

Economic  
Development

Biodiversity

Protected areas

Conservation

livelihoods

Forest values

Poverty reduction



## **Innovative Instruments: Payment for Environmental Services**

**Klas Sander**

**Forest Economist, SDN Forest Team, The World Bank**

**ITTO Forest Forum in Curitiba, Brazil,**

**23 – 24 November 2006**



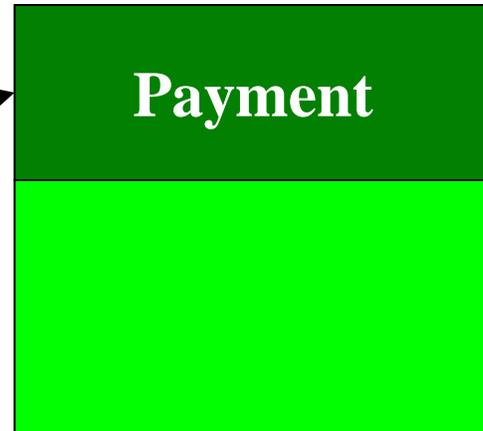
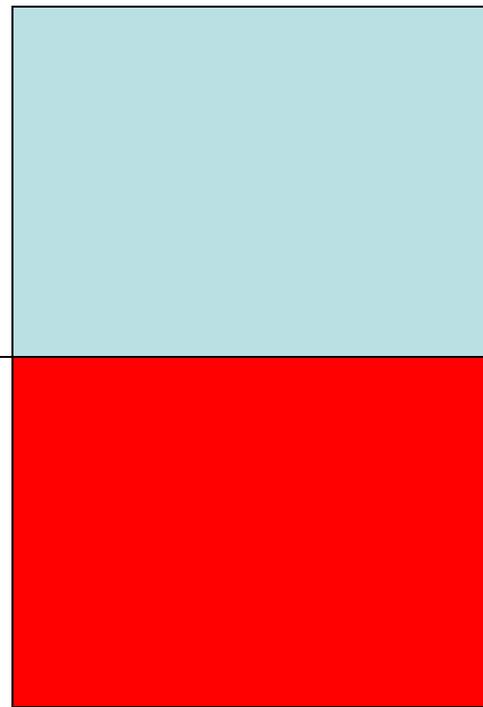
Continued  
use of pasture

Reforestation  
with payment  
for service

Benefits to  
land users

Costs to  
downstream  
populations

**Payment**





## Payment for Environmental Services (PES)

**=> PES develops mechanisms to capture environmental externalities and bring them into the marketplace**

**=> Basic principles:**

- ✓ Beneficiaries of environmental services pay for their provision
- ✓ Providers of environmental services get paid to provide them



## Identifying environmental services

### Demand:

- **What are the specific services?**
- **Who benefits from these services?**
- **How much benefit do they receive?**

### Supply:

- **How are these services generated?**
- **How much more or less of these services would we receive if land use changed?**
- **Who generates these services?**



