

**Southern Africa Regional Workshop for Updating National  
Biodiversity Strategies and Action Plans:**

**incorporating work on valuation and incentive measures**

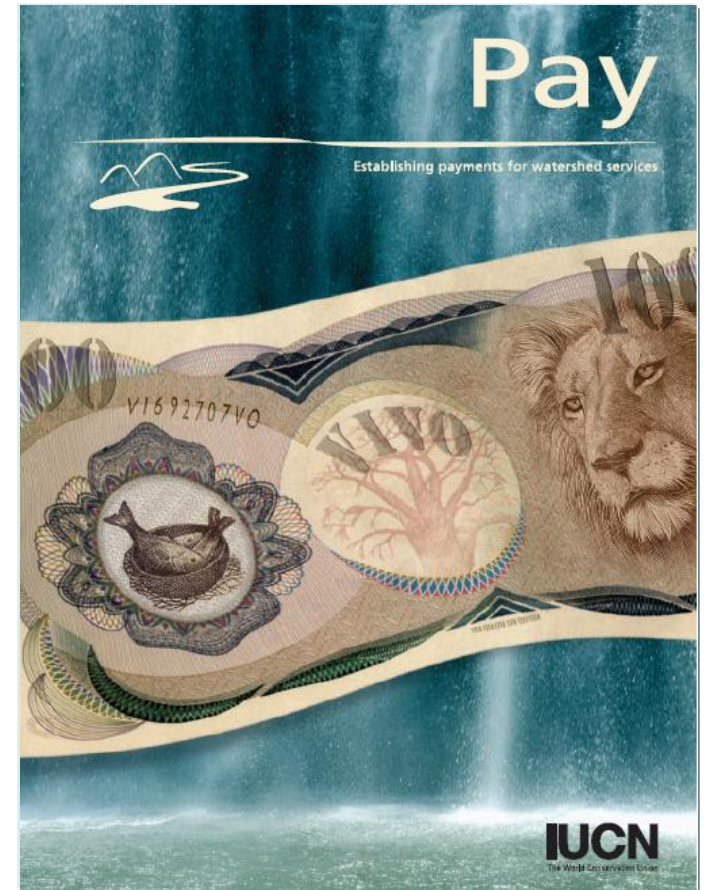
**Positive Incentives: global perspectives and  
regional experiences (Target 3)**

**16 March 2011**

**Joshua Bishop, IUCN**

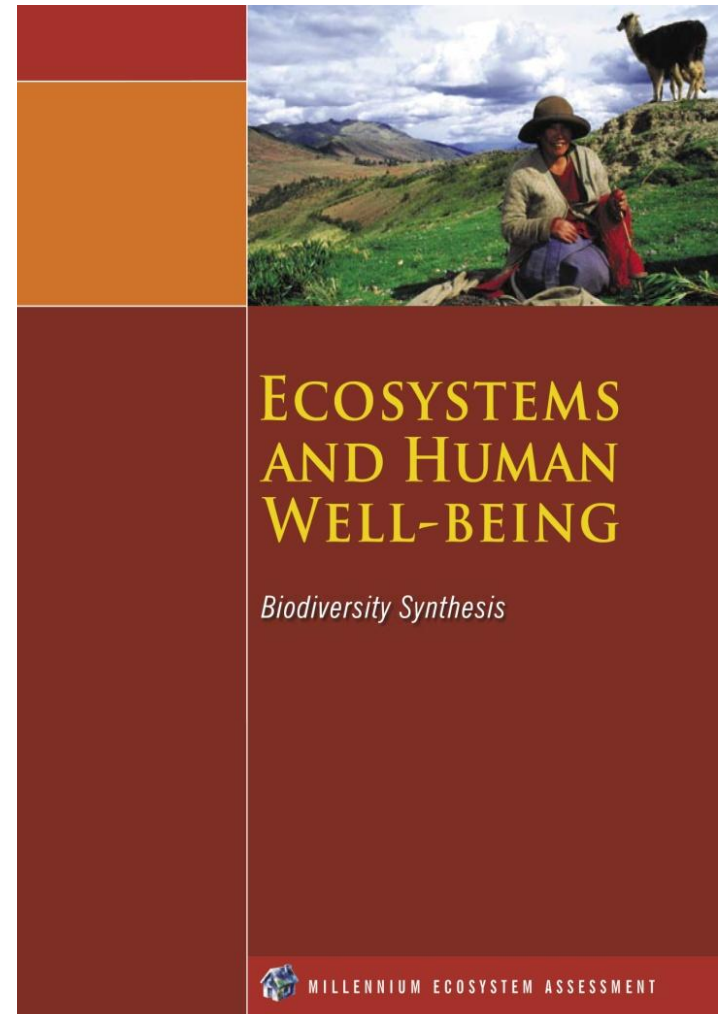
## Outline

- Positive incentives:  
global perspectives
- Positive incentives:  
national and regional  
experiences



# MA's “promising (economic) responses”

- Incorporation of nonmarket values of ecosystems in resource management decisions
- Elimination of subsidies that promote excessive use of ecosystem services (and, where possible, transfer these subsidies to payments for non-marketed ecosystem services)
- Measures to reduce aggregate consumption of unsustainably managed ecosystem services
- **Greater use of economic instruments and market-based approaches in the management of ecosystem services (where enabling conditions exist)**





