#### Earmarked taxes for PAs

- CBD Assessment: spending on conservation < 1% of national government budgets
- US: 5.5% of excise tax on hunting and fishing equipment goes to PAs (USD 150 mln)
- Namibia: part of commercial fish catch tax goes to PAs
- Costa-Rica: part of government fuel tax goes to PAs.

## Third-party Trust Funds

- ~55 Conservation Trust Funds globally (USD 810 mn in capital).
- Types: endowment, sinking, revolving (rare).
- Largest \$89 mn, smallest \$1.4 mln
- 74% in LAC, 10% in Asia; few in Europe.
- Pay for salaries, ecological monitoring, and recurrent costs, not investment needs.
- Difficult to establish.
- High overhead.
- Reluctance of donors to capitalize the endowment.
- Not a 100% solution.

#### **Third-party Trust Funds**

- •In United Kingdom, the Heritage Lottery Fund distributes a share of the money raised by the National Lottery for Good Causes, and raised over £125 million for biodiversity projects in the past ten years.
- •Bangladesh and US government have established Tropical Forest Conservation Fund (TFCF) for conservation, restoration and afforestation of tropical forest.
- •In Chile, Agricultural Research Fund (FIA), National Fund for Technology and Production (FONTEC), Fisheries Research Fund (FIP), CONAMA Environmental Fund (FAC), Fund of the Americas, SAG Fund, National Fund for Regional Development (FNDR), all provide financial support to biodiversity projects.

## Debt-for-nature swaps (DNS)

- Majority of DNS were mediated by large NGOs.
- Majority of DNS are in LAC.
- US Government, France, Switzerland and Germany are main "forgivers". [2008 France forgave a USD 20 mln debt to Madagascar in exchange for a corresponding replenishment of Madagascar PA Fund.]
- Remains a commercial deal in which debtor tries to bargain for largest discount off its debt – which not always coincides with motives of the "forgiving" Government. Explains why DNS remain rare.

# Payments for ecosystem services (PES)

- Written commercial contracts between consumers and suppliers of a service.
- Menu of "theoretically tradable" ecosystem services:
  - provision of clean drinking water, food and pharmaceutical products;
  - regulating climate and diseases, decomposition of waste; retention of floods, erosion control, support to nutrient cycles,
  - crop pollination; recreational benefits / tourism potential.
- Services that practically reached commercialization:
  - carbon sequestration (300 markets by WWF assessment),
  - watershed protection (60 markets),
  - tourism.
- Sequence of PES contract development:
  - Document ecological services
  - Assess their economic value for groups inside and outside of PA
  - Agree on a fee to be charged and where it is to be channeled must stay with PA!
  - Enforce fee collection.

#### **Biodiversity offsets**

- Conservation action outside development site designed to compensate for UNAVOIDABLE adverse biodiversity impacts caused by land/resource use (mining, roads, urban infrastructure, agriculture).
- Should not be applied if impact is avoidable.
- US, Canada, Brazil, European Union, Australia, Russia and Uzbekistan.
- Prerequisite 1 law limiting development at certain habitats.
- Prerequisite 2 memorandum on roles and responsibilities among Government, land-developer, NGOs, mediators in the off-set.
- Sequence for establishing a biodiversity offset:
  - No-net-loss assessment and design of an equivalence for the offset.
  - Select location suited for the offset's equivalence.
  - Agree among contractual parties on the duration of the offsetting obligations and budget.
  - Develop and implement the conservation plan.
  - Validate the results, establish regular monitoring and/or a protected area to enforce permanance.
- Example of success: US wetland banking involves 135 private commercial banks and over USD 370 million in BO transactions per year.

#### Removal of (perverse) subsidies:

- Agricultural subsidies in OECD countries averaged US\$261 billion/year in 2006-8,
- global fisheries subsidies at US\$15-35 billion,
- energy subsidies around US\$500 billion per year worldwide,
- transport subsidies US\$238-306 billion/year, and
- water subsidies US\$67 billion.

A portion of these subsidies re-directed can be significant for biodiversity objectives.