Regional Workshop for Central & Eastern Europe/Asia on Updating National Biodiversity Strategies and Action Plans:

Resource Mobilization: A global perspective (SP Target 20, Decision X/3)

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Strategic goal E. Enhance implementation through participatory planning, knowledge management and capacity building

Target 20: By 2020, the mobilization of financial resources for effectively implementing the Strategic Plan for Biodiversity 2011-2020 from all sources, should increase substantially.

X/3. Resource Mobilization indicators (p. 7)

- (1) Aggregated financial flows, ...:
 - (a) Official Development Assistance;
 - (b) Domestic budgets at all levels;
 - (c) Private sector;
 - (d) Non-governmental organizations, foundations, and academia;
 - (e) International financial institutions;
 - (f) United Nations organizations, funds and programmes;
 - (g) Non-ODA public funding;
 - (h) South-South cooperation...;
 - (i) Technical cooperation;
- (4) Amount of funding provided through the Global Environment Facility and allocated to biodiversity focal area.
- (7) Number of Parties that integrate considerations on biological diversity and its associated ecosystem services in development plans, strategies and budgets;

- (8) Number of **South-South cooperation** initiatives ...
- (9) Amount and number of South-South and North-South technical cooperation and capacity building initiatives that support biodiversity;
- (13) Resources mobilized from the removal, reform or phase out of incentives, including subsidies, harmful to biodiversity, which could be used for the promotion of positive incentives, including but not limited to innovative financial mechanisms, ...
- (14) Number of initiatives and respective amounts, ... that engage Parties and relevant organizations on new and innovative financial mechanisms, ...
- (15) Number of access and benefit sharing initiatives and mechanisms,...

Target 20. Resource Mobilization

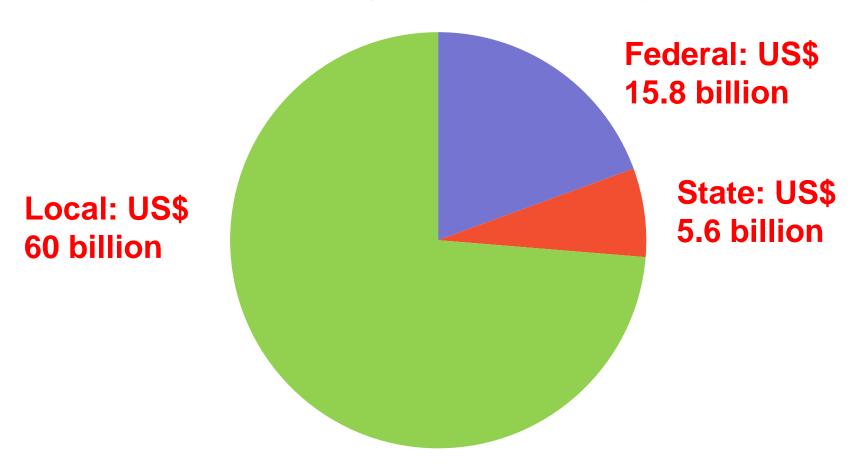
Target	Means & activities	Possible indicators
By 2020, at the latest, the mobilization of financial resources for effectively implementing the Strategic Plan for Biodiversity 2011-2020 from all sources and in accordance with the consolidated and agreed process in the Strategy for Resource Mobilization should increase substantially from the current levels. This target will be subject to changes contingent to resources needs assessments to be developed and reported by Parties	 Increase Official Development Assistance Reinforce domestic capacity Implement innovative financing mechanisms Apply appropriate allocation of resources Improve dialogue and coordination among donors and recipients of bilateral and multilateral aid Undertake training and capacity-building Promote professional networks and exchange of expertise 	Official Development Assistance provided in support of the Convention (Number of officials and experts qualified on biodiversity related matters)

