

PAYMENTS FOR ECOSYSTEM SERVICES WITH A SPECIAL FOCUS ON PAYMENTS FOR WATERSHED SERVICES

Living Lakes Webinar “Environmental Services and water stewardship“

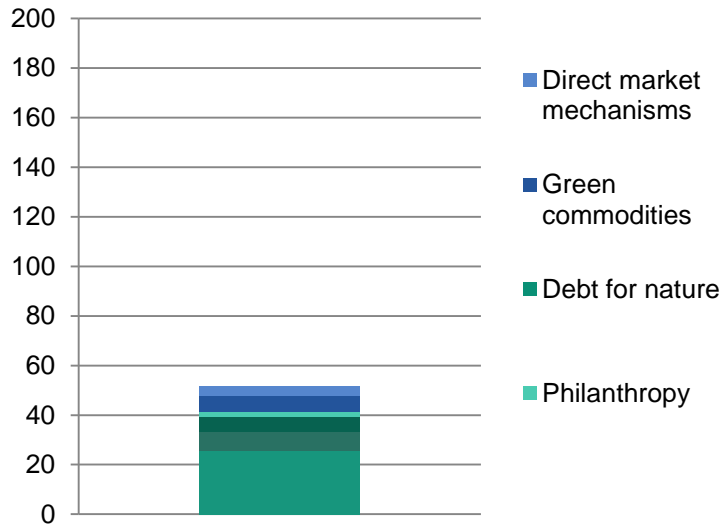
2nd July 2014

Suleika Suntken

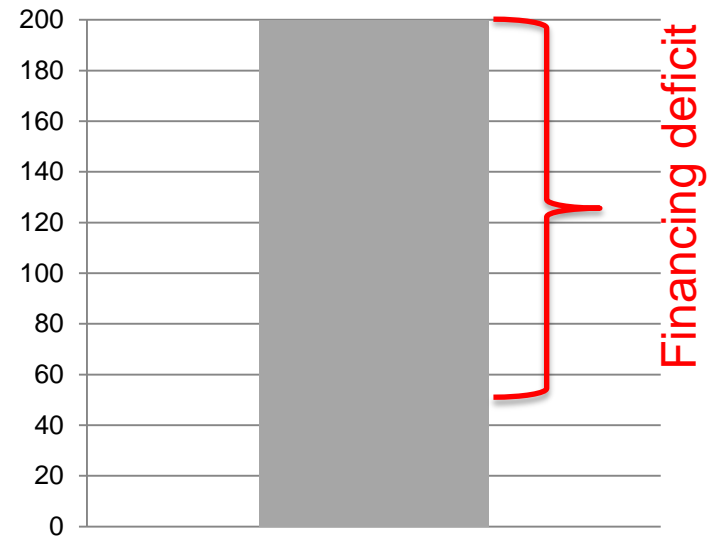
Projekt manager – Deutsche Umwelthilfe (German Environmental Aid)



Current expenditure (2012) for biodiversity protection (US\$ Billion)



Needed expenditure for biodiversity protection (US\$ Billion)