## TEEB approach to “valuation”

**1. Recognizing value:** a feature of all human societies and communities

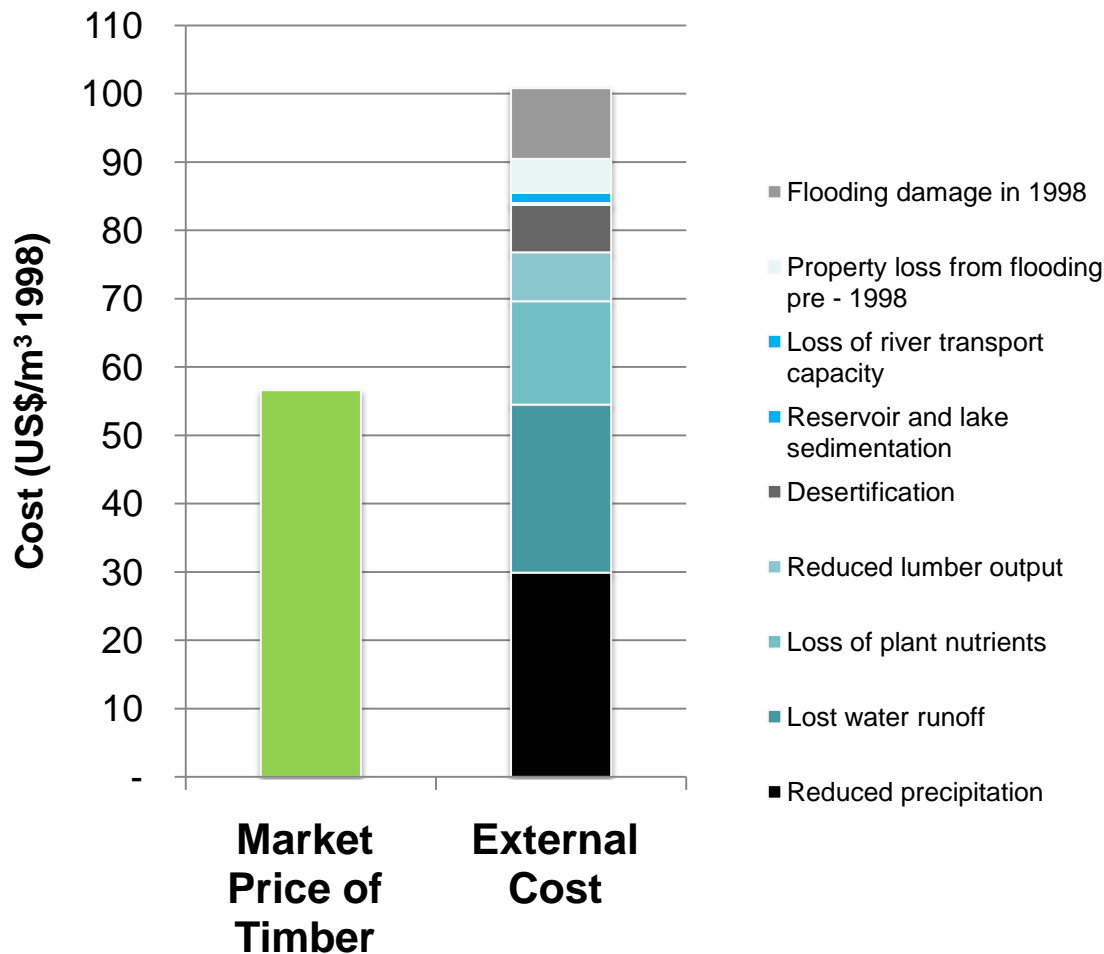
**2. Demonstrating value:** in economic terms, to support decision making

**3. Capturing value:** introduce mechanisms that incorporate the values of ecosystems into decision making





## Internalizing ecosystem impacts in prices



- US\$12.2 billion estimated ecological cost of deforestation in China (1950-88)
- 60% of this cost is attributed to logging
- 64% of logging was for construction and materials sectors
- External costs = 178% of the market price of timber (1998)

Source: TEEB for Business, 2010 (Annex 2.1).

