

OVERVIEW OF ECOSYSTEM SERVICES



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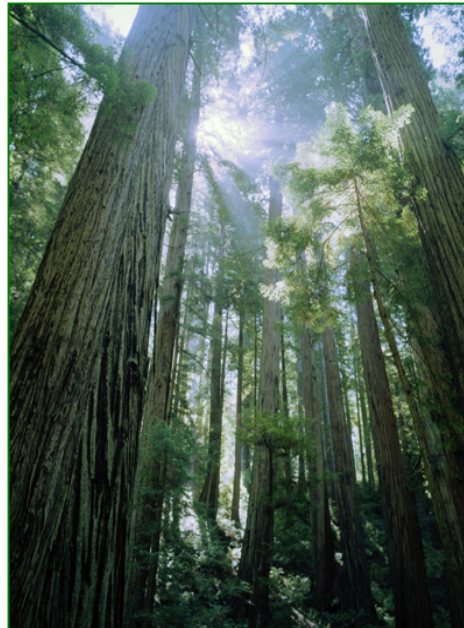
MAJOR FOREST ECOSYSTEM SERVICES

**Watershed Protection
Services**

**Biodiversity
Conservation Services**

**Climate Regulation
Services**

**Agricultural
Services**



**Landscape Quality, Recreation,
Cultural/Spiritual Values**

WHY ARE THESE PUBLIC GOODS?

