

Presentation given at the Southeast Asia Katoomba meeting

Katoomba XVII

Taking the Lead: Payments for Ecosystem Services in Southeast Asia

June 23-24, 2010

Hanoi, Vietnam

Hosted by:

Forest Trends, the Katoomba Group, Ministry of Agriculture and Rural Development (MARD), Ministry of Natural Resources and Environment (MONRE), United States Agency for International Development (USAID) and Winrock International



This workshop was generously supported by the American people through the United States Agency for International Development (USAID), under the terms of the TransLinks Cooperative Agreement No.EPP-A-00-06-00014-00 to the Wildlife Conservation Society (WCS). TransLinks is a partnership of WCS, The Earth Institute, Enterprise Works/VITA, Forest Trends and the Land Tenure Center. The contents are the responsibility of the authors and do not necessarily reflect the views of USAID or the United States Government.

Bundling & Stacking

Carbon *for* Conservation

ECOSYSTEM SERVICES, BIODIVERSITY CONSERVATION, & LOCAL LIVELIHOODS

Payments *for* Ecosystem Services

WILDLIFE
CONSERVATION
SOCIETY



Risks of Payments for Ecosystem Services

- PES gives an explicit economic value to ecosystem services provided by land, forests, natural resources.
- Possible risks:
 - What happens if the value of the ecosystem services is less than alternative land-uses → erosion of ecosystem services
 - Market changes in the price of individual ecosystem services, e.g. prices of carbon credits



Fluctuations in carbon credit prices





Risks of Payments for Ecosystem Services

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- Possible risks:
 - What happens if the value of the ecosystem services is less than alternative land-uses → erosion of ecosystem services
 - Market changes in the price of individual ecosystem services, e.g. prices of carbon credits
 - Targeting: prioritising one value (e.g. carbon or water) over others (e.g. wildlife)
 - Not all ecosystem services have market value
 - Adding an economic value could undermine, rather than reinforce, non-market values



Multiple Ecosystem Services: PES Stacking

Stacking: landowners sell several different types of credits from a single location.

- E.g. selling carbon and water values separately from the same area of land
- Advantages:
 - Provides multiple revenue streams, increasing income
 - Diverse of revenue flows, increasing resilience to price changes
 - Targets multiple ecosystem services, rather than one
- Disadvantages:
 - How to avoid double-counting?
 - How to measure additionality?



Example: Bolikhamxay, Laos

Payments for Watershed Services & Carbon

- Payments for watershed services from Theun Hinboun Hydropower Company
- Payments from reducing deforestation (REDD)
- Creating a new PA connecting Nam Kading PA & PhouChomVoy PA
- 5 new species of mammals named from the area in the past 15 years
- >100,000 hectares
- 20,000 people





Example: Northern Plains, Cambodia

Multiple markets for biodiversity

Community-based ecotourism:

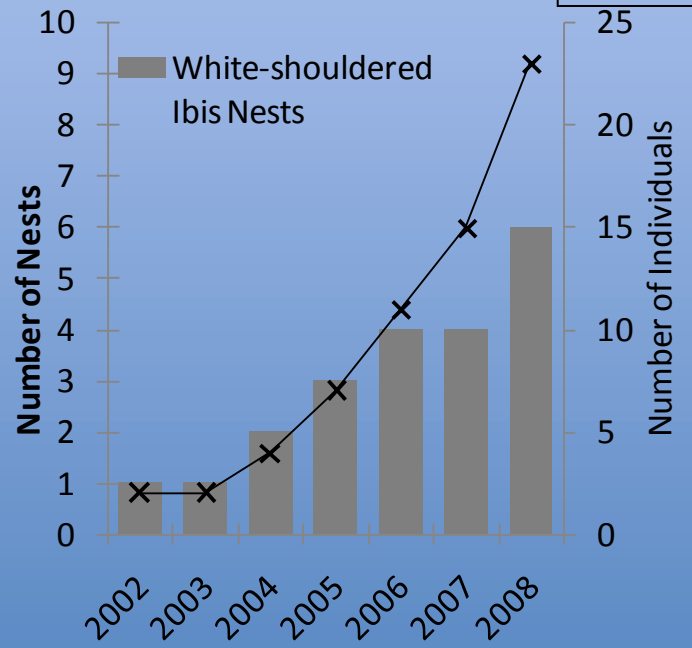
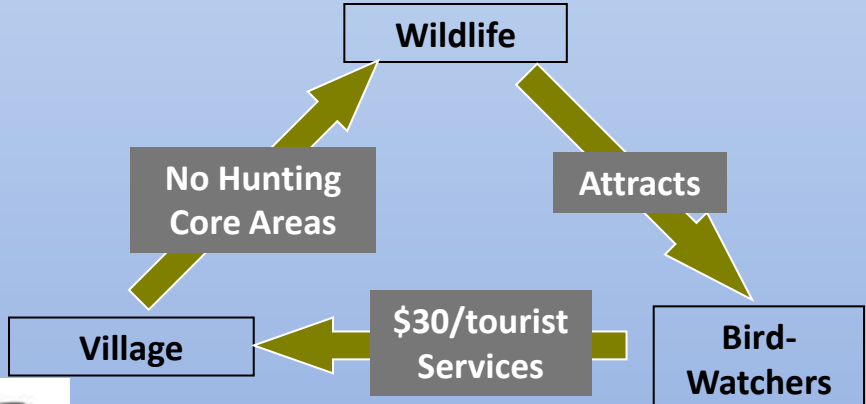
- Tourism contingent upon bird protection
- Tourists pay \$30 if they see wildlife
- c.\$10,000/year/village

