

PRESENTATION GIVEN AT THE WORKSHOP ENTITLED:

“HEALTH AS AN ECOSYSTEM SERVICE”

DECEMBER 3-4, 2009

BRONX, NEW YORK, USA

HOSTED BY

THE WILDLIFE CONSERVATION SOCIETY



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Potential for conserving health as an ecosystem service

Health as an Ecosystem Service Meeting
WCS

December 3-4, 2009

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TransLinks Program of the Wildlife Conservation
Society



Many approaches and tools for conserving ecosystems

- Land use planning
- Protected areas
- Policy
- Financial tools

A few types of financing used (or being developed) to achieve conservation goals

- Taxes and Tax Rebates
- Biodiversity offsets
- Conservation Banking (Wetland Banking and Species Banking)
- Sales of natural products certified as environmentally friendly
- Payments for Ecosystem Services

Why markets for conservation of an ecosystem service?

- Provides an incentive for conservation of ecosystem services in contexts where prevailing land uses are resulting in degradation of ecosystems
- Provides an incentive for conservation where compliance with environmental regulations is weak
- Provides funds for conservation where government has abdicated its responsibility or lacks the capacity to pay for public goods and services such as clean drinking water, disaster protection and biodiversity conservation
- National and international markets may provide a level of financial support that far exceeds local actors' donors' or governments' capacity to pay

Payments for Ecosystem Services (PES)

Key Criteria:

- (a) the mechanism must involve a voluntary transaction where;
- (b) a well-defined ecosystem service (or a land use likely to secure that service);
- (c) is being 'bought' by a (minimum of one) service buyer;
- (d) from a (minimum of one) service provider and
- (e) if, and only if, the service provider secures service provision (conditionality)

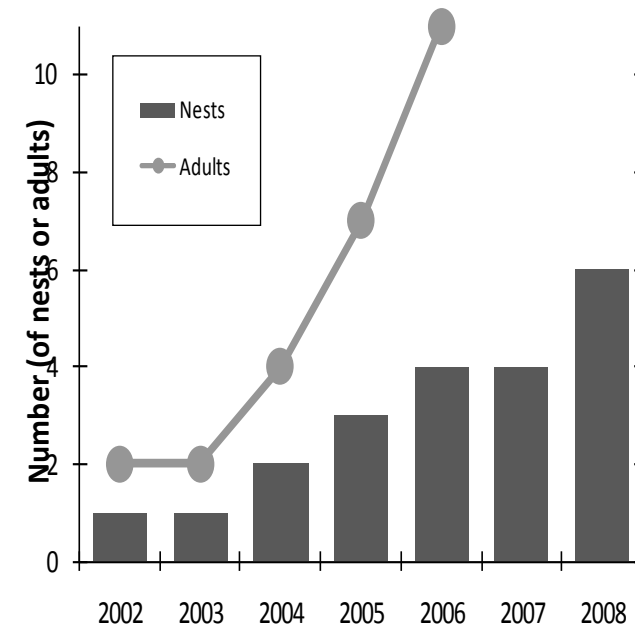
(From Wunder ,2005)



Community-based Ecotourism

Tmatbouey, Cambodia (Clements et al. 2008)

Year	Total	Services	Fund	Average Service Payment/ Tourist	% revenue for village
2003	\$0	\$0	\$0		
2004	\$498	\$128	\$370	\$ 10	11.4%
2005	\$2,588	\$1,058	\$1,530	\$ 21	14.1%
2006	\$3,553	\$1,453	\$2,100	\$ 21	14.1%
2007	\$5,961	\$3,641	\$2,320	\$ 47	19.9%
2008	\$12,271	\$8,491	\$3,780	\$ 67	23.9%