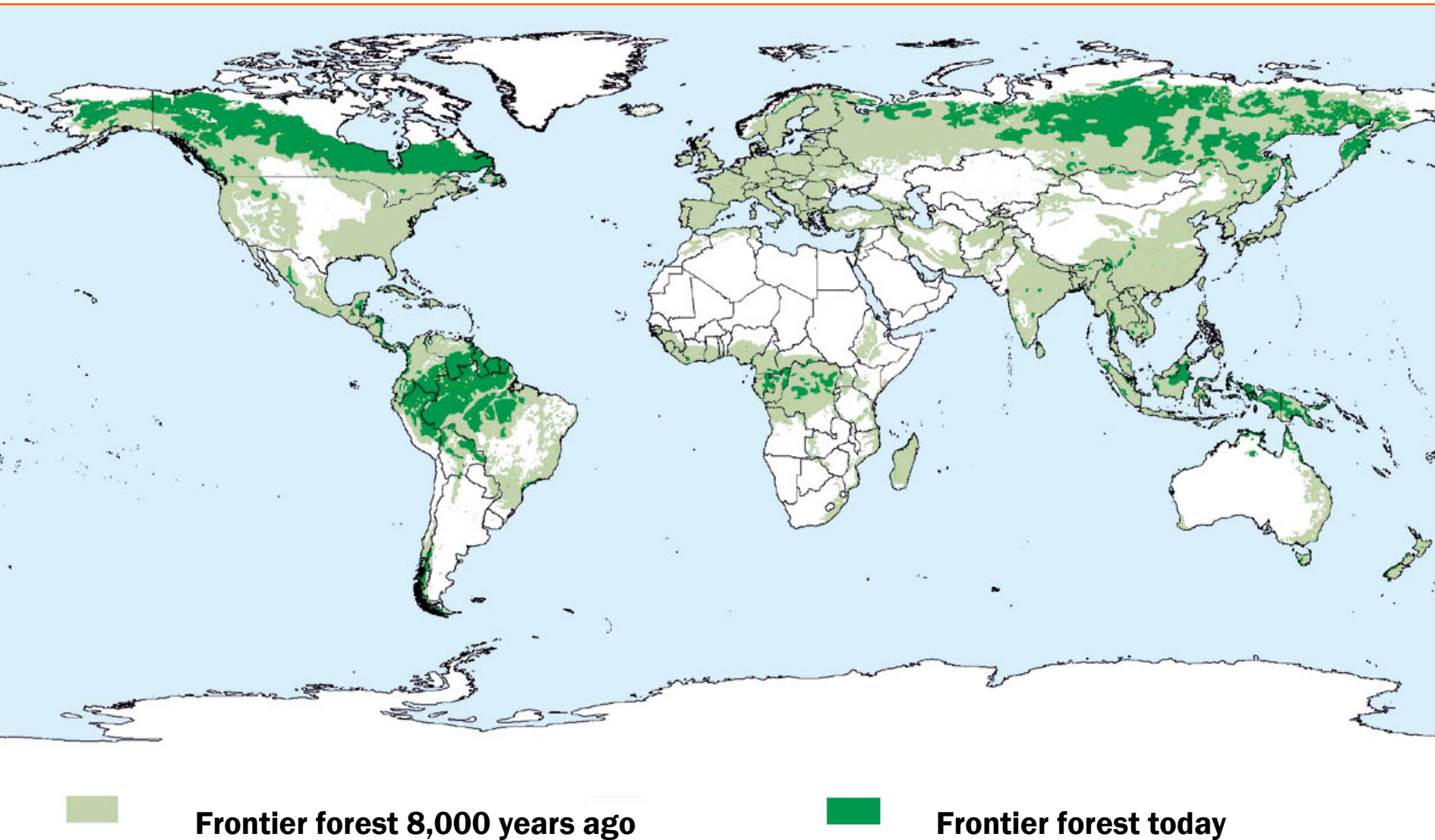
CONVENTIONAL CONSERVATION INSTRUMENTS

Assumption: Ecosystem Services are public goods that require public management



- Direct public management of forests
- Public regulation of public forests
- Technical assistance to forest owners/managers
- Fiscal and price incentives/ penalties

