Payments for Ecosystem Services (PES) in concert with other policy instruments

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Payments for Ecosystem Services: empirical analysis for Costa Rica

- *„Using observed and projected deforestation rates, including for matched analysis, we find that Costa Rica's PSA (payments for environmental services) program has had little impact on deforestation rates. Reasons include:*
  - *a low national rate of deforestation;*
  - *a lack of targeting by the PSA of where the payments could matter;*
  - *and a goal of transferring surplus to landowners.*

- *This pioneering effort could save most of its budget, or drastically increase impact for its current budget, if it could target those areas of the country that face a relatively high threat of deforestation.“*

- Source: A. Pfaff, J. A. Robalino and G. A. Sanchez-Azofeifa (2006) Payments for Environmental Services: empirical analysis for Costa Rica. Columbia University, New York, 2006

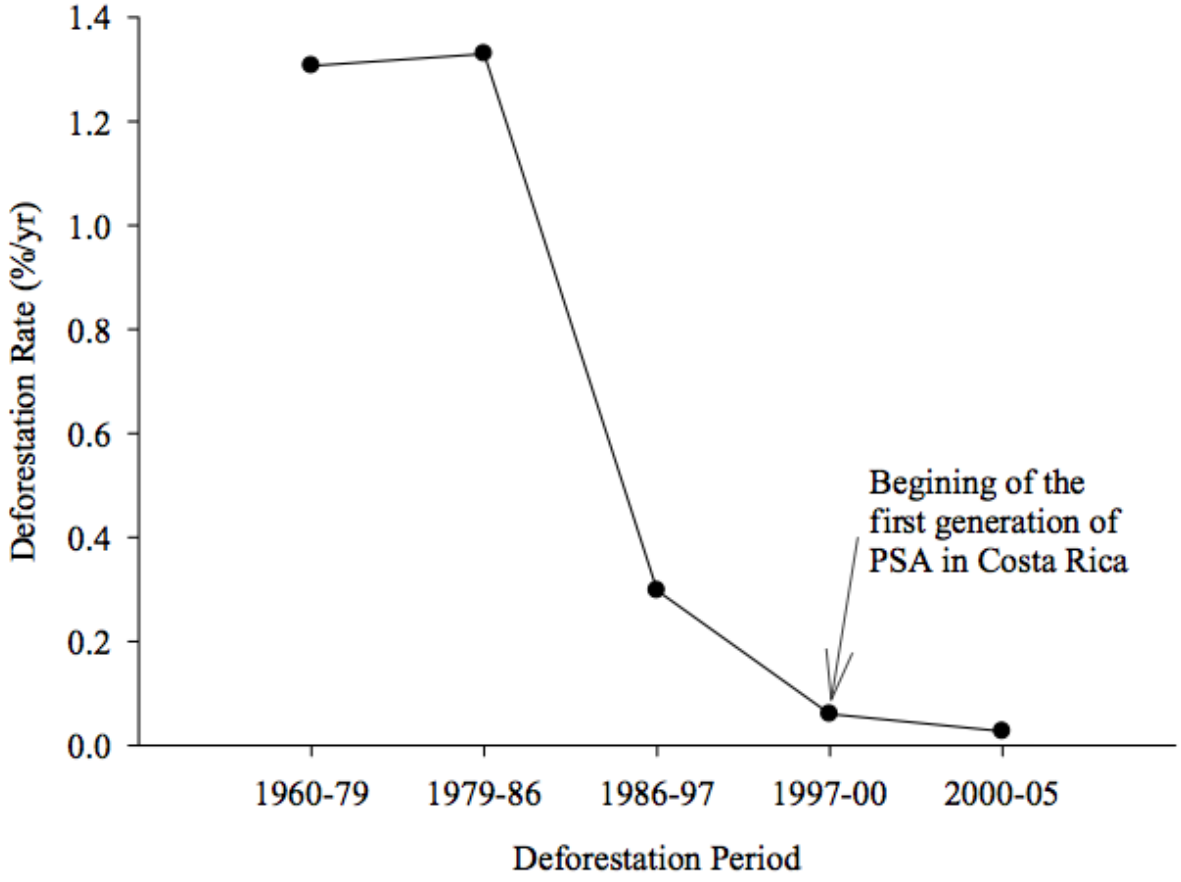


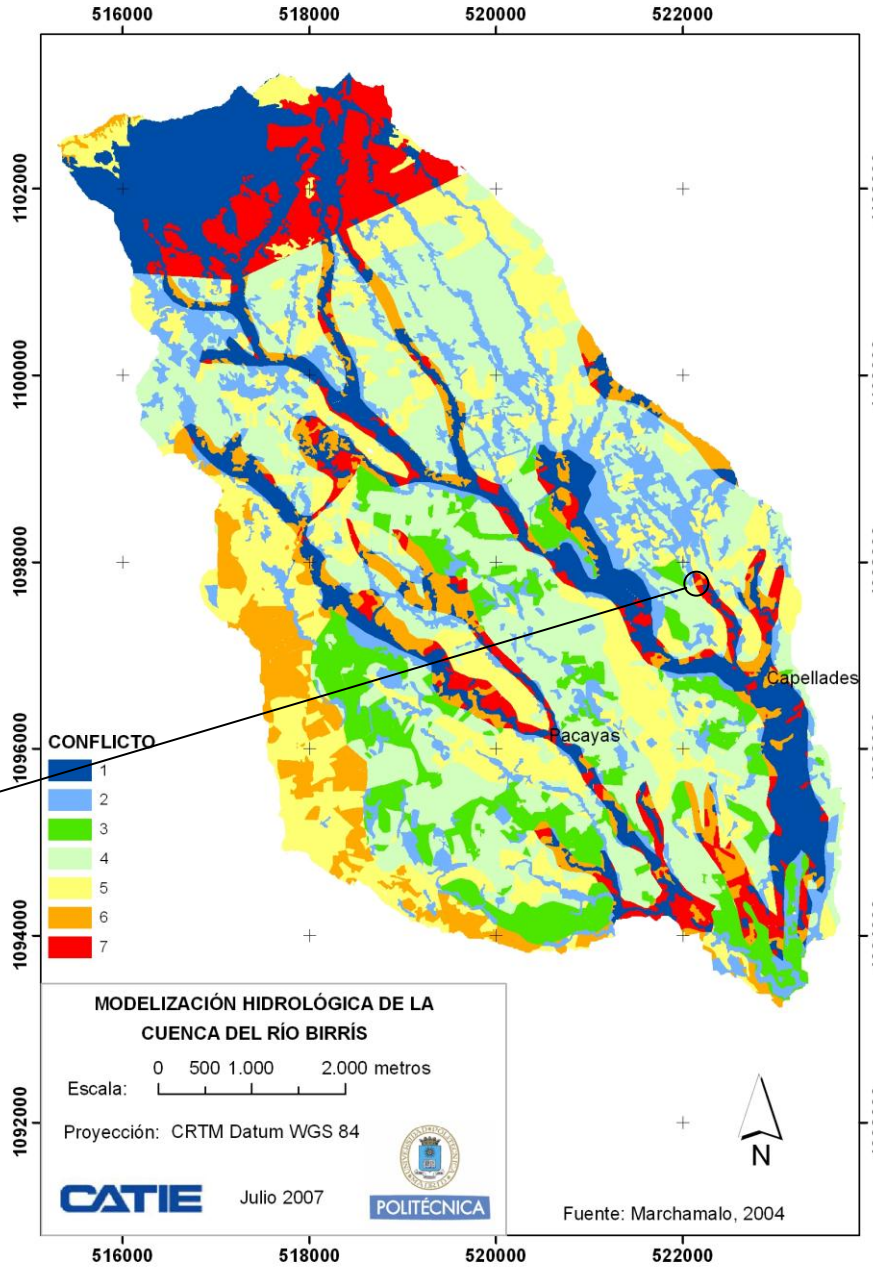
Figure 3. Changes in deforestation rates between 1960 and 2005. Arrow is implementation of the first PSA (payment for ecosystem services) program.

