



WORKING GROUP ON ECONOMIC ASPECTS OF BIODIVERSITY  
(WGEAB)

OECD EXPERT WORKSHOP ON  
**ENHANCING THE COST-EFFECTIVENESS OF  
PAYMENTS FOR ECOSYSTEM SERVICES (PES)**

SUMMARY RECORD

25 MARCH, 2010  
PARIS, FRANCE

The aim of this OECD workshop was to bring together policy-makers and other experts to discuss and exchange experiences on key design and implementation issues for enhancing the cost-effectiveness of Payment for Ecosystem Services (PES). The Workshop brought together more than 40 participants, including OECD government delegates, developing country officials from the People's Republic of China and South Africa, experts from the Convention on Biological Diversity (CBD) Secretariat, IUCN, UNEP, CIFOR, as well as other NGOs and the private sector.

**Session 1: Introduction** opened with welcoming remarks from the WGEAB Chair, *Carlos Muñoz Piña*. This was followed by a presentation on “An Introduction to PES: Enhancing Cost-Effectiveness” by *Katia Karousakis* (OECD Secretariat).

Key principles and criteria for cost-effective PES design were outlined during the presentation. Discussion amongst participants focused on the strengths and weaknesses of PES programmes versus other types of regulation, as well as the ability to layer PES programmes with other existing policy instruments. A number of PES examples were highlighted, including those in Costa Rica, Mexico and Canada, to demonstrate the opportunities for improved cost-effectiveness. In particular, PES design parameters including effort- versus performance-based payments were considered in relation to the distribution of compliance risk and barriers to participation in PES; and uniform versus discriminatory payments were discussed to illustrate how the design of a programme can influence the quantity of purchasable service under a fixed budget constraint.

**Session 2: Key Issues for Enhancing PES Cost-Effectiveness** opened with a presentation by *Sven Wunder* (CIFOR) on the practical aspects of the theory, “PES Theory and Criteria for Effective Design”. This was followed by two presentations on PES case studies, namely “PES Targeting via Risk: Measuring the REDD Effect of the Payment for Hydrological Environmental Services (PSAH) Program in Mexico”, by *Carlos Muñoz Piña* (Mexico), and “PES in the Context of EU Policy”, by *Alexandra Vakrou* (EC).

Five key messages from the presentation by Sven Wunder were discussed: (i) the need for preconditions (performance based, voluntary, customisable); (ii) PES is institutionally demanding (property rights, negotiation, enforcement); (iii) leakage and permanence are important but can be adequately addressed; (iv) services and costs are heterogeneous in space, and needs to be reflected in PES design; (v) conditionality of service provision is key. The distinction between user- and government financed PES programmes was also highlighted.

The Mexican PSAH example, presented by Carlos Muñoz Piña, showed how economic modelling can provide empirical evidence on the performance of cost-effectiveness of PES. Through the use of econometrics, the Mexican environment agency has been able to show the cost-effectiveness of PES relative to command and control (e.g. Protected Areas), and how these conservation efforts compare in the broader context of agricultural subsidies.

The presentation on the EU, by Alexandra Vakrou, highlighted a number of different programmes including targeted agri-environment measures and forest-environment payments. Experience from the EU indicated the need for capacity building to encourage participation; these points were mirrored by experience with PES in Australia. There is a trade-off between increased complexity of design for cost-effectiveness in theory, and increased simplicity to encourage participation. The importance of a clear regulatory framework was highlighted.

**Session 3: Designing and Implementing Inverse Auctions** began with three case study presentations: “The Tasmanian Forest Conservation Fund”, by *Jim Binney* and *Charlie Zammit* (Australia), “The USDA

Conservation Reserve Programme”, by *Quiller Brooke* and *Katia Karousakis* (OECD Secretariat), and “The Finnish Trading in Nature Values programme”, by *Arto Naskali* (METLA).

These presentations paid particular attention was paid to the development and informational requirement of inverse auctions for PES. The Australian case study, presented by *Jim Binney*, demonstrated that while it was based on a solid monitoring and information system, it can be relatively quick (4 years in this case) to design and implement PES auctions. Moreover, the additional cost, relative to a simple fixed price PES programme, is small.

The US case study, presented by *Quiller Brooke*, paid particular attention to auction design parameters, considering the effectiveness of the Environmental Benefits Index and the use of a revealed pricing cap in the Conservation Reserve Programme. Discussion highlighted the trade-offs involved in auction design, for example the pricing cap avoids unreasonably high bids, though may reduce competition, and the use of a national EBI which targets general environmental benefits but has less local specificity.

The Finnish case study, presented by *Arto Naskali*, discussed the evolution of the Trading in Nature values programme, including site selection criteria to target biodiversity benefits.

The use of environmental benefit indices in all three case studies was discussed as a particularly useful tool for improving PES cost-effectiveness given the spatial heterogeneity of biodiversity benefits.

**Session 4: Wrap-up Discussion and Conclusions** opened with a presentation on “PES Links and Relevance to the CBD COP-10” by *Ravi Sharma* (CBD Secretariat).

Discussion summarised the conclusions from the workshop. Highlights included:

- To enhance cost-effectiveness, PES design should reflect the heterogeneity of opportunity costs and environmental quality. The use of spatially-explicit mapping tools to identify areas with high biodiversity, Environmental Benefit Indices or other scoring mechanisms to help target benefits and discriminate payments can be a useful tool for this.
- Lessons from the case studies presented indicate that designing and implementing more sophisticated targeting approaches and the application of inverse auctions is neither expensive nor particularly difficult but lead to substantially more cost-effective PES programmes. They do require a solid monitoring and information system as well as continued stakeholder involvement throughout the process.
- Greater emphasis is needed to engage and leverage private investment in PES. While numerous examples of private sector PES initiatives exist, recognising and harnessing other available opportunities could be improved.
- PES needs to be considered in the broader regulatory context and used in conjunction with other types of regulation where appropriate.
- While most PES programmes are local or regional, there are opportunities for international PES, such as REDD, and analytical work on this is equally important.

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