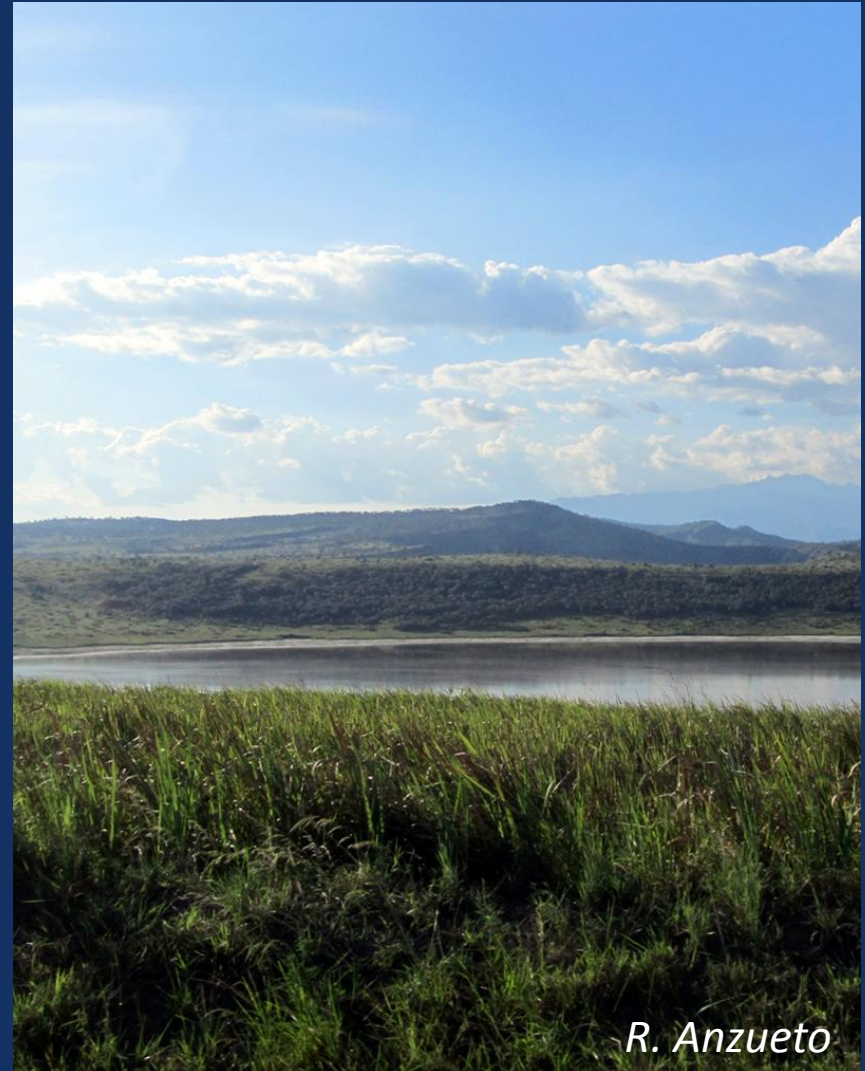
- No Prohibition on PES
- Identifiable Supply and Demand
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- **Tenure Rights in Land**
- Rights in Ecosystem Services
- Regulatory Regime for PES





# 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



*R. Anzueto*



# 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
- Identifiable Supply and Demand
- Governance Factors
- Tenure Rights in Land
- **Rights in Ecosystem Services**
- 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
- Identifiable Supply and Demand
- Governance Factors
- Tenure Rights in Land
- Rights in Ecosystem Services
- **Regulatory Regime for PES**



## 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
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- 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



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

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

## 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

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- **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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- **PES Risk Mitigation**

# Thank you!

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