Biodiversity finance: Baseline & gap assessment

Baseline	Financing gap	Source
US\$6.5 billion/yr (PAs)	US\$45 billion/yr x 30 yrs	Balmford et al. 2002
US\$7 billion/yr (PAs)	US\$23 billion/yr x 10 yrs	Bruner et al. 2004
US\$402 million/yr (PAs in Lat America & Caribb.)	US\$314-700 million/yr	Bovarnick et al. 2010
US\$36-38 billion/yr	US\$24-135 billion/yr	Parker & Cranford 2010

US government spending on biodiversity

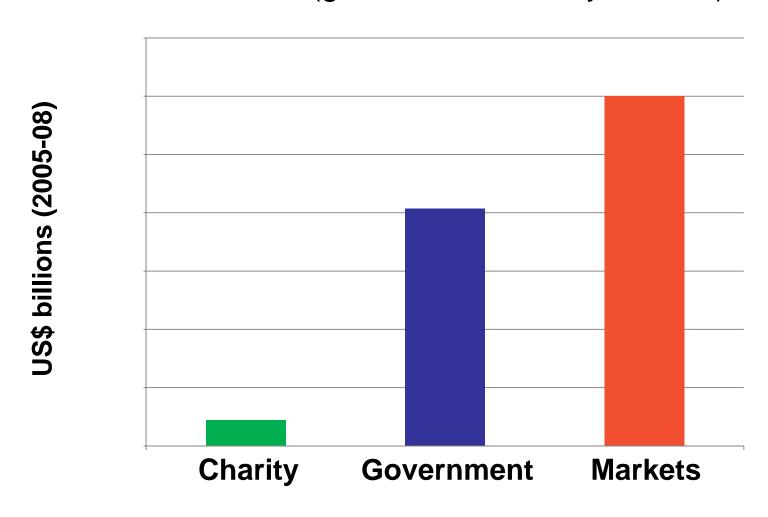
- 1. What was the total in FY2008? US\$ 81.4 billion
- 2. What was the rank (federal, state, local)?



Source: Walls, M., Darley, S., Siikamäki, J. 2009. The State of the Great Outdoors: America's Parks, Public Lands, and Recreation Resources. Resources for the Future: Washington, D.C. 100 pp.

US public & private spending on biodiversity

What is the rank (government, charity, market)?



Sources: Walls et al. 2009; Giving USA 2006; US Fish & Wildlife Service 2007.

Biodiversity finance in a wider context

USD 104 billion in 2006 (of which \$19 billion in debt relief)¹ **ODA** 2.8% for biodiversity (2002-05 average)² International private capital **USD 647 billion in 2006** flows to dev. (Global Dev. Finance 2007)³ countries **Developing** country exports **USD 4,335 billion in 2006** (World Bank, 2007)4 **Developing country** domestic markets ~ USD 11,000 billion in 2006 (World Bank, 2007)⁵

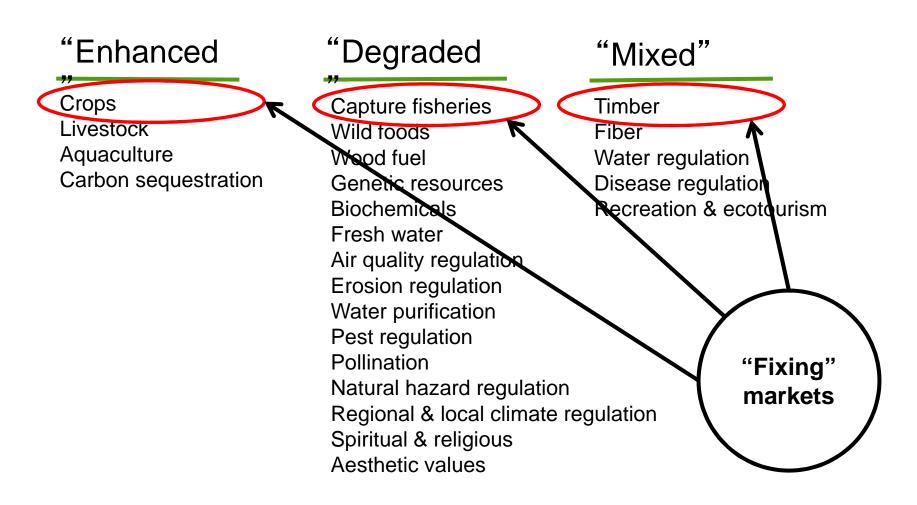
Size, source and control of funds varies with their purpose