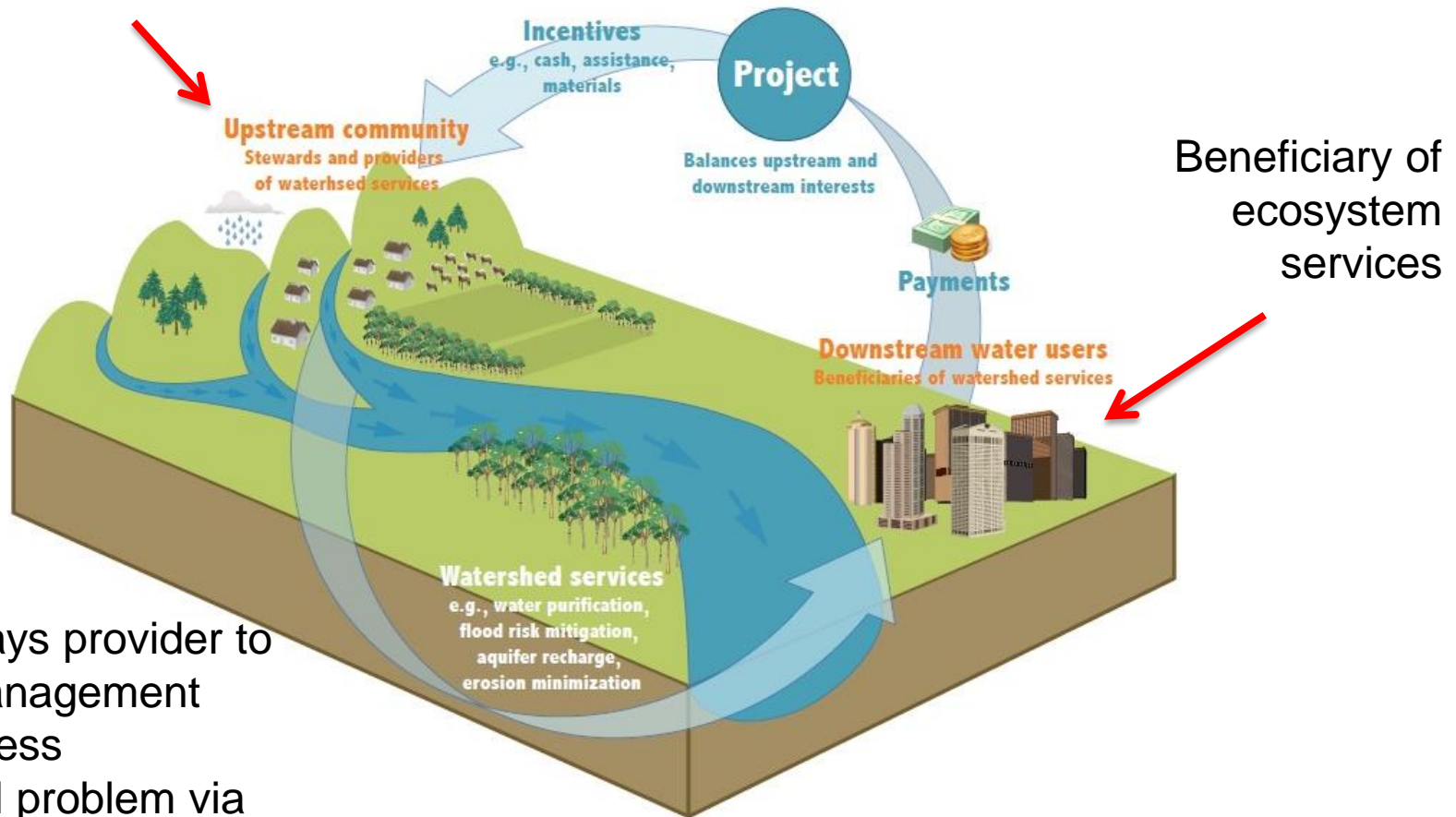
→ Biodiversity financing deficit: about US\$ 150 billion annually