# X/44. Incentive measures

7. *Requests* the Executive Secretary, subject to the availability of financial resources and in collaboration with relevant partners, and taking into account the work of the TEEB initiative as well as similar work at national or regional levels, such as the regional initiative of the United Nations Development Programme (UNDP) on the importance of biodiversity and ecosystems for sustained growth and equity in Latin America and the Caribbean, to convene regional workshops for the exchange among practitioners on practical experiences on the removal and mitigation of perverse incentive measures, including, but not limited to, harmful subsidies, and on the promotion of **positive incentives**, including, but not limited to, **market-based incentives**, with a view to build or enhance capacities of, and promote common understanding among, practitioners;
8. Invites national, regional and international funding institutions to support the building or enhancement of national capacities for assessing the values of biodiversity and ecosystem services, for identifying and removing or mitigating perverse incentives, and for the design and implementation of **positive incentive measures** for the conservation and sustainable use of biodiversity;
10. Noting the essential role of regulation and the complementary role of market-based instruments, encourages Parties and other Governments to promote the design and implementation, in all key economic sectors, of **positive incentive measures** for the conservation and sustainable use of biodiversity that are effective, transparent, targeted, appropriately monitored, cost-efficient as well as consistent and in harmony with the Convention and other relevant international obligations, and that do not generate perverse incentives, taking into account, as appropriate, the range of **positive incentive measures** identified in the report for policy-makers of the TEEB initiative, the “polluter pays principle” and the associated “full-cost recovery principle”, as well as the livelihoods of indigenous and local communities;
11. Acknowledging the crucial role of communication between the public and private sectors in developing incentive measures that are supportive of the national implementation of the Convention, encourages Parties and other Governments to engage with businesses and enterprises on ways and means to contribute to the national implementation of the Convention, including through the design and implementation, with their participation, of direct and indirect **positive incentive measures** for the conservation and sustainable use of biodiversity;
12. Invites Parties and other Governments to foster, as appropriate, implementation of sustainable consumption and production patterns for the conservation and sustainable use of biodiversity, both in the public and the private sector, including through business and biodiversity initiatives, **procurement policies** that are in line with the objectives of the Convention, and development of methods to promote science-based information on biodiversity in **consumer and producer decisions**, consistent and in harmony with the Convention and other relevant international obligations;



# ***CBD (2011) Incentive measures for the conservation and sustainable use of biological diversity: Case studies and lessons learned, Technical Series No. 56***

**1. Direct approaches** - generally involve 'paying' relevant actors to achieve biodiversity-friendly outcomes or, conversely, to not achieve biodiversity-harmful outcomes

- Examples: long-term retirement (or set aside) schemes; conservation leases, covenants or easements; schemes providing payments for ecosystem services. Breaks on governmental levies such as taxes, fees or tariffs that grant advantages or exemptions for activities beneficial for conservation and/or sustainable use

**2. Indirect approaches** - support activities or projects that are not designed exclusively to conserve or promote the sustainable use of biodiversity, but have the effect of contributing to these objectives

- Examples: development or commercialization of biodiversity-based products or services, such as sustainable or eco-tourism, or the marketing of biodiversity-related goods and services e.g. non-timber forest resources ('biotrade').

# ***CBD (2011) Incentive measures for the conservation and sustainable use of biological diversity: Case studies and lessons learned, Technical Series No. 56***

**1. Direct approaches** - generally involve ‘paying’ relevant actors to achieve biodiversity-friendly outcomes or, conversely, to not achieve biodiversity-harmful outcomes

- Examples: long-term retirement (or set aside) schemes; conservation leases, covenants or easements; schemes providing payments for ecosystem services. Breaks on governmental levies such as taxes, fees or tariffs that grant advantages or exemptions for activities beneficial for conservation and/or sustainable use

**2. Indirect approaches** - support **activities or projects** that are not designed exclusively to **conserve or promote the sustainable use** of biodiversity, but have the effect of contributing to these objectives

- Examples: development or commercialization of biodiversity-based products or services, such as sustainable or eco-tourism, or the marketing of biodiversity-related goods and services e.g. non-timber forest resources (‘biotrade’).



