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# **Bridging the Gap: Tools for Conservation and Development**

**Final Briefing  
Spring Workshop 2007  
Faculty Advisor Kathleen Callahan**



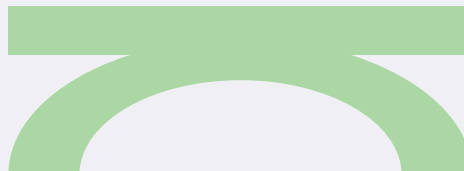
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## WCS and Translinks:

Promoting Transformation: Linking Natural Resources,  
Economic Growth,  
and Good Governance

**BIODIVERSITY  
CONSERVATION**

**Translinks**



**SOCIOECONOMIC  
DEVELOPMENT**



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# A Call to Action

**NATURE**



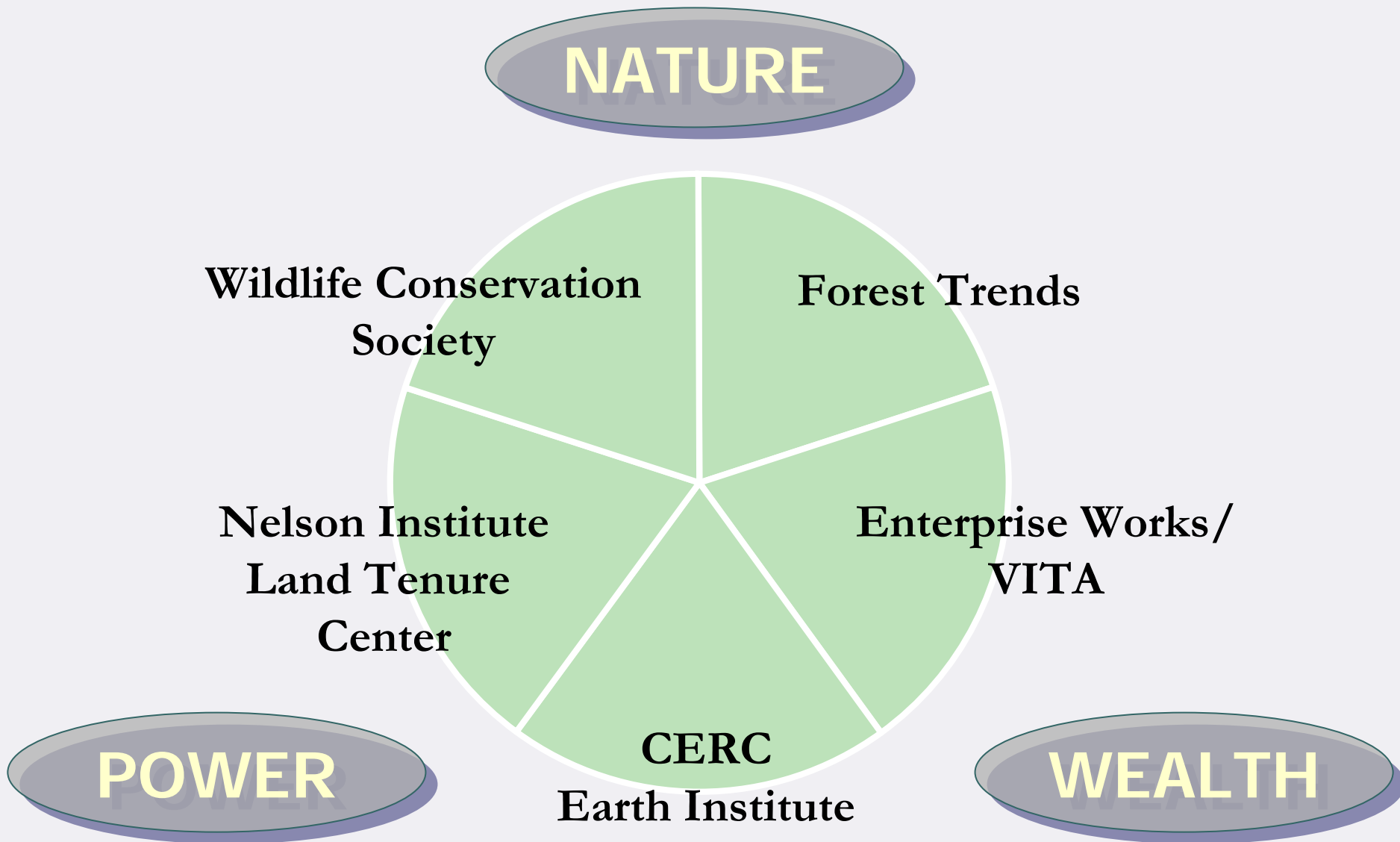
**POWER**

**WEALTH**



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# An Innovative Partnership





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# Translinks Objectives

**To Enhance  
Knowledge  
&  
Understanding**

**How natural resource governance systems influence security, benefit sharing and sustainability**

**Role of natural resource management and environmental assets in wealth creation for rural poor**

**How changes in wealth influence livelihood practices and resource stewardship**



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# Bridging the Gap: Zoning

**Land Tenure Center  
Zoning**



Thinking Outside the Boundaries

An aerial photograph of a river delta, showing a large body of water with a winding river channel and several smaller tributaries. The water is a deep blue, and the sediment in the channels is a light brown color.