Purpose	Size	Source and Budget
Facilitating biodiversity planning implementation and monitoring	\$	Domestic budget or ODA Environment Ministry Budget
Core Biodiversity activities: surveys; protected areas; regulation etc	\$\$	Domestic budget, ODA and other sources Environment Ministry Budget
Mainstreaming in agriculture, forestry, fisheries, education etc	\$\$\$	Domestic budget, ODA, PES, subsidy reform and other sources Budgets of other ministries and private sector
Adaptation to climate change; C sequestration	\$\$\$\$	Climate-related finance
Green economy (sustainable production and consumption)	\$\$\$\$\$\$	All sources All budgets

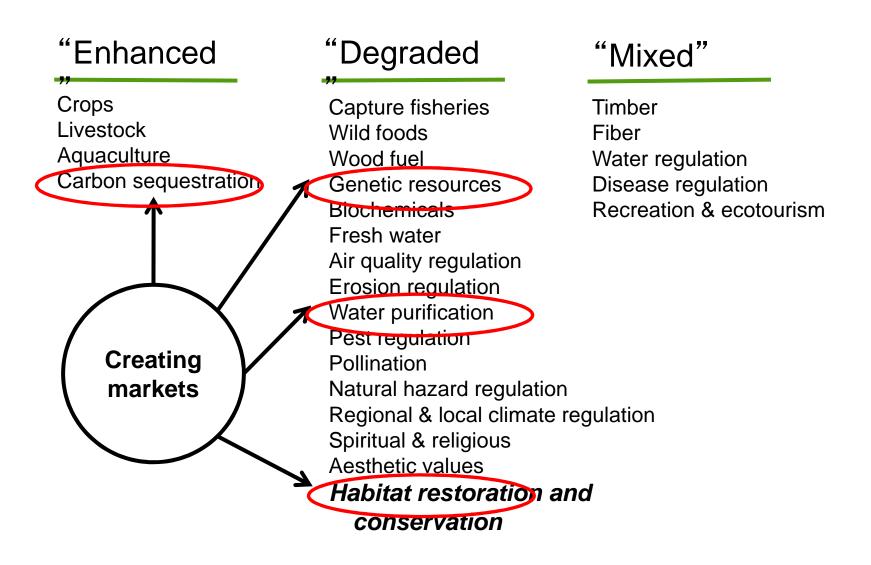
CBD, Technical Series No. 56 (2011) Incentive measures for the conservation and sustainable use of biological diversity: Case studies and lessons learned

- 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 biodiversityrelated goods and services e.g. non-timber forest resources ('biotrade').