www.naturalcapitalmarkets.org

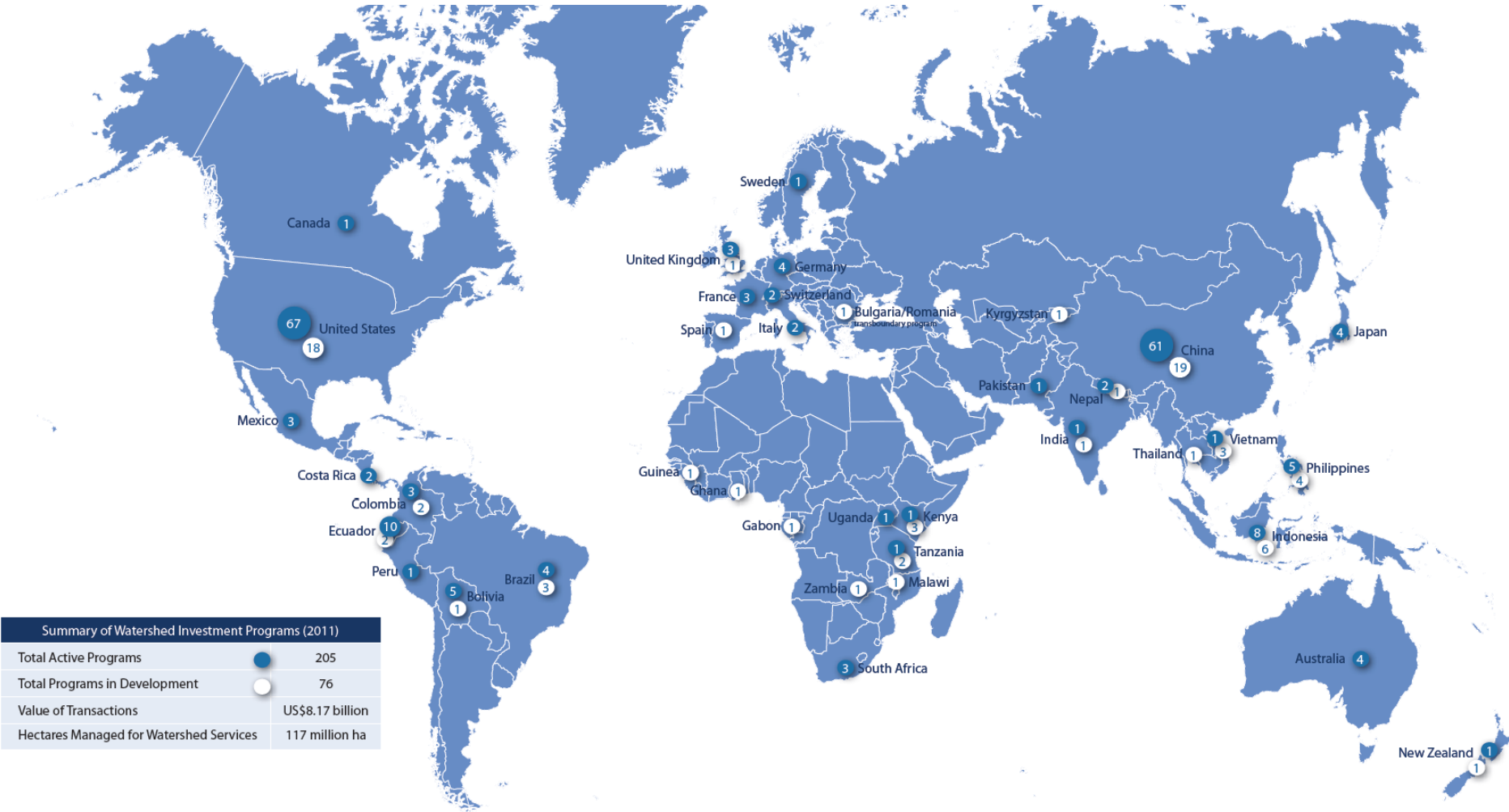
1. Payments for Ecosystem Services (PES)
 - i. Basics
 - ii. Overview
2. Examples
3. Conditions
4. Best practices
5. Sources
6. Contact

PAYMENTS FOR ECOSYSTEM SERVICES THEORY

„Provider“ of ecosystem services



Beneficiary pays provider to implement management action to address environmental problem via payment mechanism.



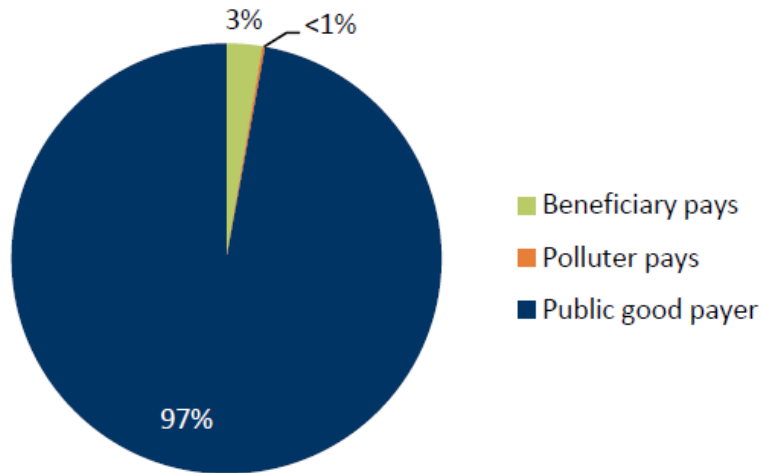
WHO ARE THE KEY ACTORS?

- > Providers: Private or communal landholders, forest managers, factories or treatment plants discharging into a water body
- > Beneficiaries: Water users downstream, hydropower operators concerned about sedimentation of their reservoir, beverage companies depending on clean water supplies
- > Other stakeholders: Community organizations, regulators, policy-makers, conservation professionals, ecosystem market service providers (such as aggregators or trading platform hosts)

- > Beneficiaries of watershed protection (like a downstream city)
- > Polluters compensating for their impacts (like a factory offsetting its polluted effluent)
- > ‘Public good payers’ that may not be directly benefitted by or responsible for watershed cleanup, but fund it nonetheless on behalf of general welfare (usually a government or NGO)