# From ecosystem decline to ecosystem incentives

## “Enhanced”

---

Crops  
Livestock  
Aquaculture  
Carbon sequestration

## “Degraded”

---

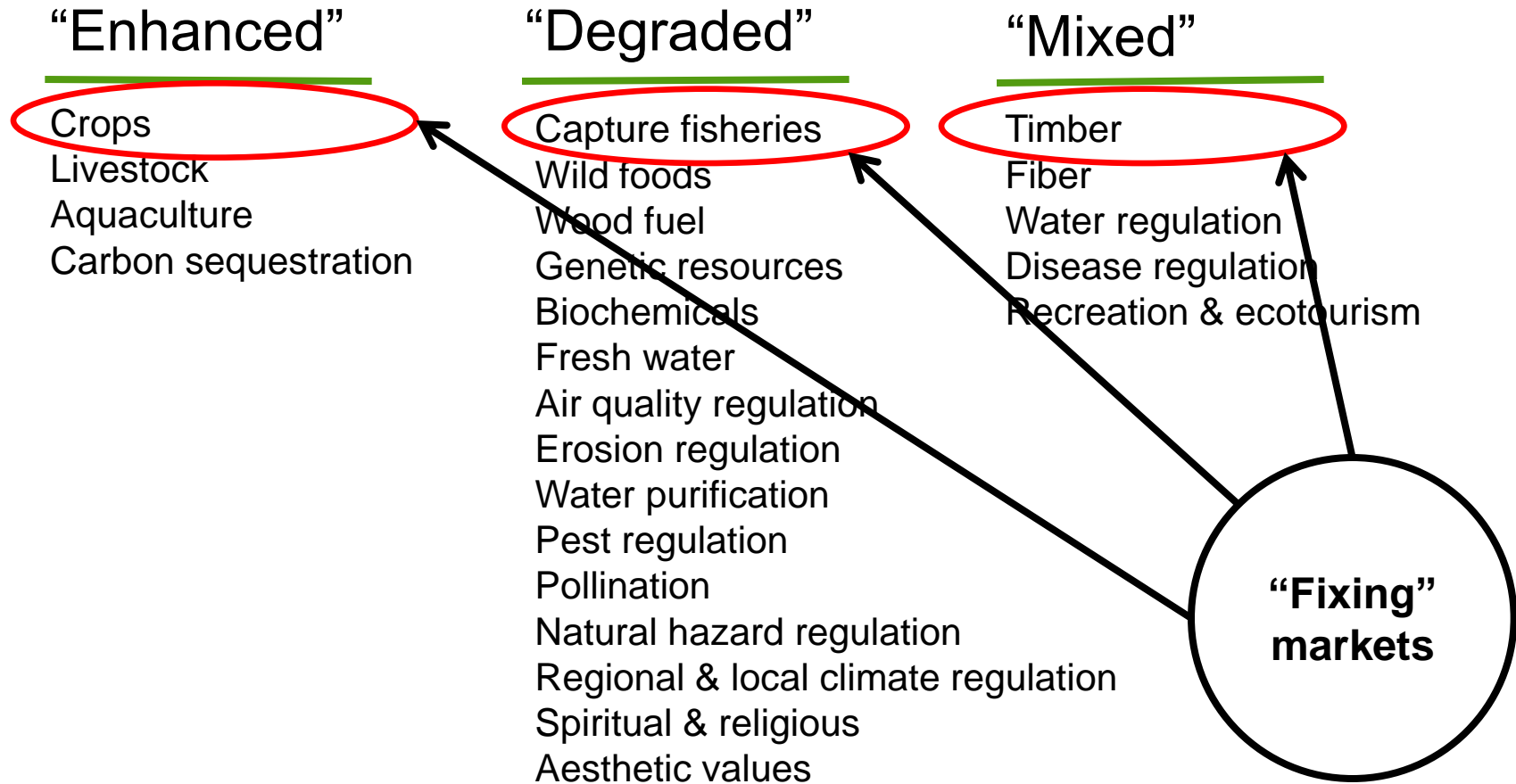
Capture fisheries  
Wild foods  
Wood fuel  
Genetic resources  
Biochemicals  
Fresh water  
Air quality regulation  
Erosion regulation  
Water purification  
Pest regulation  
Pollination  
Natural hazard regulation  
Regional & local climate regulation  
Spiritual & religious  
Aesthetic values

## “Mixed”

---

Timber  
Fiber  
Water regulation  
Disease regulation  
Recreation & ecotourism

# From ecosystem decline to ecosystem incentives by fixing markets (CBD “indirect approaches”)



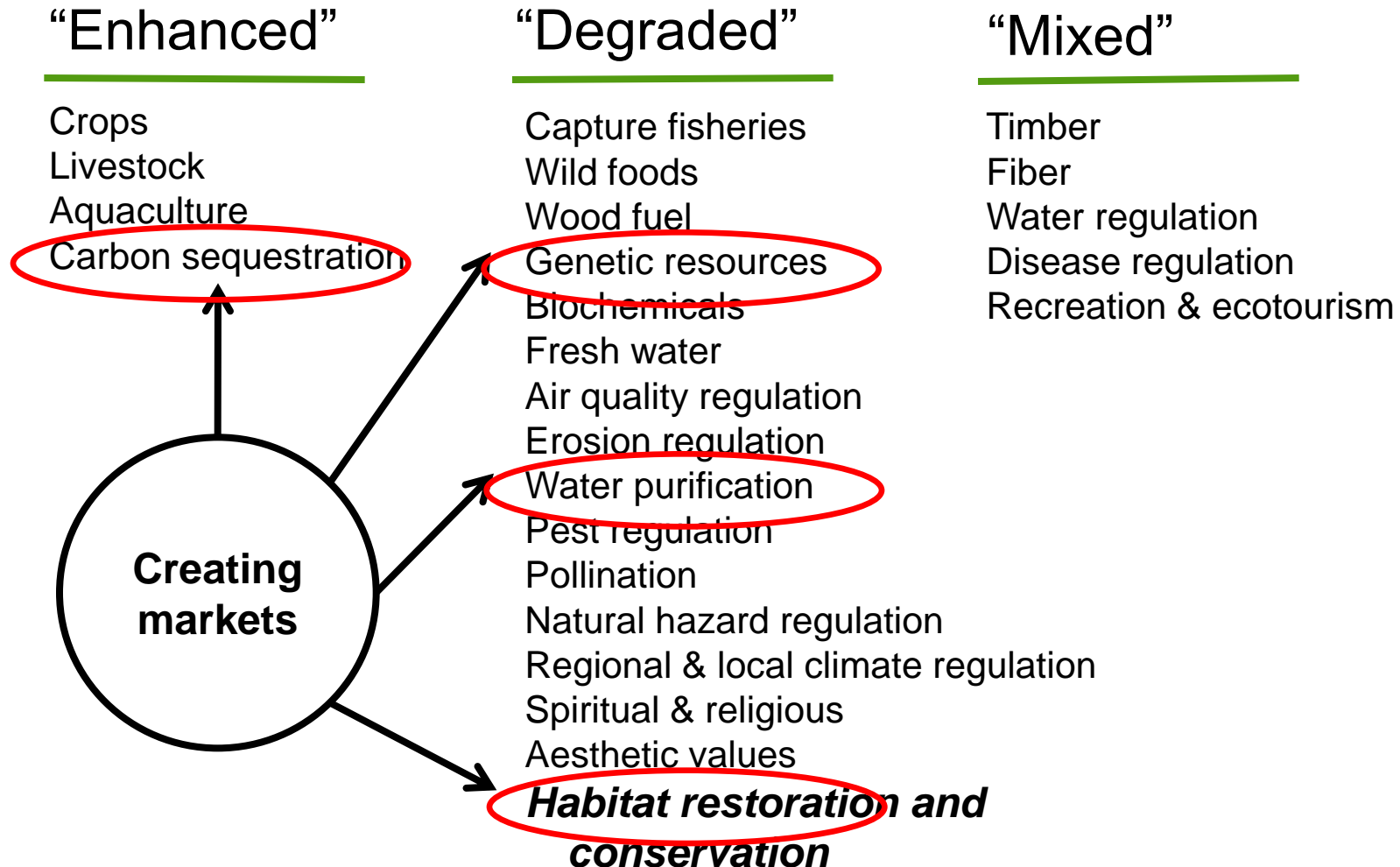
# Fixing markets: 'green' products and services