## Generating financing and making payments

### Question to be addressed:

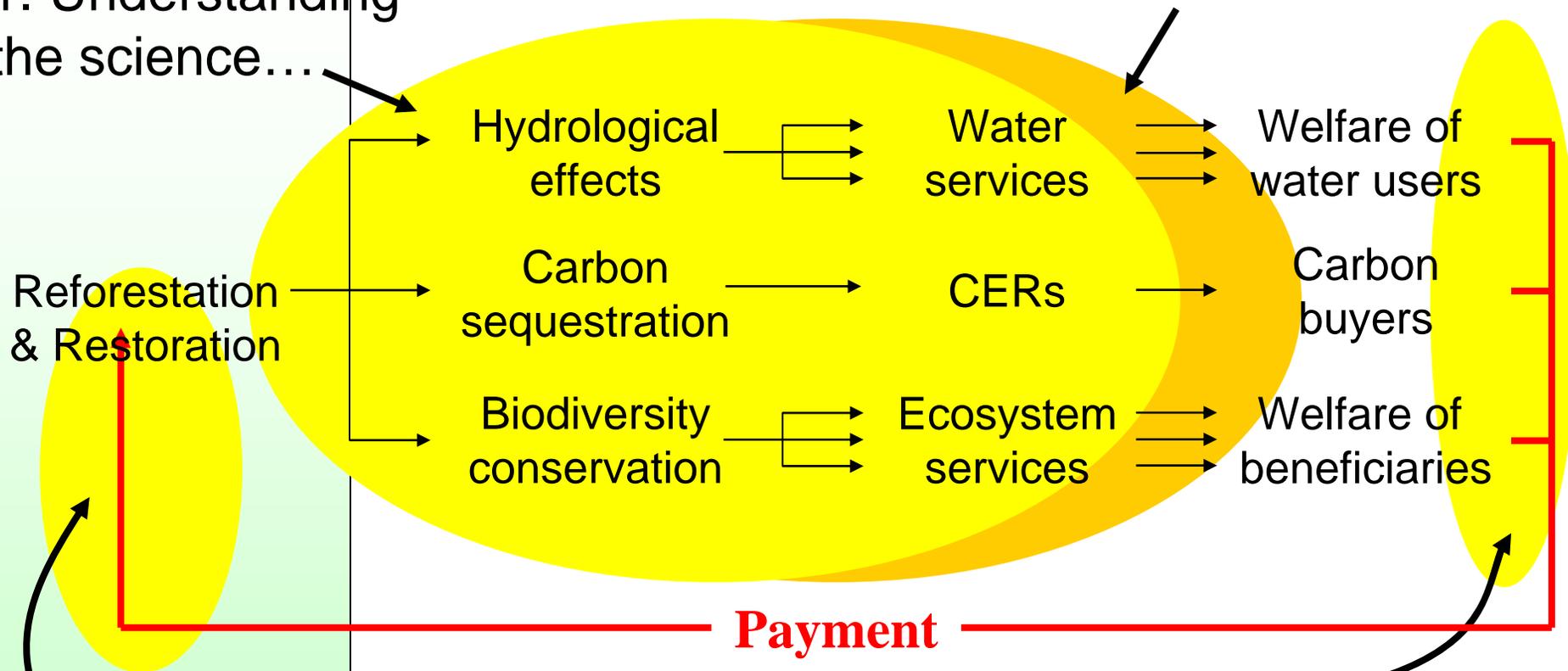
- What is the willingness-to-pay of the beneficiaries of environmental services to help finance conservation (Contingent Valuation)?
- How can their willingness-to-pay be translated into real resource flows?
- How should the collected funds be used to structure payments to those who are doing conservation activities?
- How do these question differ when global and local PES are taken into consideration?



## Developing payments for environmental services ... and the economics

1. Understanding the science...

... and the economics



2. Capturing benefits

3. Paying service providers



ESSD Forests

## Carbon Finance at the World Bank

- **Prototype Carbon Fund (PCF) as the flagship:**  
US\$180 million
- **Community Development Carbon Fund (CDCF)**  
Launched WSSD, implemented from June 2003  
US\$40-50 million
- **BioCarbon Fund**  
US\$30-40 million
- **World Bank Carbon-Neutral Policy**  
Initiated March 2003
- **Avoided Deforestation**  
Under envisaged Global Forest Alliance





# World Bank PES Initiatives

## Projects under implementation:

- **Costa Rica:** Ecomarkets Project (US\$33 million WB + US\$8 million GEF)
- **Colombia/Costa Rica/Nicaragua:** Regional Integrated Silvopastoral Ecosystem Management Project (US\$4.5 million GEF)
- **Guatemala:** Western Altiplano Natural Resources Management Project (US\$32 million, incl. US\$2 million pilot PES component)
- **Mexico:** Technical support to national PES program
- **South Africa:** Cape Action Plan for the Environment (CAPE)

## Projects under preparation:

- **Venezuela:** Canaima National Park Project
- **China:** Guangxi Integrated Forestry Development and Conservation Project

## Research and Dissemination:

- PROFOR supported workshop in Colombia, Jan. 2004
- Country level research including on valuation of environmental services

## Capacity building:

- Courses in Ecuador, Venezuela, Panama, Perú, Mexico, South Africa, Senegal, Dominican Republic, Vietnam, Bolivia ...



**ESSD Forests**

## **Initial Lessons**

- ✓ One size does not fit all
- ✓ Identify the services being provided clearly
- ✓ Understand and document the links between forests and services
- ✓ Begin from the demand side, not the supply side
- ✓ Monitor effectiveness
- ✓ Design flexible mechanisms
- ✓ Not a universal solution
- ✓ Ensure the poor can participate (delivery mechanisms)

**!!! Muito Obrigado !!!**