SÁNCHEZ-AZOFEIFA et al. (2007) Conservation Biology 21: 1165-1173

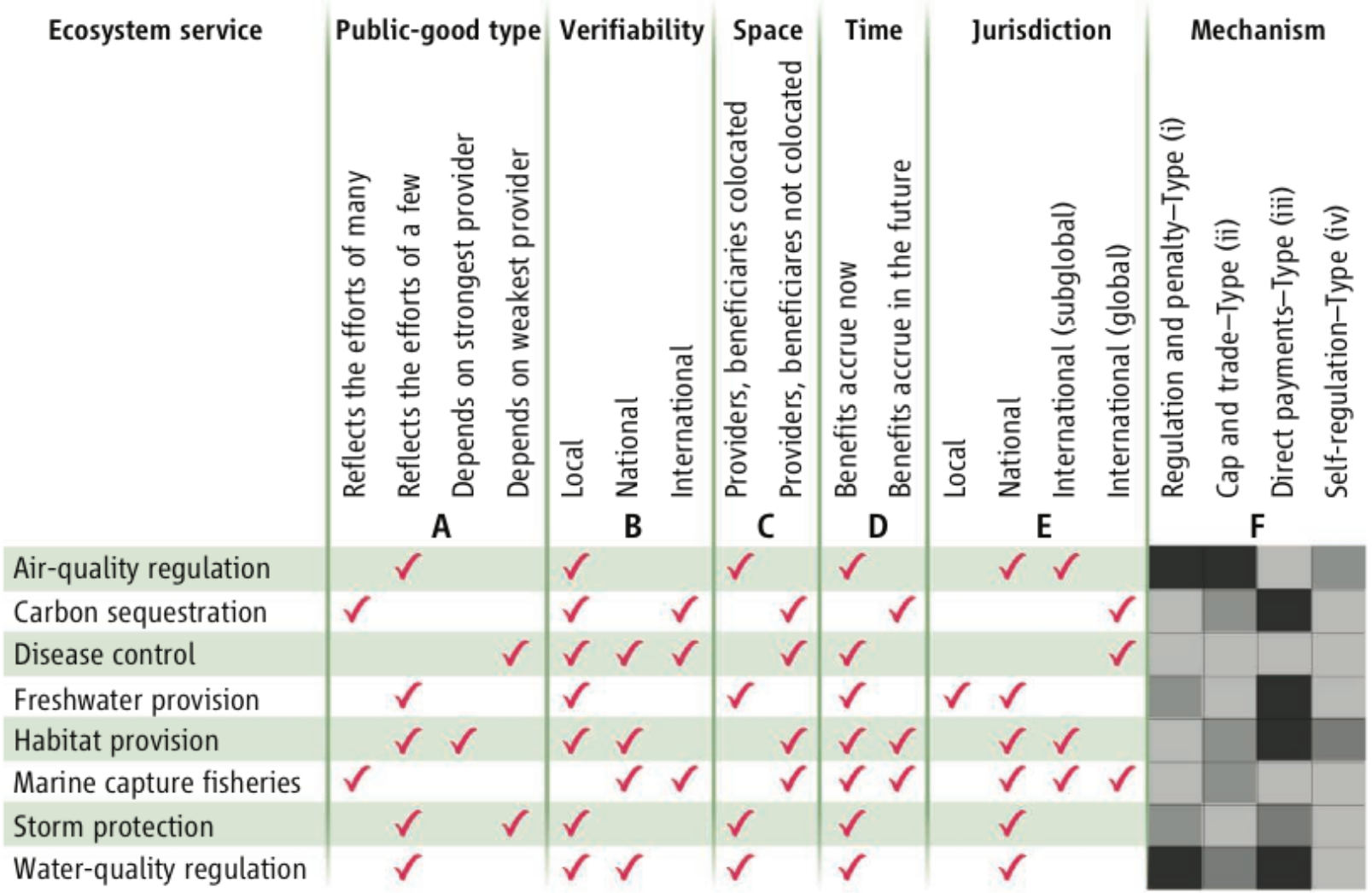

Payments for ecosyst. services
Information campaigns
Command & control
Capacity building
Micro-Credit
Fencing

In national park and in areas > 30° slopes, law not totally enforced

- Agricultural frontier is inside the National Park Irazu!
- Steep, riperian forest are cultivated



Kinzig et al. (2011) Paying for Ecosystem Services—Promise and Peril. SCIENCE 334: 603-604



Characteristics of ecosystem services and payment mechanisms. The table schematizes authors' impressions of the effectiveness of incentive mechanisms (column F) in providing environmental public goods. Column A classifies a sample of ES as public goods (*35*). Column B indicates the scale(s) at which delivery of a service can be verified (*20*). Column C denotes the geographic location of providers relative to beneficiaries (*27*). Column D and E indicate timing (*20*) and the governance level(s) needed to achieve effective outcomes (*36*). Darker shading in column F indicates mechanisms considered more effective for achieving the socially optimal level of provision, although effectiveness is context-dependent.

Conclusion

- Effectiveness of policy instruments depends on ecosystem services
- Interdependeny between policy instruments needs to be investigated