- Global sales of organic food and drink = US\$ 60 billion in 2009
- Sales of certified 'sustainable' forest products increased four-fold between 2005 and 2007
- The global market for eco-labeled fish products grew by over 50% from 2008 to 2009, to a retail value of US\$ 1.5 billion
- Major consumer brand owners and retailers have added 'ecologically-friendly' attributes to key product lines:
  - Mars (Rainforest Alliance cocoa)
  - Cadbury (Fairtrade cocoa)
  - Kraft (Rainforest Alliance Kenco coffee)
  - Unilever (Rainforest Alliance PG Tips)

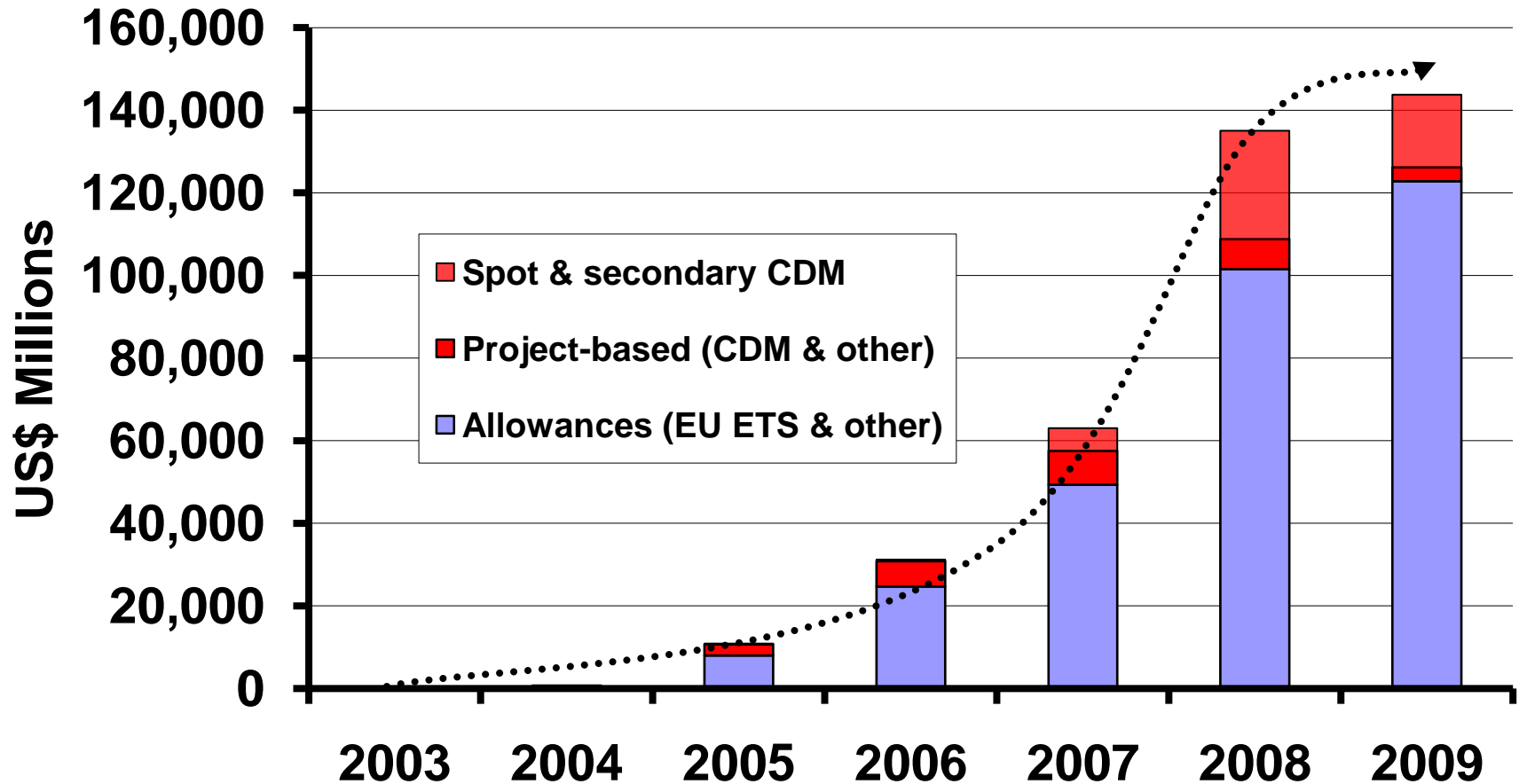


**FSC** FOREST STEWARDSHIP COUNCIL  
Because forests matter

# From ecosystem decline to ecosystem incentives by creating markets (CBD “direct approaches”)

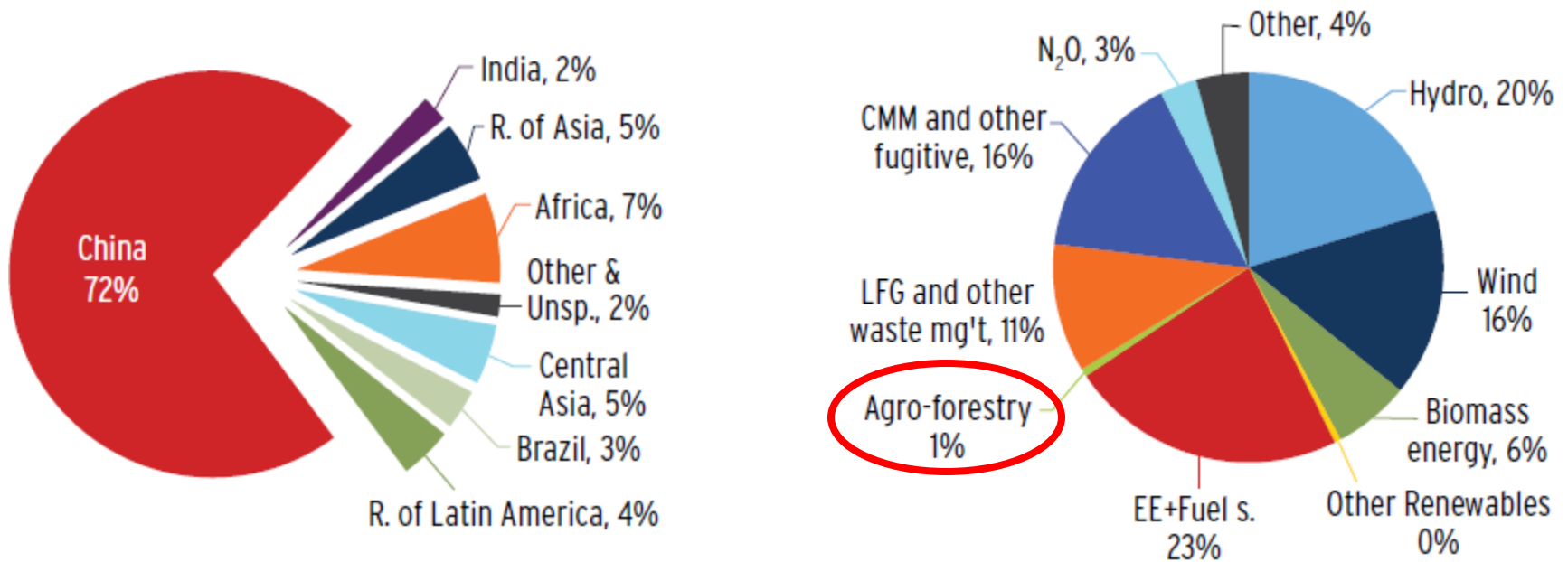


# Creating markets: The case of carbon



**Cumulative 2003-2009: US\$307 billion  
(of which CDM US\$78 billion)**

