THE USE OF PES AND OFFSETS TO PROTECT WATERSHED SERVICES


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

- Direct market mechanisms
- Green commodities
- Debt for nature
- Philanthropy
- ODA
- Agricultural subsidy reform
- Domestic government funding

Source: High-Level Panel on Global Assessment of Resources for Implementing the Strategic Plan for Biodiversity 2011-2020; Parker & Cranford, 2012; Huwyler et al., 2014
Rationale
> Biodiversity financing deficit: about US$ 150 billion annually
> Can PES and offsets protect biodiversity and bring profit for companies?

Products
> Website: www.naturalcapitalmarkets.org
> Study
> Toolkits for companies, financial institutes and NGOs
> Policy paper
> Webinars
Direct, voluntary, conditional payments by the user of ecosystem services to the supplier of ecosystem services

- Direct payments, no credits
- Voluntary, no taxes
- Conditional: no ecosystem services = no payments
- User pays

Wunder, Sven (2005): Payments for environmental services: Some nuts and bolts, CIFOR Occasional Paper No. 42 Center for International Forestry Research
Supply of ecosystem services
Protection of water supply by upstream land owners

Use of ecosystem services
Use of water supply by downstream companies

“Examples”

> Vittel (France): farmers are compensated for and educated to use alternative agricultural practices

> SWM (Germany): financial support for organic farming in watershed of Munich municipal water company

> CSR measures (Germany): tree planting in watersheds (Bionade)
Conditions for successful private sector PES programmes:

> Demand for a particular ecosystem service
> Ecosystem is decreasing in quantity or quality
> The value resulting from the PES programme is significantly higher than the management costs of a PES programme
> Supply of the ecosystem services is site specific
> Assurance that other actors do not negatively influence the natural capital
Offsetting:

- The damage to biodiversity
- By using the mitigation hierarchy
- No net-loss (or preferably net-gain of biodiversity)
- Offsets can be expressed in credits representing a compensation measure of a certain size and quality

Example:

- Wetland mitigation (USA)
Mitigation hierarchy

- Impact
  - Avoid
  - Minimise
  - Restore

- Residual Impact
  - Avoid
  - Minimise
  - Restore

- Residual Impact
  - Avoid
  - Minimise
  - Restore

- Net gain
  - Offset
  - Offset
  - Offset

Biodiversity Offsetts

Natural Capital Markets
Increasing interest and new developments in the field of impact mitigation (although not specifically for watersheds):

> UK
> France
> Spain
> EU No net loss initiative
> Germany
## Offset strategies:

| Impact of a company | Amount of land under management by a company |  |
|---------------------|---------------------------------------------|  |
| **low**             | **low** Purchase single offsets            | **high** Creation of a habitat bank and supply offsets |
| **high**            | **high** Buy offsets from a habitat bank    | **high** Create habitat bank and stockpile offsets for own impacts |
On the positive side:
> Experimenting with market based instruments to protect watershed services
> Legislation is drafted and improved

However:
> Increasing critique against offsetting (and economic approach of nature)
> Hardly any incentive to offset impacts without legal framework
> Opportunities for PES programmes are limited for the private sector

Therefore:
> Combination of different instruments promising to scale up “PES“
> Learn from existing programmes

Study and toolkits available in May on www.naturalcapitalmarkets.org
THANK YOU
www.naturalcapitalmarkets.org

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