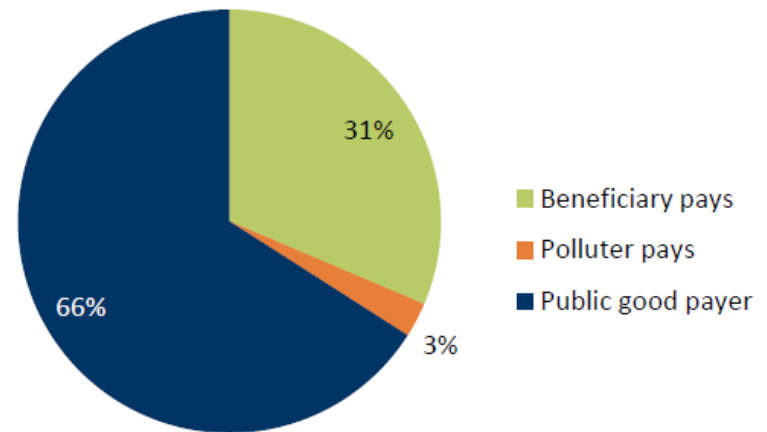
WATERSHED INVESTMENTS BY PAYER TYPE

Watershed Investments by Payer Type, Globally



Source: Ecosystem Marketplace.

Watershed Investments by Payer Type, Globally, Excluding China



Source: Ecosystem Marketplace.



WHAT DOES THE BENEFICIARY PAY FOR?

- > Agricultural best management practices
- > Afforestation/reforestation or improved forest management
- > Technology upgrades to limit polluted discharge
- > Water rights transactions

What form does the payment take?

- > Cash
- > In-kind: Agro-inputs, technical training, or tenure security

- > Motivation: a receding shoreline, expensive clogging of irrigation systems due to sediment, and declining biodiversity and landscape beauty
- > Beneficiary: Lake Naivasha Water Resource Users Association, representing large-scale horticulture farms, ranchers, and hoteliers near the lake
- > Provider: the local Water Resource Users Associations representing farmers in the upper catchment
- > Payment: the providers receive annual vouchers worth \$17 each that can be redeemed for agro-inputs
- > Agreement: implementing agricultural best management practices and protecting riparian areas

- > Motivation: Land-use change in the region around Nepal's Rupa Lake, driven by forest clearing for agriculture and settlements, is a major contributor to heavy siltation and nutrient pollution in the lake
- > Beneficiary: Rupa Lake Restoration and Fishery Cooperative
- > Provider: upstream land managers (the Community Forestry User Groups and the Community Development Groups). Seventeen Community Forestry User Groups participate and receive annual payments
- > Payment: The Cooperative makes annual direct and in-kind payments, at a value of about \$45 annually through the Rupa Lake Watershed Conservation Fund. The Cooperative also financially supports schools and annual scholarships in the upper catchment to increase environmental education
- > Agreement: upstream land managers (the seventeen Community Forestry User Groups) apply land management practices and conservation activities that benefit the lake's fisheries

CONDITIONS FOR PES PROGRAMMES

- > Is there a demand for a particular ecosystem service?
- > Is somebody affecting the quantity or quality of the ecosystem service?
- > Are the implementation costs of a PES program lower than other solutions?
- > Can it be assured that when implementing a PES programs other actors do not negatively influence the ecosystem services?

- > Voluntary agreement of the water supply institution with the land managers in the watershed
 - > Draw up a cooperation agreement between land manager (provider) and beneficiary
 - > In order to negotiate and work out locally adapted agreements it is recommended to employ i.e. agricultural engineers or agricultural specific offices
- > The PES program must ensure that
 - > the farmers' income level is maintained at all times
 - > all technological changes are financed
 - > that the program does not lead to a *de facto* privatization of the water resource

- > www.naturalcapitalmarkets.org
- > A Primer on Watershed Investments:
<http://www.watershedconnect.com/pages/primer>
- > Ecosystem Marketplace: Charting new Waters State of Watershed payments 2012 http://www.forest-trends.org/documents/files/doc_3308.pdf
- > The Vittel case: <http://pubs.iied.org/pdfs/G00388.pdf>
- > Bavarian cooperations:
http://www.lfu.bayern.de/wasser/trinkwasserschutzgebiete/kooperation_mit_landwirten/index.htm



THANK YOU

www.naturalcapitalmarkets.org

Suleika Suntken

suntken@duh.de

Projekt manager – Deutsche Umwelthilfe



Naturalcapitalmarkets.org is financed by the German Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety. The project is implemented by the Global Nature Fund and the German Environmental Aid