# Creating markets: Carbon offsets as a new export sector for developing countries



**Primary CDM sellers and sectors in 2009, as percent of total volume transacted (Source: World Bank 2010).**



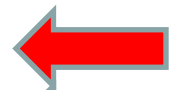
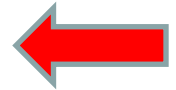
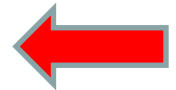
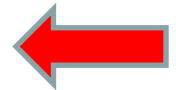
# Forest carbon offsets & REDD+

Markets	Volume (MtCO <sub>2</sub> )		Value (million US\$)	
	Historical Total	2008	Historical Total	2008
Voluntary OTC	15.3	3.7	129.7	31.5
CCX	2.6	1.3	7.9	5.3
<b>Total Voluntary Markets</b>	<b>17.9</b>	<b>5.0</b>	<b>137.6</b>	<b>36.8</b>
New South Wales	1.8	0.2		
CDM A/R	0.5	0.1	2.9	0.3
NZ ETS	0.1		0.7	
Kyoto (AAU)	0.6		8.0	
<b>Total Regulated Markets</b>	<b>2.9</b>	<b>0.2</b>	<b>11.6</b>	<b>0.3</b>
<b>Total Global Markets</b>	<b>20.8</b>	<b>5.3</b>	<b>149.2</b>	<b>37.1</b>

Source: Hamilton et al. (2010)