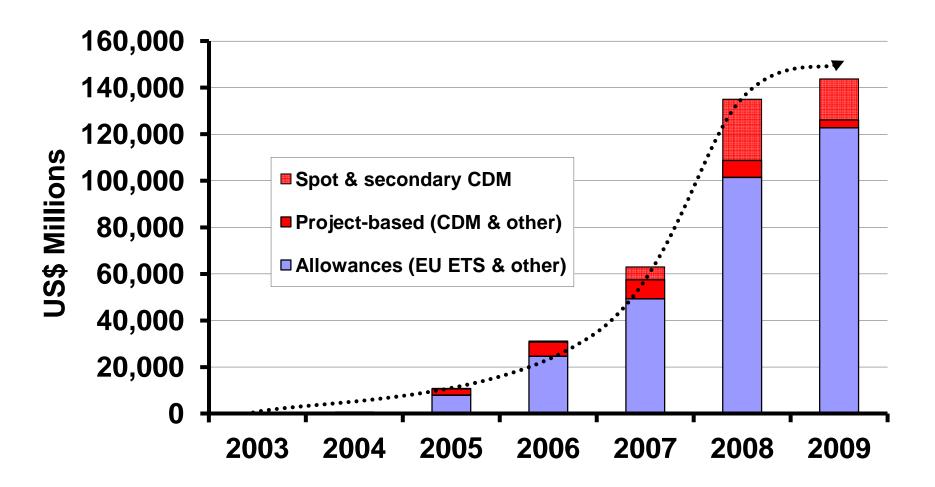
Shifting Ecosystem Services from nagative to positive impact on biodiversity by <u>fixing</u> market failures (CBD language "indirect approaches")



From ecosystem decline to ecosystem incentives by <u>creating markets</u> (CBD "direct approaches")



Creating markets: The case of carbon



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

Carbon storage in rangeland: An under-appreciated opportunity?

"Soil organic carbon is the largest reservoir in interaction with the atmosphere" (FAO)

Grazing land comprises two thirds of the global land surface area – some 5 **BILLION** hectares



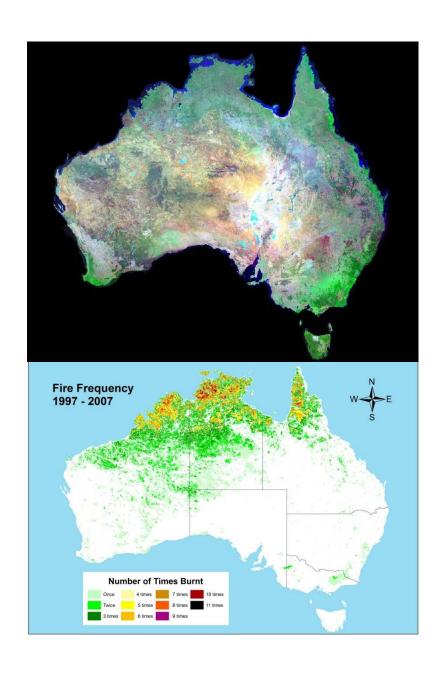


- Same area
- Same rainfall
- Same soils
- Same plant species
- Same season (pictures taken on the same day)

- The area above actually has more livestock
- It also has far more wildlife, including buffalo, elephant, and lion
- The only difference is management

Source: http://www.soilcarbon.com.au/

Fire and GHG in northern Australia





- 30% of Australia's terrestrial carbon stocks
- Small GHG emissions per fire or per unit area
- But high fire frequency and vast area burnt (30 M ha/yr)

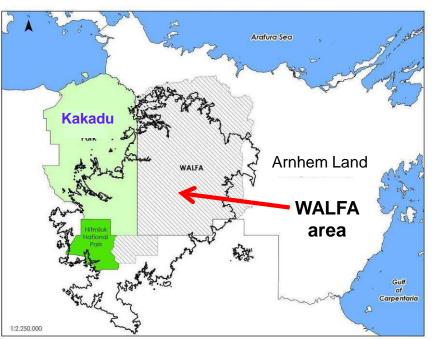
Source: Heckbert (2009) CSIRO.

