



Economics and Conservation in the Tropics: A Strategic Dialogue

January 31st – February 1st, 2008
Gordon and Betty Moore Foundation, Presidio of San Francisco

Objective

The objective of this dialogue is to identify the most effective economic research, market and policy approaches for nature conservation in high-biodiversity tropical ecosystems.

Economics and Conservation

If we can better understand nature and its role in our lives, we can more easily justify, motivate, and achieve conservation. Economics is one of the disciplines that can shed light on these interactions, quantifying the pressures that lead to habitat loss, revealing nature's values and presenting opportunities to create and intervene in markets to encourage conservation.

Economics is also one of the last disciplines to be integrated in to the practice of conservation in high-biodiversity tropical ecosystems. Economists have expanded and refined our economic understanding of the environment, but don't usually participate in the practical business of crafting conservation strategies in tropical regions. As it emerges as a conservation tool, the uses of economics have been diverse. These have included site-based economic valuation, economic analysis of threats, markets for environmental services, policies encouraging conservation, businesses based on intact nature, and large-scale geographic models of environmental values, just to name a few. While there is a fast-growing interest in economics for conservation, there isn't a consensus on which of these research, market and policy approaches work. Advancing our understanding on that point is the purpose of this conference.

Participants

The participants are all people who have thought about, and/or applied economic thinking and tools in the field. Among the many talented environmental economists in the world, a small minority work on issues of tropical ecosystems and fewer still have delved into the complexities of doing conservation on the ground. In compiling a list of participants for this event, we have given considerable weight to practical experience.

Process

Invited experts have prepared a short commentary or set of “debating points” that will be delivered in approximately 10 minutes to stimulate each discussion session. They will draw on their accumulated experience, news of real breakthroughs in environmental economics, solutions to some of its stubborn limitations, and particularly real-world evidence of what works. Several speakers will set the stage for each round of discussion over the two-day period. Members of the audience will have the opportunities to ask questions of each speaker. At the end we will collect each expert’s views on priorities for research, market-creation, policy and training.

Speakers

Alex	Pfaff	Duke University
Allen	Blackman	Resources for the Future
Carlos Eduardo	Young	Federal U. of Rio de Janeiro
Dick	Rice	Conservation International
Francisco	Alpizar	CATIE/LACEEP*
Gretchen	Daily	Stanford
James	Boyd	Stanford University & Resources for the Future
Jared	Hardner	Hardner & Gullison
Jeff	Vincent	Duke University
John	Dixon	Independent/World Bank (Ret.)
John	Reid	Conservation Strategy Fund
Joshua	Farley	University of Vermont
Juan Camilo	Cardenas	Universidad de los Andes
Keith	Alger	Conservation International
Konrad	Ritter	The World Bank
Linwood	Pendleton	Coastal Ocean Values Center & The Ocean Foundation
Lucy	Emerton	The World Conservation Union
Paul	Ferraro	Georgia State University
Robin	Naidoo	World Wildlife Fund
Stefano	Pagiola	The World Bank
Steve	Polasky	University of Minnesota
Subhrendu	Pattanayak	Research Triangle Institute
Sven	Wunder	Center for International Forestry Research

*Centro Agronómico Tropical de Investigación y Enseñanza & Latin American and Caribbean Environmental Economics Program

Discussion Questions

Session 1

Environmental Valuation techniques and challenges

- Often the very values that drive conservation interest in tropical ecosystems are the hardest and most expensive to value. Biodiversity and indigenous culture are good examples. Has the science of valuation reached its methodological limits for monetizing non-use values, or can we still expect breakthroughs that can be applied in the tropics?
- Site-specific data on environmental values has not been gathered for the vast majority of sites of conservation importance in the tropics. One response to this gap is to use GIS models to extrapolate from one research site to unstudied sites. What is promise and what are the pitfalls of this sort of benefits-transfer analysis? Can the ecosystem service production functions be transferred at a large geographic scale? What about their unit monetary values (prices)?
- What ecological data are needed and available for valuation?

Session 2

Human Resource Needs

- Broadening the pool of people skilled in the application of economic concepts is essential for a greater impact of economics on conservation decisions.
- Skilled people are needed to do economic research, implement market based policies and oversee markets for ecosystem goods and services. What are the human resources you've found to be most and least available in developing countries?

Session 3

Property Rights and Natural Resources

- How do property rights affect individual and collective use and conservation of land, timber, water, fish, and other important resources?

Session 4

Valuation and Spatial and Temporal Scales

- Comparing financial – or even economic – benefits provided by the marginal intact hectare to the financial benefits derived from conversion often favors the latter, until natural areas have become scarce and fragmented (as in the case of the Brazilian Atlantic Forest). By then, any “wilderness” character and landscape ecological function may have been lost. Should we be valuing the marginal hectare, or the marginal wilderness/landscape?
- Societies place a higher value on conserving nature once they've attained a certain level of development, and some nature is lost on the way to that point. Some of those losses are irreversible, particularly where endemic species are concerned. How should conservation advocates address the threat of irreversible losses where nature isn't yet highly valued in a particular developing society, but may be someday?

Session 5

Economic Data and Conveying Conservation Outcomes

- Are we collecting the right economic data for local conservation needs? The case for time-series data on non-monetary measures of economic output.
- Is it most advantageous/appropriate to convey outcomes as purely biophysical results (hectares protected), ecosystem services provided (cubic meters of irrigation water), or monetary measures? And why?

Session 6

Application of Valuation Results

- Is valuation useful? The case that bringing values to market is more important than measuring them.
- Some people say protected areas cut off people's access to resources and make them poorer. Others contend that protection brings government and NGO projects, prevents the consolidation of landholdings, and maintains subsistence resources, which all can improve living standards around parks. Is there convincing evidence that protected areas make their neighbors either richer or poorer (counting non-market benefits and costs)?
- One of the uses of valuation is to convince people that ecosystems are worth conserving. Do valuation results resonate among the general public and policy-makers developing countries?

Session 7

Markets for Environmental Services

- Protected areas funding needs and prospects
- More recently, interest has focused on creating new markets for ecosystem services. What are the necessary conditions (institutional, informational, cultural, competitive, etc.) for markets for ecosystem services – like carbon storage and hydrological regulation – to emerge and function?

Session 8

Conservation Tools

- What is the promise and challenges of using direct incentives for conservation in developing countries?
- The economics of promoting managed landscapes as a conservation tool.
- What are the necessary conditions for market-based environmental policies – like green taxes or subsidies or tradable development rights – to work? What can US experience in this area tell us about prospects in the tropics?

Session 9

Policy Influence

- Much of nature that's outside of protected areas, and some that's within, risks being lost due to large-scale infrastructure and other development projects. Is there evidence that conservationists can influence policy or development project outcomes using economic analysis?