# Other payments for ecosystem services (PES)

National PES Programmes	Annual Budget in USD
China, Sloping Land Conversion Programme (SLCP)	4 billion (Bennett, 2008)
Costa Rica, Payments for Environmental Services (PES)	12.7 million (FONAFIFO, 2009)
Mexico, Payments for Environmental Hydrological Services (PEHS )	18.2 million (Muñoz Piña <i>et al.</i> , 2008)
UK, Rural Development Programme for England	0.8 billion (Defra, 2009)
US, Conservation Reserve Program (CRP)	1.7 billion (Claassen, 2009)
Regional PES Programmes	Annual Budget in USD
Australia, Tasmanian Forest Conservation Fund (FCF)	14 million (DAFF, 2007)
Australia, Victoria State ecoMarkets	4 million (DSE, 2009)
Bulgaria and Romania, Danube Basin	575 000 (GEF, 2009)
Ecuador, Profafor	150 000 (Wunder and Alban, 2008)
Tanzania, Eastern Arc Mountains	400 000 (EAMCEF, 2007)



Source:  
D,  
2010.

# Creating markets: Biodiversity offsets and “habitat banking”



“The global annual market size is at least \$1.8-\$2.9 billion” (Madsen et al. 2010)  
(see: [www.speciesbanking.com](http://www.speciesbanking.com))

**What about  
the social  
impacts of  
incentives?**



# Ecosystem incentives and poverty

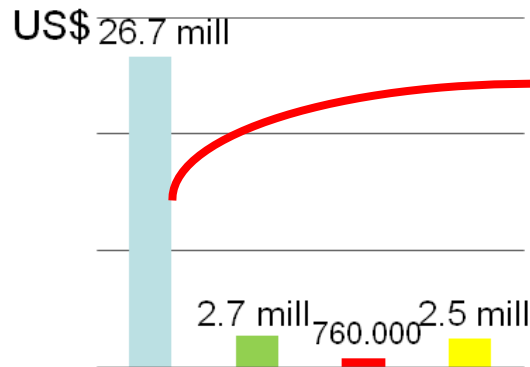
- **Potential opportunities:**
  - increase cash income
  - diversify income sources
  - reinforce social networks
  - develop new skills
- **Potential constraints:**
  - insecure property rights
  - high start-up and transaction costs
  - weak enforcement capacity



# Bringing it all together? Aligning economic growth, biodiversity and development

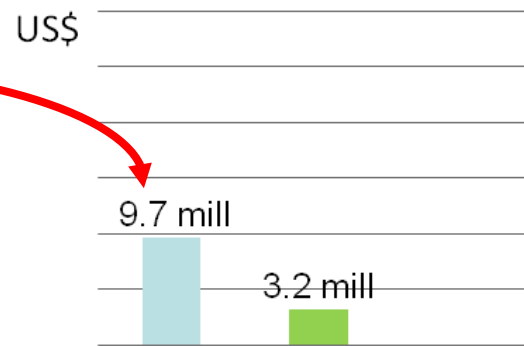
- Example: Rio Tinto mine in Madagascar
- Corporate goal: Net Positive Impact (NPI) on biodiversity
- Support for conservation project (60,000 ha lowland forest)

