

# Heredia Declaration on Payments for Ecosystem Services (PES)

March 16, 2007

## Whereas:

- Ecosystem services (the benefits humans derive from ecosystem functioning), and the natural capital assets that produce them, represent a significant contribution to sustainable human well-being - larger than the contribution of marketed goods and services. The dominant economic paradigm does not adequately recognize these contributions and we therefore need to develop a new, more comprehensive paradigm.
- Ecosystem services are being threatened and degraded by human activities
- Many ecosystem services cannot (or should not) be privately owned, and are therefore ignored by conventional markets.
- Many ecosystem services are such that providing benefits to one person does not reduce the amount of benefits available for others (they are “non-rival”), and therefore they should be provided cooperatively and not competitively.
- There are and will remain enormous uncertainties about how ecosystem services are provided, the magnitude of their benefits, and how human activities affect their provision. Stakes are high, the potential for irreversible outcomes are high, and a precautionary approach to decision-making should therefore be adopted.
- Adaptive institutions need to be developed to adequately deal with ecosystem services and tradeoffs among services so that their contributions to human well-being can be sustained and enhanced. Systems of payment for ecosystem services (PES) can be one effective element in these institutions.

Based on a thorough review and synthesis of information at a workshop in Heredia, Costa Rica, March 8-16, 2007, we recommend the following principles concerning the use of PES systems:

### 1. Measurement:

We need to continue to develop better methods to measure, map, model, and value ecosystem services at multiple scales. At the same time, we cannot wait for certainty and precision to act. We must synergistically continue the process of improvement of measurements with evolving institutions that can effectively utilize these measurements (see 7 below)

### 2. Bundling:

Most ecosystem services are produced as joint products (or bundles) from intact ecosystems. The relative rates of production of each service varies from system to system and site to site, and time to time, but we must consider the full range of services and the characteristics of their bundling in order to prevent creating perverse incentives and to maximize the benefits to society.

### 3. Scale-matching:

The spatial and temporal scale of the institutions to manage ecosystem services must be matched with the scales of the services themselves. Mutually reinforcing institutions at local, regional and

global scales over short, medium and long time scales will be required. Institutions should be designed to ensure the flow of information between scales, to take ownership regimes, cultures, and actors into account, and to fully internalize costs and benefits.

#### **4. Property rights:**

Establishing appropriate property rights regimes is essential for implementing PES systems. However, given the public goods nature of most ecosystem services, we can either use existing private property rights, change property rights, or develop systems that can *propertize* ecosystems and their services without privatizing them. For example, common property asset trusts are one way to effectively do this.

#### **5. Distribution Issues:**

The distribution of costs and benefits from PES systems need to be carefully considered. Systems should be designed to insure inclusion of the poor, since they are more dependent on common property assets like ecosystem services. In particular, wealthier nations should be prevented from free-riding, and instead pay for the services they receive from the biodiverse and ecologically productive ecosystems in less developed countries (see 6 below).

#### **6. Sustainable funding:**

PES systems should link beneficiaries with producers. In order to be sustainable, fees should be collected from beneficiaries in order to pay producers to continue to provide the services - either by paying private land owners or through investments in commonly owned natural capital assets.

#### **7. Adaptive management:**

Given that significant levels of uncertainty always exist in ecosystem service measurement, monitoring, valuation, and management, we should continuously gather and integrate appropriate information with the goal of learning and adaptive improvement. To do this we should evaluate the impacts of existing PES systems and design new systems as experiments from which we can more effectively quantify performance and learn.

#### **8. Education and Politics:**

Two key limiting factors in implementing PES systems are shared knowledge of how the systems work and political will. Both of these can be overcome with targeted educational campaigns, clear dissemination of success and failures directed at both the general public and elected officials.

#### **9. Participation:**

All stakeholders (local, regional, and global) should be engaged in the formulation and implementation of PES systems. Full stakeholder awareness and participation contributes to credible, accepted rules that identify and assign the corresponding responsibilities appropriately, and that can be effectively enforced.

#### **10. Policy Coherence:**

PES systems will be most effective when they form part of a coherent set of policies to address ecosystem use and management. They are less likely to work when other policy instruments are providing opposing incentives (for example by subsidizing the use of water, energy etc.) or when legislation controlling allocation is inflexible.