Zoning as a Tool for Linking  
Conservation & Development Goals





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# Bridging the Gap: Natural Resource Marketing

**Enterprise Works/Vita**  
Natural Resource  
Marketing





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# Bridging the Gap: PES

## Forest Trends Payments for Ecosystem Services

**FOREST TRENDS**

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**Our Roles: Convening, Disseminating Information and Facilitating Deals**

**Project Portfolio**

Projects: Watershed and Biodiversity Payments for Ecosystem Services

Project summaries and project documents for projects can be located by clicking on the title of the project listed below.

Project Name	Type
<b>Bolivia:</b> >> La Aguada and the Water Planting Water (Siembra del Agua) Project, Bolivia	WS
<b>Brazil:</b> >> ICMS Ecologico Tax Subsidies >> Government Subsidies: Acre	WS BD
<b>Ecuador:</b> >> Direct Payments for Watershed Services, Pimampiro	WS
<b>Guatemala:</b>	

**Payments for Ecosystem Services in a Conservation Context**

What are ecosystem, ecological, or environmental services?  
These services are the critical benefits that plants contribute from the natural environment.

What are some specific ecosystem services?  

- Water Retention
- Soil Retention
- Carbon Sequestration
- Habitat Creation
- Disease Regulation
- Aesthetic Value
- Seed Dispersal
- Pollination
- Pest Control
- Natural Disaster Control
- Cultural Importance

Many of these services are now being frequently grouped into three overall market categories:  
Carbon Sequestration  
Biodiversity Conservation  
Watershed Protection

Though many of the benefits from one market category frequently overlap and will also benefit another market category, "What does benefit overlap" does create an opportunity to bundle services either through a combination of buyers who may have different objectives or investors who also have philanthropic interests. This has the added benefits of extending wildlife corridors, maintaining greater ecosystem integrity through larger functioning parcels, and maintaining efficiency of administration and cost-revenue expenditures.

How can we implement a Payment for Ecosystem Services?  
Three general steps are typically used in the process. These steps are defining the services, measuring the services, and finally implementing an appropriate payment scheme.

How to define the service?  
The difficulty is no longer defining a service, but instead identifying a service that can be considered a commodity an investor will buy. So a primary prerequisite is identify a buyer.

How to measure or value important what to measure? Measured with varying degrees of success. Some long historical data, such as forestry. There are established methods to begin the measuring ecosystem services the underlying factor is the resources or profits the conservation can create. Much of the valuation has already been performed so far in the case of water filtration, carbon sequestration, and pollution. Ecological species and cultural services are certainly more difficult to quantify and subsequently more expensive. What is even more difficult to quantify is the socio-economic impacts on the local communities. Many times there is much less data available on how the local communities value ecosystem services. These studies are costly and may reduce the feasibility of using Payments for Ecosystem Services in a conservation context because of increased transaction costs.

For more information on Ecosystem services and measurements:  
Chris Kremen (2009), Measuring ecosystem services: what do we need to know about their ecology? Ecology Letters 4 (5), 408-419

How do you implement an appropriate payment scheme?  
How well defined, but some require more than 70 Payments for Ecosystem Services (PES) schemes to:  
1. A voluntary transaction where  
2. A well-defined PES for a land-use likely to occur the service  
3. It being bought by a (institution) and PES buyers  
4. From a (institution) and PES provider  
5. If not one of the PES providers receive PES provision (landownership).  
Wunderlin, S. 2006. Are direct payments for environmental services getting down for sustainable forest management in the tropics? Ecology and Society 11(2): 23.



**FOREST  
TRENDS**





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# Key Strategies for Success

## Considerations:

- Political and Physical Infrastructure
- Established Property & Land Rights
- Institutional Set-up
- Monitoring and Enforcement Mechanisms
- Long-term Strategy
- Realistic Expectations

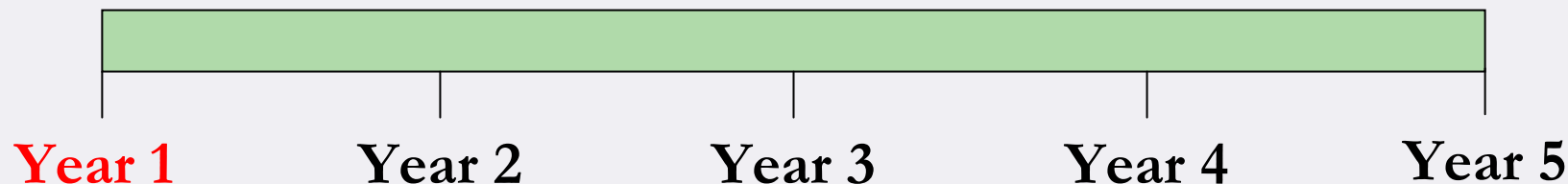


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# Next Steps

## Future of Translinks

- Identify existing and develop new diagnostic decision tools
- Develop and pilot training modules
- Workshop to integrate training modules
- Training for practitioners and decision makers





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