Wildlife-friendly agricultural products:

- Payments for farmers that protect wildlife & limit field expansion
- 50% price premium
- Certified wildlife-friendly

Payments for bird nest protection:

- Payments to local people to protect nests of globally threatened species
- \$120/person/nest on average
- Over 1,900 nests protected (2002-2010)



Multiple PES programs increases resilience



Increasing Value: PES Bundling

Stacking: landowners combine multiple ecosystem services into one credit type.

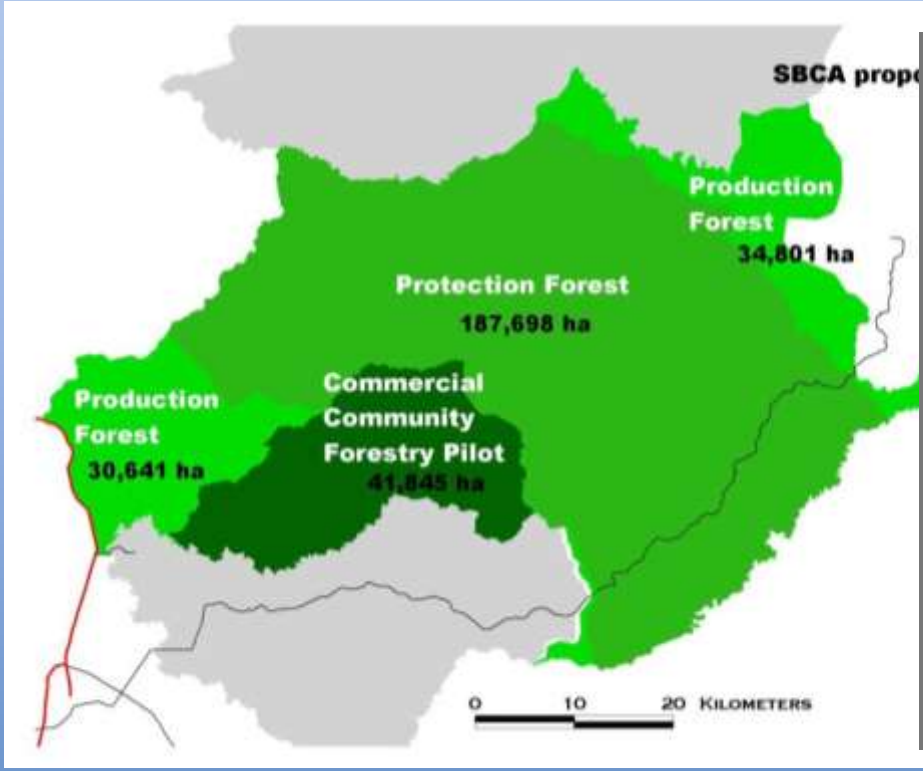
- E.g. selling carbon and biodiversity values together from the same area of land
- Advantages:
 - Increases value of the credits
 - May be more attractive to buyers
 - Targets multiple ecosystem services, rather than one
 - Avoids double-counting
- Disadvantages:
 - Single credit type



Example: Seima Protection Forest, Cambodia Carbon, Biodiversity & Livelihoods



Cambodian government has created the new Seima Protection Forest projected to generate REDD credits of c.2-300,000 tCO2/year (VCS)