## Potential benefits:



- Carbon storage
- Wildlife habitat
- Hydrol. Regulation
- Eco-tourism

## Potential costs:



- Lost agricultural output & NTFPs
- PA start-up and management

- **Benefit-sharing with communities (based on REDD revenues)**

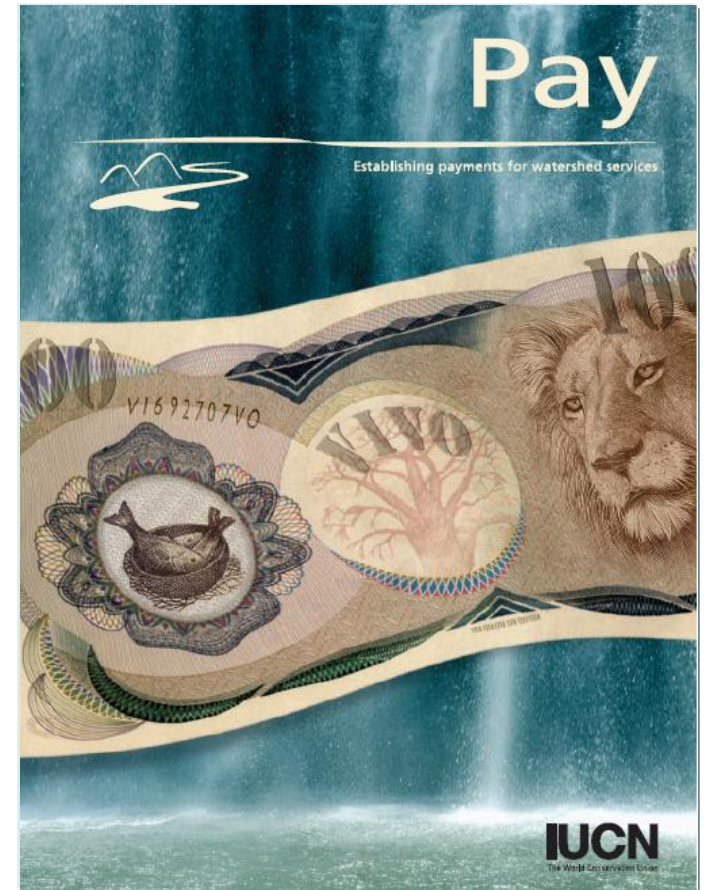


## Changing the incentives: summing up

	<b>Ecosystem Damage (Business as usual)</b>	<b>Conservation &amp; Sustainable Use</b>
<b>Costs</b>	<p>Need to <b>rise</b>, e.g. through:</p> <ul style="list-style-type: none"> <li>• Technological limits</li> <li>• Resource taxes/fees</li> <li>• Reporting requirements</li> <li>• Naming and shaming</li> </ul>	<p>Need to <b>fall</b>, e.g. through:</p> <ul style="list-style-type: none"> <li>• Tax credits</li> <li>• Facilitated permitting</li> <li>• Lower interest rates</li> </ul>
<b>Benefits</b>	<p>Need to <b>fall</b>, e.g. through:</p> <ul style="list-style-type: none"> <li>• Consumer boycotts</li> <li>• Trade barriers (where allowed)</li> </ul>	<p>Need to <b>rise</b>, e.g. through:</p> <ul style="list-style-type: none"> <li>• Consumer choice</li> <li>• Payment for ecosystem services</li> <li>• Market creation</li> <li>• Recognition / award schemes</li> </ul>

## Outline

- Positive incentives:  
global perspectives
- **Positive incentives:  
national and regional  
experiences**



# Country experience with positive incentives

- **Describe an example** of a positive incentive for biodiversity conservation and/or sustainable use in your country. Which CBD targets/programmes are relevant?
- **How does the incentive work?** How are the costs and/or the benefits of conservation or of biodiversity-friendly activities affected by the incentive?
- **What is the impact of the incentive on biodiversity?** What is the extent of uptake/adoption of the incentive? What are the indicators of success, relative to “business-as-usual”?
- **How much does it cost to implement the incentive**, and how is this cost covered? Public spending and/or private expense? Is the incentive efficient (i.e. benefits > costs) or at least cost-effective, compared to alternative measures?
- **What are the social equity impacts of the incentive?** Who are the “winners” and “losers”? Does the incentive help to reduce poverty? What about governance/participation aspects?
- **Are there side effects** or unintended consequences from the incentive? Are they positive and/or negative?

# Target setting on positive incentives

## 1. How can existing positive incentives be improved?

- How to replicate or expand coverage?
- How to improve targeting/effectiveness?
- How to improve social/equity impacts?
- How to improve financial sustainability?
  - Opportunities for “self-financing”?
  - Opportunities to reduce costs?

## 2. What new positive incentives may be introduced?

- What criteria are most relevant to identify high potential or high priority for introducing positive incentives? Existing threats to biodiversity? Economic values of biodiversity? Social development concerns?
- What are the key steps involved in introducing new positive incentives?

# Thank you!

for more information

[www.teeb4me.com](http://www.teeb4me.com)

[www.teebweb.org](http://www.teebweb.org)

## X/44. Incentive measures

7. *Requests* the Executive Secretary, subject to the availability of financial resources and in collaboration with relevant partners, and taking into account the work of the TEEB initiative as well as similar work at national or regional levels, such as the regional initiative of the United Nations Development Programme (UNDP) on the importance of biodiversity and ecosystems for sustained growth and equity in Latin America and the Caribbean, to convene regional workshops for the exchange among practitioners on practical experiences on the removal and mitigation of perverse incentive measures, including, but not limited to, harmful subsidies, and on **the promotion of positive incentives, including, but not limited to, market-based incentives**, with a view to build or enhance capacities of, and promote common understanding among, practitioners;
8. *Invites* national, regional and international funding institutions to support the building or enhancement of national capacities for assessing the values of biodiversity and ecosystem services, for identifying and removing or mitigating perverse incentives, and for **the design and implementation of positive incentive measures for the conservation and sustainable use of biodiversity**;



## X/44. Incentive measures

10. *Noting* the essential role of regulation and the complementary role of market-based instruments, *encourages* Parties and other Governments to **promote the design and implementation, in all key economic sectors, of positive incentive measures for the conservation and sustainable use of biodiversity that are effective, transparent, targeted, appropriately monitored, cost-efficient as well as consistent and in harmony with the Convention and other relevant international obligations**, and that do not generate perverse incentives, taking into account, as appropriate, the range of positive incentive measures identified in the report for policy-makers of the TEEB initiative, the “polluter pays principle” and the associated “full-cost recovery principle”, as well as the livelihoods of indigenous and local communities;

## X/44. Incentive measures

11. *Acknowledging* the crucial role of communication between the public and private sectors in developing incentive measures that are supportive of the national implementation of the Convention, *encourages* Parties and other Governments to **engage with businesses and enterprises on ways and means to contribute to the national implementation of the Convention, including through the design and implementation, with their participation, of direct and indirect positive incentive measures for the conservation and sustainable use of biodiversity;**
12. *Invites* Parties and other Governments to foster, as appropriate, **implementation of sustainable consumption and production patterns for the conservation and sustainable use of biodiversity, both in the public and the private sector, including through business and biodiversity initiatives, procurement policies that are in line with the objectives of the Convention, and development of methods to promote science-based information on biodiversity in consumer and producer decisions,** consistent and in harmony with the Convention and other relevant international obligations;