

BioSoc: the Biodiversity and Society Bulletin

Research highlights on biodiversity and society, poverty and conservation

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WHAT'S WILDLIFE WORTH? INVESTING IN BIODIVERSITY FOR POVERTY REDUCTION

It has long been argued that a healthy environment is key to long-term, sustainable poverty reduction. The Millennium Ecosystem Assessment has emphasised this most recently, highlighting the links between biodiversity, ecosystem services and human well-being. Nevertheless, environment in general – and biodiversity in particular – continues to be a low priority on the international development agenda. A recent report by the late David Pearce, *Investing in Environmental Wealth for Poverty Reduction* attempts to redress this, reviewing the economic evidence for environmental investments to achieve the Millennium Development Goals (MDGs).

Reducing poverty requires increasing and/or improving the asset base of the poor in order to generate long-term income flows and well-being. For poor people, and poor countries, environmental assets can make up a large proportion of their total asset base. Investing in the environment could therefore be an effective route to achieving the MDGs. But how much is this likely to cost and how effective really is it? Pearce estimates that US\$60-90 billion per year will be needed over the next 10-15 years to reach MDG7 on environmental sustainability, with an additional US\$80 billion per year to tackle climate change over the next 50 years. Terrestrial protected areas alone will require an investment of nearly \$8 billion a year if the poor are to be fully compensated for any lost access to resources that protected area expansion might cause – with perhaps twice that amount again for marine protected areas.

While some recent studies that have claimed the benefits of conservation exceed the costs may overstate the case, there are some clear examples where conservation pays – and where it doesn't:

- Sustainable **forest** management can provide reasonable rates of return – but conventional timber harvesting or clearance for agriculture is likely to be more profitable. The jury is also out on the economic value of bio-prospecting in forests – much depends on the precise contract negotiated. However, forest conservation can be worthwhile if carbon storage and sequestration benefits were accounted for (<3:1 return compared to slash and burn in the Peruvian Amazon) or where agroforestry is feasible <6:1 return).
- **Coral reef** conservation can provide significant benefits (returns range from 1.3:1 to 6.5:1 depending on the activities threatening the reef) – but is often hampered by the open-access nature of the resource.
- **Wetlands** conservation produces returns in the range of 1.2: 1 to 7.4:1. Conversion of mangroves to shrimp farming is surprisingly unattractive (conservation provides returns of 3:1 compared to shrimps in Thailand).
- **Wildlife** conservation can generate negative returns in terms of the opportunity costs of lost access to resources or GDP forgone if land is set aside from productive uses (a return of 0.2: 1 in Kenya in the early 1990s). However, under the right conditions returns can be extraordinarily high (up to 2.3:1 in Namibian conservancies) – particularly for tourism, game ranching and hunting.

Investment alone is not enough, however. Unless conditions are right for poor people to capture the benefits, investments will fail. This implies: the need for strong and secure resource and property rights to enable community institutions to function effectively; access for the poor to credit and insurance to help overcome 'short-termism'; removal of perverse subsidies in rich countries and development of markets in environmental assets.

What's wildlife worth? Potentially quite a lot it would seem – if only we could get the governance and policy framework right. In Pearce's words: 'When carefully designed and managed, conservation pays and the poor gain too.'

SOURCE

Pearce, D (2005) Investing in Environmental Wealth for Poverty Reduction. Prepared on behalf of the Poverty Environment Partnership, UNDP, New York

The author, David Pearce, tragically died before this report was published. Please direct queries or comments to IUCN's Senior Economics Advisor, Josh Bishop: Joshua.bishop@iucn.org

Electronic copies can be downloaded from:

www.biodiversityeconomics.org/library/search_the_library_by_category/incentives_finance_and_policy/growth_poverty_inequality/environment_for_the_mdgs/index.html

More information about the Poverty Environment Partnership can be found at:

www.povertyenvironment.net/pep/

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