Climate, Community & Biodiversity Standard: biodiversity & livelihoods

Protection of at least 45 Globally Threatened vertebrate species

Register existing community land rights (c.5,000 people) & provide community incentives

Carbon ++ credits projected to have a higher value



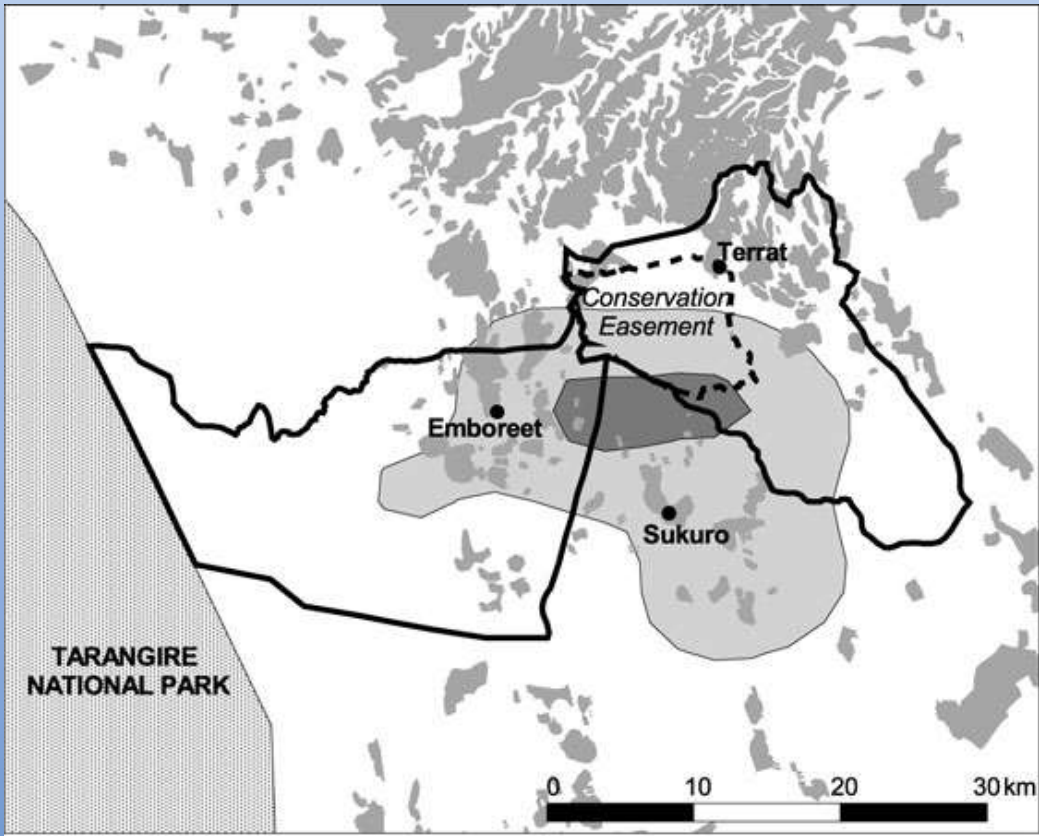


Non-market values?

- Forests, land, etc. have other values, for local livelihoods, NTFPs, etc.
- These may provide strong additional incentives to local people for conservation
- In some cases, PES can also promote forest and land tenure reform, because there is a need to determine who is the owner/manager
- Payments linked to improve land or natural resource title may provide strong incentives for local participation in PES



Community land easements Simanjiro, Tanzania (Nelson et al 2010)



PES program reinforces and supports local traditional pastoral practices
Payment is less than value of alternative land-uses

Wildlife in Tarangire National Park migrates annually to grasslands outside of park for grazing during wet season

Agricultural expansion outside of park threatens key wildlife dispersal areas

Agricultural expansion is a defense strategy by local Maasai pastoralists to secure land rights

Agreement between private tour operators and community of Terrat to conserve grasslands for wildlife

5-year contract, \$4,500/year + \$3,500 for local rangers



Conclusions

- Stacking and bundling ecosystems services can:
 - Increase value
 - Diversifies revenue streams
 - Improves overall resilience of the PES program
- Recognition of existing land and natural resource management rights can provide a strong incentive for local people to engage in PES
 - Even if the payment is lower than alternative land-uses

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