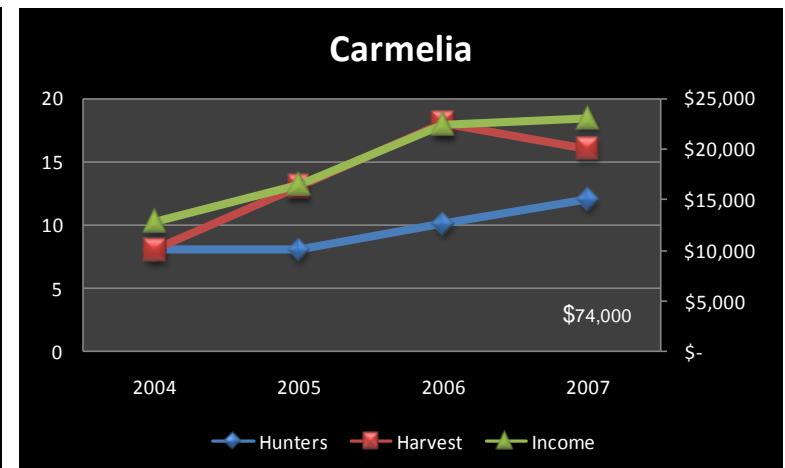
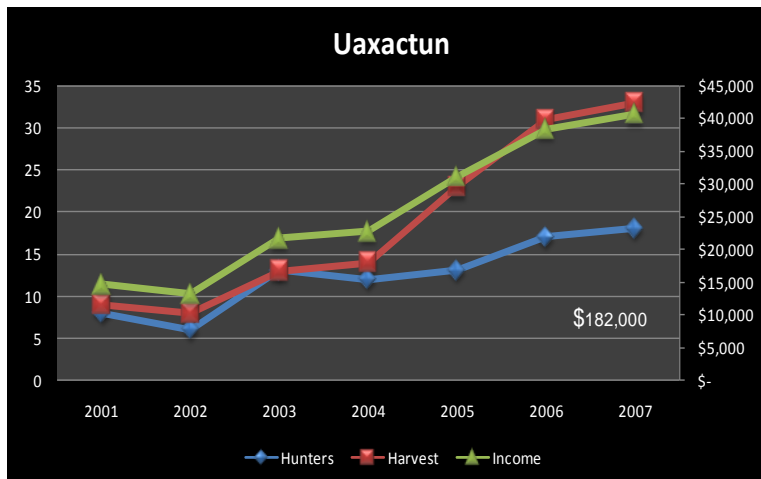


Wildlife population trends: White-shouldered Ibis (*Pseudibis davisoni*).

Community-based trophy hunting

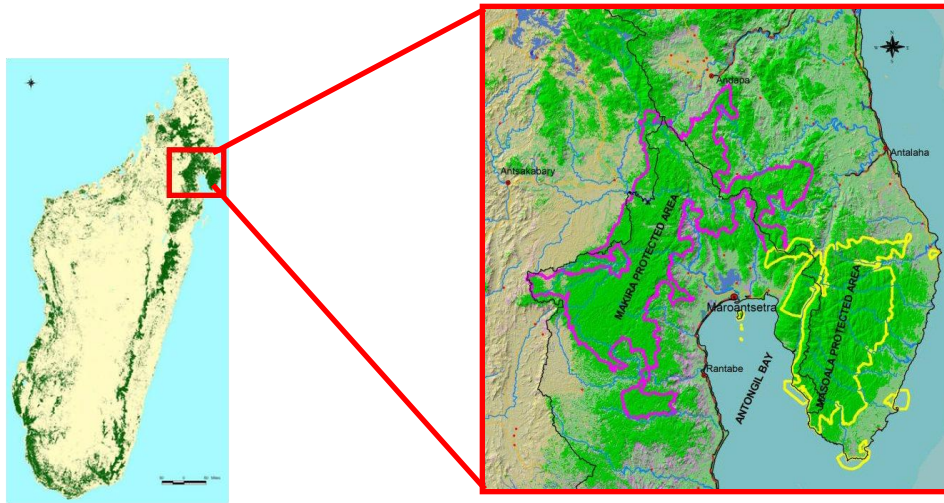
Maya Biosphere Reserve, Guatemala (Baur et al. 2008)

	Uaxactún		Carmelita	
Years	2000 - 2004	2005 - 2007	2002 - 2004	2005 - 2007
Mean Density	0.48	0.76	0.37	0.63
Range	0.32-0.54	0.60 - 0.84	0.24 - 0.45	0.41 - 0.81
St. Dev.	0.083	0.136	0.114	0.204



Financing forest conservation through the carbon market

Makira, Madagascar (Holmes et al. 2008)



- Approximately 150,000 people in 120 villages and household income of approximately \$250/year from cash crops
- Area of 401,000 ha for avoided deforestation/forest carbon conservation surrounded by an area of 276,387 ha of community managed lands
- Assessments demonstrated that 9,486 ha of forest could be protected from deforestation over a thirty year time period
- Agreements between the Government and local communities to sustainably manage forest resources and agreements between Government and WCS to manage forests for conservation and to market CO₂ emissions reductions

Could we envision markets for health as an ecosystem service?

- Can aspects of health as an ecosystem service be clearly defined?
- Do health benefits respond directly to improved natural resource management?
- Can health benefits be monitored?
- Who would the sellers be?
- Who would the buyers be?
- What would the conditions of payment be?