GHG emissions off-setting on Aboriginal Land in Australia

West Arnhem Land Fire Abatement project

- ConocoPhillips \$1M/yr for 17 years
- Reduce fire extent and severity
- Abatement of 100,000 tonnes CO₂-e/yr
- Multiple benefits





Project collaborators: Bushfires NT, NLC, Tropical Savannas CRC, NAILSMA, CSIRO









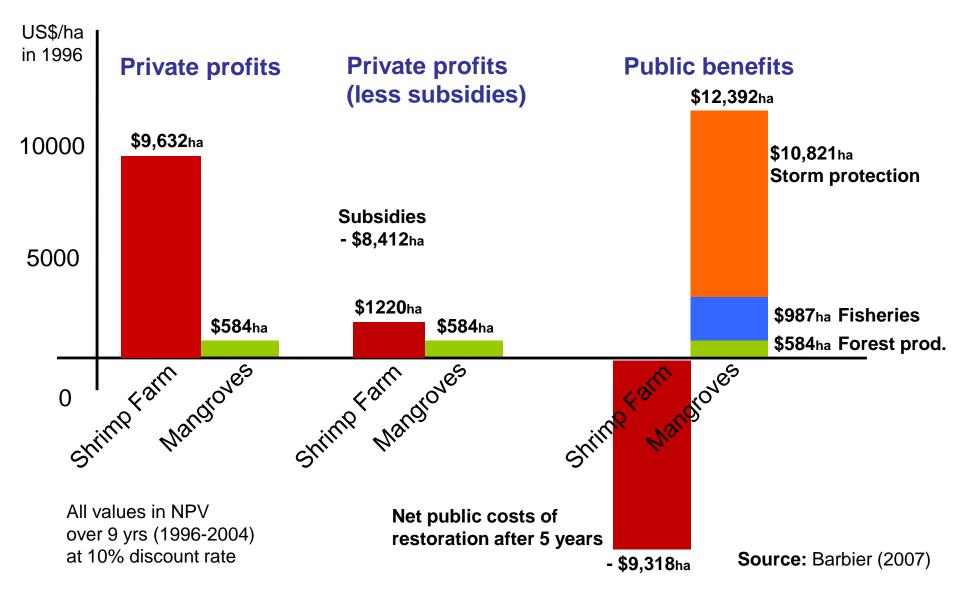
Other payments for ecosystem services (PES)

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 et al., 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: OECD, 2010.

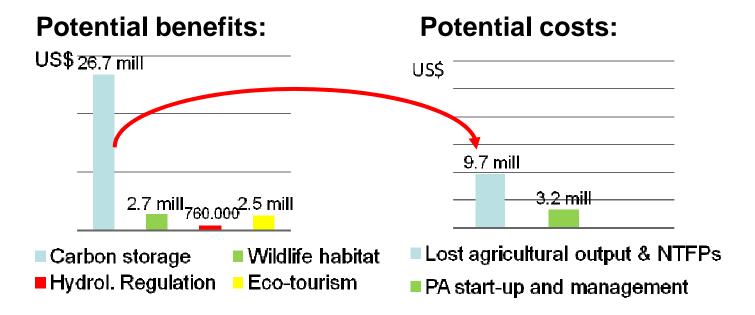
The Economics of Ecosystems & Biodiversity

Trade-offs: Shrimp farms vs mangroves



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)



Benefit-sharing with communities (based on REDD revenues)

Source: Olsen & Anstee (2010)

Changing the incentives: summing up

	Ecosystem Damage (Business as usual)	Conservation & Sustainable Use
Costs	 Need to rise, e.g. through: Technological limits Resource taxes/fees Reporting requirements Naming and shaming 	Need to fall , e.g. through: Tax credits Facilitated permitting Lower interest rates
Benefits	Need to fall, e.g. through:Consumer boycottsTrade barriers (where allowed)	 Need to rise, e.g. through: Consumer choice Payment for ecosystem services Market creation Recognition / award schemes

Setting national targets for resource mobilization

- Can your tentative target be achieved with existing resources?
- If not, then what specific activities will require additional resources?
- 3. Who benefits from achieving the target and who bears the cost (including indirect costs)?
- 4. How feasible is it to get the beneficiaries to contribute to achieving the target?
- 5. Are there any relevant subsidies that could be redirected to help implement the target?
- 6. What other sources of funding may be tapped to help implement this target?