POLICY AND MARKET FAILURES



LIMITATIONS OF TRADITIONAL INSTRUMENTS

- Lack of private incentive for good stewardship



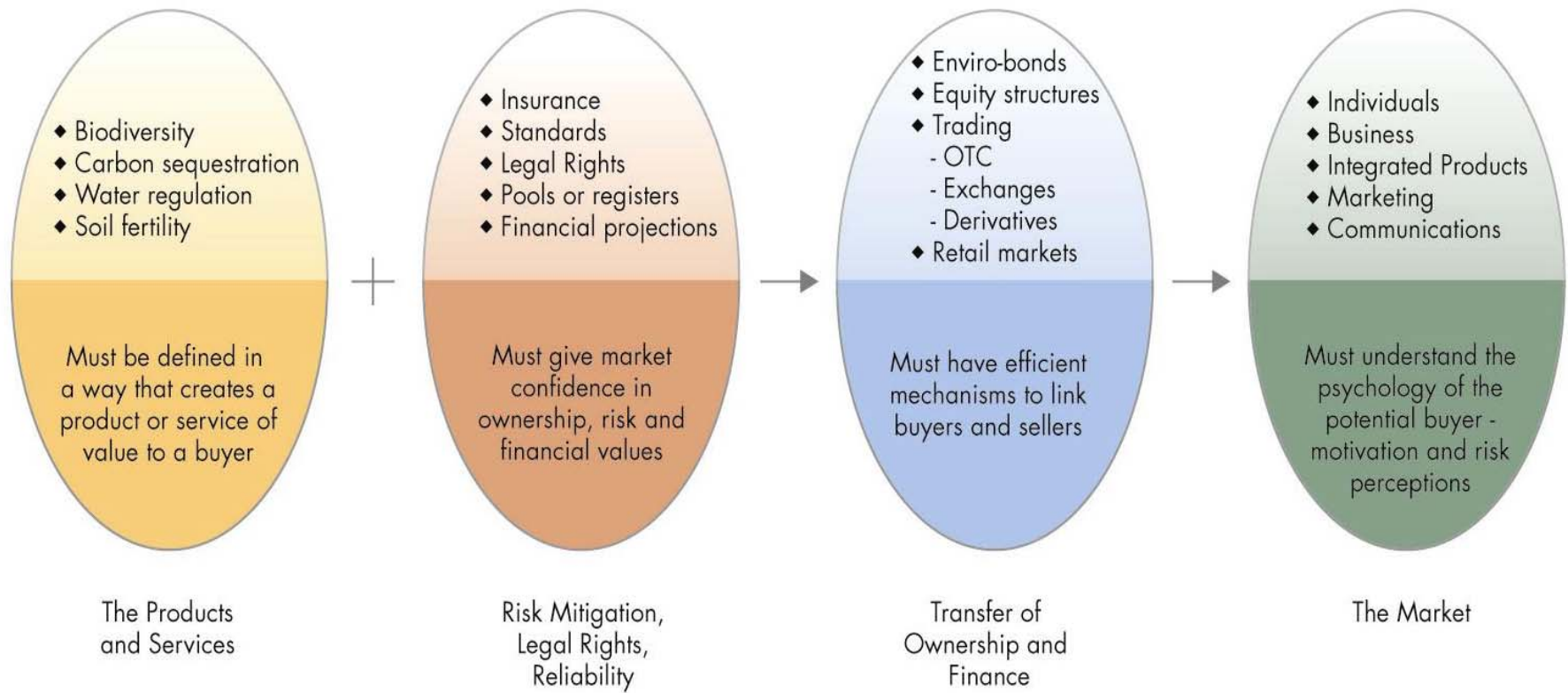
- Need for action at large scale

- Crisis in public finance for conservation

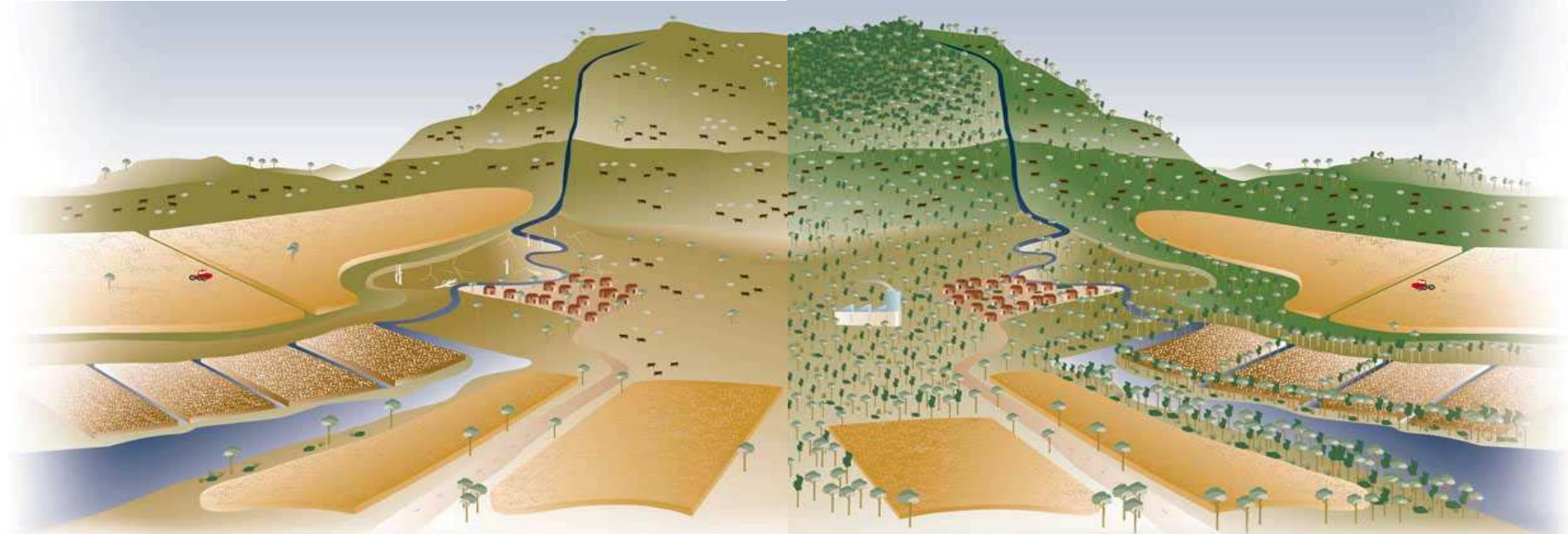
- Limitations of protected areas

NEW SOLUTIONS

How do we create a market for an environmental service?



POTENTIAL BENEFITS OF PES



P R E S E N T

The existing rural landscape.

LAND USE

OUTPUT	AREA (ha)	REVENUE (000's)
Sheep	250,000	25,000
Cattle	200,000	40,000
Wheat	250,000	118,000
Canola	150,000	112,000
Cotton	150,000	490,000
TOTAL	1,000,000	785,000

ENVIRONMENTAL PROBLEMS

- ◆ Dryland salinity increasing
- ◆ Rising water tables and saline discharge
- ◆ Nutrients leaching into waterways
- ◆ Low biodiversity
- ◆ Soil erosion and turbid waterways

F U T U R E

Planted forests in the landscape create a more diverse economy and a healthier environment.

LAND USE

OUTPUT	AREA (ha)	REVENUE (000's)
Sheep	150,000	18,000
Cattle	120,000	28,000
Wheat	200,000	94,000
Canola	120,000	90,000
Cotton	150,000	490,000
Timber	26,000	12,000
Bioenergy	117,000	9,000
Charcoal	117,000	14,000
Carbon credits		41,000
Salinity credits		26,000
TOTAL	1,000,000	822,000

ENVIRONMENTAL BENEFITS

- ◆ Dryland salinity reduced
- ◆ Lower water tables and clean discharge
- ◆ Nutrients retained on farm
- ◆ Biodiversity increased
- ◆ Soil erosion reduced

THANK YOU!



www.forest-trends.org



www.katoombagroup.org